

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
Національний авіаційний університет

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PROFESSIONAL ENGLISH LOGISTICS

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Навчальний посібник уміщує навчальні тексти, словники до кожної теми,
різні типи вправ.

Для студентів вищих навчальних закладів напрямку підготовки «Менедж-
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ПЕРЕДМОВА

Навчальний посібник “Professional English. Logistics” призначений для вивчення професійно орієнтованої англійської мови студентами економічних спеціальностей, збагачення їхнього словникового запасу, розвитку вмінь перекладу фахової оригінальної літератури, реферування з метою отримання і використання інформації, необхідної для майбутньої професійної діяльності.

Посібник складається з 23 тематичних розділів, що містять базові навчальні тексти, комплекс умовно-комунікативних лексико-граматичних вправ, розподілених за принципом зростання складності, тематичні термінологічні словнички до кожного тексту, тексти для контролю розуміння і засвоєння навчального матеріалу.

Тематика навчальних розділів пов’язана з основними напрямками спеціалізації студентів. Лексичні вправи передбачають пошук українсько-англійських та англо-українських термінологічних еквівалентів; добір синонімів, антонімів; переклад термінологічних словосполучень; тлумачення сталих абrevіатурних логістичних сполучень. Комунікативні вправи спрямовані на розвиток умінь висловлювання власної думки, узагальнення, аргументування, складання і ведення діалогів.

Грамматичні вправи охоплюють основні граматичні явища, характерні для текстів англomовного ділового та науково-технічного дискурсу.

Система вправ дозволяє викладачеві обирати завдання з урахуванням індивідуальних здібностей студентів. Творчі види навчальної діяльності, що ґрунтуються на автентичних інформативно-насичених текстах, підвищують мотивацію студентів і допомагають їм розвинути необхідні в реальному житті комунікативні навички та здатність до самореалізації.

Unit 1. BASICS OF LOGISTICS

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

lodge, logist, logic, logistics, logician, logistician, logistic, logistical, logical, origin, basic, Greek, French, hence, derive, quarter, appear, yield, chemical, financial, multi-dimensional, discipline, soldier, practitioner, refer, detail, retail, activity, exactly, industry, various, apply, mention, dimension, healthcare, production, application, calculation, academician, maritime, rooted, skilled, influenced, marketing, underlying, management, procurement, agriculture, concept, freight.

Exercise 2. Study the definitions. Give their Ukrainian equivalents.

logist (v) – to perform logistics functions or processes. The act of planning, organizing and managing activities that provide goods or services;

logistics (n) – comes from the Greek logos (λόγος), meaning "speech, reason, ratio, rationality, language, phrase", and more specifically from the Greek word logistiki (λογιστική), meaning accounting and financial organization. The word **logistics** has its origin in the French verb loger to lodge or to quarter;

logistic (adj) – of or pertaining to logistics;

logistical (adj) – of or pertaining to logistics, logistics-like;

logistician (n) – Logistics specialist;

logician (n) – a person skilled at symbolic logic;

logic (n) – science of reasoning; process of reasoning; sound judgement;

logical (adj) – of or according to the rules of logic or formal argument.

Exercise 3. Translate the following blocks of sentences paying attention to the words in italics. Make use of a dictionary.

1. She *logisted* the last operation. I will *logist* the next operation. I *am logisting* the current operation. We *logist* a lot of operations. The operations *are* well *logisted*.

2. *Logistics* is the management of the flow of goods and services between the point of origin and the point of consumption in order to

meet the requirements of customers. *Logistics* involves the integration of information, transportation, inventory, warehousing, material handling, and packaging, and often security.

3. Beginning in the 1960s, *logistical* support of weapon systems became an integral part of the planning and design stages of these systems.

4. A simple *logistic* function may be defined by the formula. The *logistic* function finds applications in a range of fields, including biology, demography, economics, chemistry, sociology, political science, and statistics.

5. The historical leaders Alexander the Great and the Duke of Wellington are considered to have been *logistical* geniuses.

6. A *logistician* is a professional *logistics* practitioner. Professional *logisticians* are often certified by professional associations. Some universities and academic institutions train students as *logisticians*, offering undergraduate and postgraduate programs.

7. There is no *logic* in their policy. It is *logical* to assume that they will attend the first international exhibition of transport and logistics this spring.

Exercise 4. Say whether the following statements are true or false. Correct the false ones.

1. The term “logistics” comes from the Latin “logos”. 2. Logistics is a science of reasoning and process of reasoning. 3. The French “loger” means to quarter or lodge soldiers. 4. The word logistics refers to mathematics. 5. Logistics management principles can’t be applied to different dimensions of activities in various industries. 6. Logistics can be called a multi-dimensional discipline. 7. There is only one type of Logistics according to its application in various industries.

Exercise 5. Read dialogue 1 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 1

A: What is the origin of the word “Logistics”?

B: The English word logistics has been derived from the Greek word LOGISTIKOS and the French word LOGISTIQUE.

A: What is the meaning of these words?

B: LOGISTIKOS is rooted in the concept of logic and means skilled in calculation. LOGISTIQUE is probably influenced by the French “loger” meaning to quarter or lodge soldiers.

A: Hence, the combination of logic, calculation and quartering soldiers appears to have yielded the word, doesn't it?

B: Yes, it does. At a very basic level, the word logistics refers to the management of underlying details of any activity.

A: If so, what exactly makes logistics a multi-dimensional discipline?

B: It is the possibility of applying logistics management principles to different dimensions of activities in various industries.

A: What types of Logistics can we talk about, according to its application in various industries?

B: We can mention a lot of them: Business Logistics, Healthcare Logistics, Chemical Logistics, Freight Logistics, Information Logistics, and also Retail, Financial, Procurement, Production, Air Force, Maritime, Marketing, Agriculture, International and even Global Logistics.

Notes

logistics – логістика, матеріально-технічне забезпечення

origin of the word – походження слова

to derive (from) – походити (з)

rooted in the concept – вкорінений (впроваджений) у понятті...

skilled in calculation – вправний у підрахунках, уміє здійснювати розрахунки

to quarter or lodge soldiers – розквартирувати (ставити на квартири, селити), розміщувати по казармах солдатів

to appear – 1) з'являтися; 2) здаватися

to yield the word – породити слово

to refer (to) – 1) стосуватися (чогось) 2) посилатися (на щось)

underlying details – основні деталі

multi-dimensional discipline – багатоаспектна дисципліна

to apply – застосовувати; вживати

industry – галузь

to mention – згадувати; зазначати

retail – 1) роздрібний продаж, роздрібна торгівля; 2) роздрібний;
3) продавати вроздріб
procurement – 1) придбання, закупівля; 2) постачання (обладнання),
забезпечення

Exercise 6. Write out of the texts of exercises 2, 3 and 4 all internationalisms. Mind the differences in their spelling, pronunciation and meanings in Ukrainian and English. (There are about 50 of them).

Exercise 7. Give English equivalents.

Походження; походити з; застосування; науковець; наукова установа; логіст (логістик); поняття; згадувати; логістичний; підрахунок; багатоаспектна дисципліна; різноманітні галузі; розмішувати по казармах солдатів; основні деталі; логіка; з'являтися; виконувати логістичні функції чи процеси; стосуватися (чогось); бути вкоріненим у понятті; діяльність; студентські та аспірантські програми; постачання (закупівлі); виробництво.

Exercise 8. Play the role of an interpreter translating the questions into English and their answers into Ukrainian:

1

– *Яке походження слова логістика?*
– The word logistics has been derived from the Greek word and the French word.

2

– *До чого стосується слово «логістика»?*
– The English word logistics refers to the management of underlying details of any activity.

3

– *Які типи логістики ви знаєте?*
– There are a lot of types of logistics: Business Logistics, Healthcare Logistics, Chemical Logistics, Information Logistics, and also Retail, Financial, Procurement, Production, Marketing, Agriculture, International and even Global Logistics.

4

– *Чому логістику можна назвати багатоаспектною дисципліною?*

– Because there is a possibility of applying logistics management principles to different dimensions of activities in various industries.

5

– *Хто такий логіст (логістик)?*

– A logistician is a professional logistics practitioner. Professional logisticians are often certified by professional associations.

6

– *Що таке логістика? Яке визначення цього терміну?*

– Logistics is the management of the flow of goods and services between the point of origin and the point of consumption in order to meet the requirements of customers.

Exercise 9. Memorize the basic terminology to text 1.

excursus – екскурс

marshal – *військ.* маршал

administrative officer – працівник адміністративного органу

to encamp – розташовуватися табором

warfare – війна; прийоми ведення війни; стратегія; зіткнення

weapon – зброя

ammunition – боєприпаси (*снаряди, набої*); підривні засоби

to expand – розширювати(ся)

supply – 1) постачання; 2) *pl* запаси, ресурси; 3) пропозиція
4) постачати

supply depot – склад, постачальна база; збірний пункт поставки

supply chain management (SCM) – управління ланцюгом постачання

branch – 1) гілка; 2) галузь

to pertain – стосуватися

equipment – обладнання

logistical support – логістична підтримка

integral part – невід’ємна частина

military – 1) військова сила; військо; 2) військові

engineering logistics – логістичний інжиніринг

emphasis – наголос

issue – проблемне питання

initial – початковий

requirement – вимога

to apply – застосовувати
physical distribution – збут товару, просування товару
consumer goods – товари споживчого призначення, споживчі товари
to evolve (into) – розвинути (в), еволюціонувати
dichotomy – поділ на два роди (у класифікації), дихотомія
inbound logistics – логістика вхідних потоків
outbound – 1) що відправляють(ся) (зі складу); 2) експортний
outbound logistics – логістика вихідних потоків
external – зовнішній
business community – бізнес-спільнота
component – компонент; складова частина, складовий елемент
concept – поняття, ідея, задум, уявлення; концепція
ultimate customer – кінцевий замовник; кінцевий покупець, клієнт
seamless network – суцільна мережа
to creep – заповзати
lexicon – лексикон; словник
variety – різноманітність
flow – 1) потік; 2) текти; литися
stock – запас
mechanism – 1) механізм; апарат, конструкція; пристрій; 2) техніка
(виконання)
capability – здібність, здатність
to treat – 1) трактувати; 2) стосуватися
distribution – розподіл; реалізація; збут
underlying detail – основна деталь
enterprise – підприємство, компанія
framework – структура
fundamental – основний; базовий; докорінний; фундаментальний
capital flow – потік капіталу
layman – непрофесіонал; неспеціаліст, аматор; дилетант
customer – замовник, клієнт, покупець
condition – 1) умова; 2) стан, становище; 3) *pl* обставини; умови
cost – 1) вартість; ціна; собівартість; 2) *pl* витрати, затрати
activity – діяльність; заходи
movement – рух; переміщення, пересування
point of origin – місце (пункт) походження
point of consumption – місце (пункт) споживання

to supervise – спостерігати, наглядати, здійснювати нагляд,
інспектувати, контролювати
logistics manager – менеджер з логістики

Exercise 10. Read and translate text 1.

Text 1. Logistics: Historical Excursus

The term “logistics” entered military terminology in 18th century Europe. The *maréchal des logis* (*logistics marshal* in English) was the administrative officer responsible for encamping and quartering troops. As warfare became more advanced with an increasing variety of weapons and ammunition, his duties were expanded to include the stocking of supply depots.

The term received a written definition in 1905 as that *branch of the art of war pertaining to the movement and supply of armies*. But it was not until World War II that the term began to be used to describe the support of military forces and their equipment. Beginning in the 1960s, logistical support of weapon systems became an integral part of the planning and design stages of these systems. During this period, logistics as practiced in the military grew into engineering (or systems) logistics, with an emphasis on engineering issues, calculating initial support requirements, and programming resources to keep a system operational after introduction.

The term logistics migrated to the business sector in the 1960s as academicians in marketing saw potential in applying the principles of military logistics to physical distribution of consumer goods. Business logistics evolved into a dichotomy of inbound logistics (materials management or physical supply) to support production, where the plant is the customer, and outbound logistics (physical distribution of product) to support external customers. Most recently, the business community began viewing logistics as a component of a larger evolving concept, supply chain management (SCM). SCM is a linking of all firms up and down the supply chain (from ultimate material sources to ultimate customers) in a collaborative and seamless network.

Beginning in the 1970s, the term logistics crept into the lexicon of the common culture.

Clearly, logistics as a concept and a practice has evolved over the years and is a discipline that is now practiced in different ways and

contexts. Logistics means different things to different people. Even professionals in the field differ as to what logistics actually means. To some, logistics is managing the flow and stock of materials. To others, it is a customer support activity, a planning and engineering mechanism, or a science of calculating requirements and promoting operational capabilities. The dictionary treats logistics as purely a branch of military science. The Council of Logistics Management defines logistics purely in a product distribution context. The common culture of today views logistics as the underlying details of making something happen.

Logistics can be classified as an enterprise or a business planning framework for the management of material, information, service and capital flows.

In the words of a layman, perhaps the most fundamental definition of logistics is the classical definition: getting the right product, to the right customer, in the right quantity, in the right condition, at the right place, at the right time, and at the right cost.

All activities that are involved in the movement of goods and services from the point of origin to the point of final consumption are grouped under the term “logistics”. The art of managing or supervising all these activities when grouped together as a collective unit, are placed under “logistics management”. People who are authorized or given the task of managing the aspect of logistics management are referred to as “logistics managers”.

Exercise 11. Match the definitions with proper logistics terms.

Definitions	Terms
1. The network of supply chain participants engaged in storage, handling, transfer, transportation, and communications functions that contribute to the efficient flow of goods	a) logistics
2. The factors associated with the acquisition, storage, movement, and disposition of goods	b) inbound logistics
3. The process of planning, implementing, and controlling procedures for the efficient and effective transportation and storage of goods including services, and related information from the point of origin to the point of consumption	c) logistics channel

for the purpose of conforming to customer requirements

4. The process related to the movement and storage of products from the end of the production line to the end user

d) logistics data interchange (LDI)

5. A computerized system to electronically transmit logistics information

e) logistics costs

6. The movement of materials from suppliers and vendors into production processes or storage facilities.

f) outbound logistics

Exercise 12. Answer the questions on text 1.

1. When did the term “logistics” enter military terminology? 2. What were the duties of logistics marshal? 3. When did the term receive a written definition? 4. When did logistics as practiced in the military grow into engineering logistics? 5. When did the term logistics migrate to the business sector? Why? 6. What is supply chain management? 7. What did the term logistics creep into in 1970s? 8. What does the term “logistics” mean to professionals? 9. How do different sources treat logistics? 10. How can logistics be classified? 11. What is the classical definition of logistics? 12. What is meant by “logistics management”? 13. Who are referred to as “logistics managers”?

Exercise 13. Write a summary of text 1 using the following phrases: The text is about...(deals with..., presents..., describes..., focuses on..., explains, makes clear ..., suggests).

The text consists of.../may be divided into...

In the first paragraph, the author introduces...

In the second part of the text/ paragraph/, the author describes...

As a result...

To sum up/ to conclude...

In the conclusion, starting from line..., the author sums up the main ideas/ thesis...

The author uses examples to confirm/prove that... (agrees/disagrees with the view ..., contradicts the view, emphasizes, compares ... to).

Exercise 14. Memorize the basic terminology to text 2.
to carry out – виконувати, здійснювати

acquisition – придбання; здобуття
storage – схов, зберігання
maintenance – підтримка, технічне обслуговування
evacuation – евакуація
disposition – дислокація; розташування, розміщення
personnel – штат; особовий склад, персонал; кадри (підприємства, установи)
material – матеріал, обладнання, інвентар
materiel – *військ.* матеріальна частина; бойова техніка
construction – будівництво; будування; споруджування
to furnish – постачати, забезпечувати; доставляти
to implement – виконувати, здійснювати
efficient – дієвий, ефективний
cost-effective – прибутковий, рентабельний
internal – внутрішній
raw material – сировина
in-process inventory – запаси незавершеного виробництва
finished goods – готові вироби
to provide – надавати, забезпечувати
to sustain – утримувати; підтримувати
related – пов'язаний (*із чимось*); споріднений
objective – мета, ціль
to meet the needs – задовольняти потреби
warehousing – складування, зберігання на складі
profitability – прибутковість, рентабельність
forecasting – прогнозування

Exercise 15. Read and translate text 2.

Text 2. Logistics Definitions

Here is the list of the most common definitions of Logistics taken from different sources:

1) Logistics is defined as a business planning framework for the management of material, service, information and capital flows. It includes the increasingly complex information, communication and control systems required in today's business environment. (*Business definition*)

2) Logistics is the science of planning and carrying out the movement and maintenance of forces: those aspects of military operations that deal with the design and development, acquisition, storage, movement, distribution, maintenance, evacuation and disposition of materiel; movement, evacuation, and hospitalization of personnel; acquisition, construction, maintenance, operation and disposition of facilities; acquisition and furnishing of services. (*Military definition*)

3) Logistics is the procurement, maintenance, distribution, and replacement of personnel and materiel. (*Webster's Dictionary definition*)

4) Logistics – 1. the branch of military operations that deals with the procurement, distribution, maintenance, and replacement of material and personnel; 2. the management of the details of an operation. (*American Heritage Dictionary definition*)

5) Logistics is the process of planning, implementing, and controlling the efficient, effective flow and storage of goods, services, and related information from point of origin to point of consumption for the purpose of conforming to customer requirements. Note that this definition includes inbound, outbound, internal, and external movements, and return of materials for environmental purposes. (*Council of Logistics Management*)

6) Logistics is the process of planning, implementing, and controlling the efficient, cost-effective flow and storage of raw materials, in-process inventory, finished goods and related information from point of origin to point of consumption for the purpose of meeting customer requirements. (*Canadian Association of Logistics Management*)

7) Logistics is the science of planning, organizing and managing activities that provide goods or services.

8) Logistics is the science of planning and implementing the acquisition and use of the resources necessary to sustain the operation of a system.

All these definitions have in common the concept of integrating many activities toward supporting an organizational objective. All have a sense of meeting the material, system, or process needs of a customer.

Exercise 16. Translate the following logistics quotations using the notes below. Comment on each statement.

- I don't know what this "logistics" is that Marshall is always talking about, but I want some of it. – Admiral E. J. King
- The future is not defined by what is happening today but...what is made to happen with a logistical perspective because WHAT IN THE WORLD IS NOT LOGISTICS? – The School of Business Logistics (Singapore)
- Seldom will all logistics principles exert equal influence; usually one or two will dominate in any given situation. Identifying those principles that have priority in a specific situation is essential to establishing effective support. – Joint Pub 4-0, Doctrine for Logistics Support of Joint Operations, Sep. 25, 1992
- A little neglect may breed mischief: for want of a nail the shoe was lost; for want of a shoe the horse was lost; and for want of a horse the rider was lost. – Benjamin Franklin
- Logistics Planning – The wisdom to realize when working on plan A, you'll run into conflicts in executing plan B and being properly prepared, and successfully executing plan E. – Capt John P. Laverdure, Scott Air Force Base, HQ Air Mobility Command, 1996
- Behind every great leader there was an even greater logistician. – M. Cox
- Logistics is as vital to military success as daily food is to daily work. – Captain A.T. Mahan, Armaments and Arbitration, 1912
- My logisticians are a humourless lot...they know if my campaign fails, they are the first ones I will slay. – Alexander
- Without supplies, no army is brave – Frederick II of Prussia, in his *Instruction for his Generals*, 1747
- The tactics...no, amateurs discuss tactics. Professional soldiers study logistics. – Tom Clancy, Red Storm Rising

Notes

to exert influence – впливати

neglect – 1) ігнорування; 2) ігнорувати щось, нехтувати чимось

to breed mischief – викликати лихо (збитки, втрати)

nail – 1) цвях; 2) прибивати цвяхами

shoe – 1) підкова; 2) підковувати

for want of – через відсутність (брак) чогось

to execute – виконувати
logistician – спеціаліст із логістики, логіст, логістик
vital – життєво важливий
humourless lot – невесела доля
to fail – зазнавати поразки, невдачі
to slay – вбивати, знищувати
supplies – предмети постачання; ресурси; запаси
amateur – аматор

Exercise 17. Translate into Ukrainian and put a key question to each paragraph.

1. The primary goal of logistics is to effectively manage the project life cycles and resultant efficiency. Logistics does not mean a single work activity but refers to a group of activities performed to attain the goal of a business enterprise. This may involve steps like procurement, planning, coordination, transportation, warehousing, distribution and customer service.

2. A business can run without profits, but it needs money to fund its services, pay its employees and grow its customer base. Logistics plays an important role in the present business world; it cannot be neglected by an enterprise focused on growth and profitability.

3. Logistics is a mixture of several professional disciplines, such as: Planning; Controlling; Directing; Coordination; Forecasting; Warehousing and transportation; Facility location; Inventory management.

Exercise 18. Translate the following sentences into English:

1. Термін «логістика» набуває сьогодні широкого поширення.
2. Логістика – наука про планування, організацію, управління, контроль і регулювання переміщення матеріальних та інформаційних потоків у просторі й у часі від їх первинного джерела до кінцевого споживача.
3. Логістика – це мистецтво управління потоками матеріалів і продуктів від зовнішнього джерела до споживача.
4. Потік – це сукупність переміщуваних об'єктів, що сприймаються як єдине ціле.
5. Потік характеризується такими параметрами: початкова та кінцева точка, швидкість, час, траєкторія (trajectory), довжина шляху, інтенсивність.
6. Логістика є новим науковим напрямком, ученням про планування, управління і спостереження за переміщенням потоків у

виробничих та енергетичних системах. 7. Багатоманітність визначень поняття логістики пов'язана з еволюціонуванням самої концепції логістики.

Exercise 19. Read dialogue 2 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 2

A: What are the key **logistics processes**? Will they vary between different companies, different sectors and different industries?

B: Yes, of course they will. Logistics processes are **requirement determination, acquisition, distribution, and conservation**.

A: I have also heard about order fulfilment, new product introduction, new product development, and product returns... Can they be examples of logistics processes?

B: Yes, of course. Order fulfilment process, just mentioned by you, provides a good example of a typical logistics process. The aim of order fulfilment should be to ensure that a customer's order is received, checked, selected and delivered according to the customer's requirements, with no disruption and with complete accuracy.

A: And what are the **functions of Logistics**?

B: The functions of Logistics are **planning, procurement, transportation, supply, and maintenance**. You should know that there is also the possibility of error and delay between the different functions.

A: What might typical functional errors be?

B: These are incorrect transcription of the original order requirements, incorrect notification of availability, incorrect selection or picking of the order, damage to the goods, late delivery, delivery to an incorrect address, etc.

A: What are the **principles of logistics**?

B: They are **responsiveness, simplicity, flexibility, economy, attainability, sustainability, and survivability**.

Notes

requirement determination – визначення потреби

conservation – зберігання

order fulfilment – виконання замовлення

product returns – повернені (непродані) товари

with no disruption – без порушень
complete accuracy – повна точність
maintenance – технічне обслуговування
error – помилка
delay – 1) затримка; 2) відстрочення; 3) зволікання
transcription – 1) запис; 2) друкована або письмова копія
original – 1) оригінал; 2) оригінальний; 3) первісний
order requirements – вимоги замовлення
incorrect notification – неправильне сповіщення
availability – наявність
to pick – 1) обирати, збирати, відбирати, добирати; 2) сортувати
damage – 1) пошкодження; 2) пошкоджувати
responsiveness – 1) відповідність вимогам; 2) реактивність, здатність
реагувати
simplicity – простота
flexibility – гнучкість
attainability – досяжність
sustainability – стійкість
survivability – здатність до виживання

Exercise 20. Write out of Dialogue 2 the words that can function both as a noun and a verb. (There are 20 of them).

<p><i>Model:</i> act – to act акт, дія – діяти</p>
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Exercise 21. Write out of the texts of exercises 17 and 18 all the internationalisms besides “logistics” (there are 20 of them). Give their Ukrainian equivalents.

Exercise 22. Decipher the abbreviations using a dictionary.

NAFTA, SCM, LDI, WTO, OPEC, EU, NATO, WHO, ASEAN, IMF, ECB, MNCs, FIFA, GM, IBM, CNN, NEC, JAL, ICAO, IATA.

Exercise 23. Memorize the basic terminology to text 3.

consideration – 1) міркування; 2) розгляд, обговорення
to define – визначати
to suggest – пропонувати, радити; навіювати, наводити на думку
supportability – наявність технічної підтримки

assessment – 1) оцінка; 2) обкладання; 3) сума оподаткування
computation – підрахунок, підрахунки; розрахунок
after-sale support – післяпродажне обслуговування
inventory – 1) перелік, каталог; 2) наявні товари; 3) резерв, запас;
4) *амер.* інвентаризація; переоблік
engineering – інженерія; інжиніринг; машинобудування
integration – об'єднання, поєднання, інтеграція
evaluation – 1) оцінювання, оцінка; 2) визначення (*кількості, вартості*)
disposal – 1) розташування, розміщення; 2) усунення
recycling – утилізація (*використаних ресурсів*); повторне використання
to exercise – здійснювати; користуватися (правом), реалізувати; застосовувати
performance – 1) виконання, здійснення; 2) характеристика (*роботи машини*); експлуатаційні якості; 3) продуктивність
practitioner – спеціаліст-практик
to possess – володіти, мати
application – застосування, використання
quantitative – кількісний
qualitative – якісний
deductive – дедуктивний
event logistics – логістика, діяльність якої заснована на забезпеченні організації та проведенні окремого заходу
forward logistics – логістика прямих потоків
deployment – розміщення, розгортання, розташування; дислокація
reverse logistics – логістика зворотних потоків
withdrawal – відкликання; виведення, вилучення, видалення
contingency planning – альтернативне планування (*резервне планування на випадок непередбачених обставин*)
coverage – 1) охоплення; покриття; 2) висвітлення (*в пресі*)
process logistics – логістика процесу
facility – 1) *pl* можливості, сприятливі умови; пільги; 2) *pl* устаткування; обладнання; засоби; пристрої
to occur – траплятися; відбуватися
relief – полегшення, заспокоєння (*болю*); допомога, розрада
office – 1) служба; 2) відомство; 3) кабінет, приміщення, канцелярія; 4) послуги

orthodontics office – послуги ортодонта
scheduling station – диспетчерський пункт
sequential workflow – послідовний робочий процес
collaborative – спільний, об'єднуючий
responsive – чутливий, здатний реагувати
differentiated – диференційований
carrier – перевізник

Exercise 24. Read and translate text 3.

Text 3. New Logistics Paradigm

A consideration of the various practices that, taken together, define logistics suggests that logistics is a branch of management that is practiced in four subdisciplines:

Military or engineering logistics. The design of supportability into weapon systems and other capital assets, assessment of technical requirements for training and maintenance, computation of after-sale support requirements, and integration of all aspects of support for the operational capability of military forces and their equipment.

Logistics engineering is the professional engineering discipline responsible for the integration of support considerations in the design and development; test and evaluation; production and/or construction; operation; maintenance; and the ultimate disposal/recycling of systems and equipment. Additionally, this discipline defines and influences the supporting infrastructure for these systems and equipment. The practice of logistics engineering is exercised throughout the system life-cycle to optimize costs and performance requirements.

Logistics engineer is a professional practitioner who possesses the knowledge and demonstrated skills required for successful application of scientific and mathematical principles, quantitative and qualitative analysis and deductive reasoning to develop and implement solutions to practical problems in the discipline of logistics engineering.

Business logistics. The planning and management of supply sources, inventories, transportation, distribution networks, and related activities and supporting information to meet customer requirements.

Event logistics. The network of activities that brings together the resources required for an event to take place. Event logistics is characterized by deployment of resources (forward logistics) and withdrawal of resources (reverse logistics) according to the events schedule, significant contingency planning, and the powerful presence of the logistics function in the events management team. Examples of event logistics include the detailed planning and support requirements necessary to execute a rock concert, news coverage, Euro-2012 Football Championship, the Olympic Games, presidential trips and the like.

Process logistics. The acquisition, scheduling, and management of human and material resources to support a service. Process logistics typically involves the coordinated employment of facilities, capital assets, and service personnel to create the framework for a process to occur. Examples include bus transportation of school children, mail delivery, Red Cross relief operations, and operation of a multidimensional orthodontics office (scheduling stations, personnel, and parallel and sequential workflow for efficient and effective service). Supply chain management is the collaborative integration of all logistics processes by all players in a chain, from original suppliers through end users. The process is a customer-driven system involving the sharing of information, risks, and assets among partners to achieve an integrated, seamless, responsive distribution system. Supply chain management (SCM) literature views business logistics as a component of supply chain management.

SCM is differentiated from logistics in that it involves all partners (suppliers, carriers, other distribution channel participants, and customers) up and down the supply chain and, hence, is more than the internal integration of logistics activities within a firm.

Exercise 25. Write key questions on text 3.

Exercise 26. Match the definitions and the terms.

Definitions

Terms

1. The coordinated employment of facilities, capital assets, and service personnel to create the framework for a process

a) event logistics

2. The planning and management of supply sources, inventories, transportation, distribution networks, and related activities and supporting information to meet customer requirements

b) engineering logistics

3. The professional engineering discipline responsible for the integration of support considerations in the design and development; test and evaluation; production and/or construction; operation; maintenance; and the ultimate disposal/recycling of systems and equipment

c) process logistics

4. The network of activities that brings together the resources required for an event to take place.

d) business logistics

Exercise 27. Give definitions to the following terms.

Military logistics, engineering logistics, business logistics, event logistics, process logistics, process, logistics engineer.

Exercise 28. Characterize logistics subdisciplines conveying the gist of Text 3.

Exercise 29. Translate the following sentences using “there is, there are” structure.

1. Існує багато визначень логістики. 2. Є макрологістика та мікрологістика. 3. Існують такі види логістики: закупівельна, виробнича, логістика збуту, транспортна, інформаційна, морська. 4. У логістиці існують прямий та зворотний, внутрішній та зовнішній потоки. 5. У логістики чітке завдання: організувати всі процеси без порушень. 6. У компанії існують ланцюги постачання, що мають стратегічне значення.

Exercise 30. Speak on:

1. Logistics definitions.
2. Logistics processes.
3. Logistics functions and typical functional errors.

4. Logistics principles.
5. History of logistics development.
6. Different areas of logistics.
7. Logistics as an art.

Unit 2. CAREER IN LOGISTICS

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

career, carrier, employer, employee, personnel, personal, boardroom, officer, depot, dispatch, deadline, supplier, wholesaler, manufacturer, retail, executive, respective, purchasing, packaging, tracking, re-ordering, differentiate, superior, prioritize, credential, numerical, rotational, multitude, multinational, excel, enhance, intend, possession, charity.

Exercise 2. Give nouns corresponding to the following verbs. Make use of a dictionary if necessary.

to employ, to dispatch, to possess, to order, to execute, to differentiate, to stock, to remunerate, to purchase, to track, to intend, to opt, to extend, to prevail, to drive, to package, to perform.

Exercise 3. Memorize the basic terminology to text 1.

career – кар'єра; діяльність, успіх

revelation – 1) відкриття, виявлення; 2) одкровення

challenge – виклик

responsibility – 1) відповідальність; 2) обов'язок, зобов'язання

opportunity – слушна нагода; сприятлива можливість

remuneration – винагорода, плата; заробітна плата; компенсація

boardroom – зал для нарад керівництва компанії

personnel – особовий склад, персонал; кадри, штат

to sustain – підтримувати; підтверджувати

sustaining improvement – стійке покращення

vision – проникливість; передбачливість

drive – стимул

to excel – відзначатися, вирізнятися; перевершувати

to differentiate – диференціювати, вирізнити

superior – найкращий, чудовий; винятковий

run-of-the-mill – звичайний, ординарний; звичний

officer – посадова особа; службовець; працівник
warehouse – товарний склад; пакгауз
proper – правильний; належний, відповідний; підхожий, придатний
depot – склад, база; збірний пункт
dispatch – 1) відправлення, надсилання; 2) відправляти, надсилати
medium – 1) засіб; спосіб, шлях; 2) агент, посередник
computer package – комплект обчислювального обладнання
to monitor – контролювати, перевіряти
stock – 1) запас; інвентар; 2) асортимент (*товарів*)
track – 1) слід, стежка, шлях; 2) слідкувати, стежити, простежувати;
вистежувати
order – 1) замовлення; 2) замовляти
re-ordering – повторне замовлення
on behalf of – від імені...
to assign – доручати (*завдання*)
packaging – пакування
prevailing – переважний, домінуючий; поширений, прийнятий
to enhance – збільшувати, посилювати; підвищувати
efficiency – ефективність, дієвість
to intend – мати намір; збиратися/планувати (*щось робити*)
possession – володіння; об'єкт володіння; власність, майно
to analyze – аналізувати
data – (*pl* від *datum*) дані, факти; відомості, інформація
handle (on) – володіння (*чимось*)
to opt (for) – обирати, робити вибір
credentials – характеристики; документи, що підтверджують
кваліфікацію
to relate (to) – належати (до), стосуватися
numerical – числовий, цифровий; чисельний
know-how – ноу-хау, технологічні секрети, секрети виробництва
to think on one's feet – швидко реагувати; приймати рішення без
попереднього обговорення; бути спритним, винахідливим,
кмітливим
handy – 1) корисний; 2) доступний
to perform – 1) здійснювати; 2) виконувати (*обіцянку, наказ тощо*)
deadline – крайній строк (термін)
to prioritize – 1) встановлювати пріоритет; 2) розташовувати /
розміщувати в порядку черговості; 3) приділяти першочергову увагу

multitude – безліч; велика кількість
multi- – у складних словах означає багато-, мульти-
multinational company – багатонаціональна компанія
to range (from...to) – простягатися; коливатися в межах
wholesaler – оптовий торговець, оптовик
manufacturer – виробник
supplier – постачальник
charity institution – благодійна установа
to extend – простягати(ся), поширювати(ся)
freight forwarder – вантажний експедитор
executive – 1) керівник, адміністратор; 2) виконавча влада
rotational – змінний, що чергується, ротаційний (*пов'язаний з ротацією кадрів*)
respective – відповідний

Exercise 4. Read, translate and give the gist of the text.

Text 1. Logistics Manager Career

With the passage of time, logistics has been a revelation offering enormous opportunities to people. A career in logistics can offer exciting challenges, early responsibility, travel opportunities along with, of course, excellent remuneration.

Logistics today has become a boardroom issue and it is often seen that companies nowadays are seeking personnel at all levels to deliver a sustaining improvement in the supply chain management. This obviously needs a vision and the drive to excel and this is the quality which differentiates the superior logistics manager from the run-of-the-mill one.

A logistics manager is responsible for collaborating with the other officers of the company such as purchasing officers, transport and warehouse managers, to ensure that the goods produced or sold by the company are received in the company's depot on time. A logistics manager is also responsible for making sure that the goods are stored in a proper and safe manner in addition to looking after their timely dispatch. This, of course is done through the medium of specialist computer packages, monitoring the levels of stock, tracking the movement of the goods and when necessary, re-ordering goods on behalf of the company. He may also be assigned duties relating to packaging of goods and ordering process. He is also, at times, assigned

the task of analyzing the prevailing systems and networks and to make plans for the development of new systems and networks for enhancing efficiency.

To begin a career in logistics, a degree in a subject related to logistics, such as supply chain management or transport management would surely be an advantage. The person who intends to get into this field must demonstrate possession of the ability to analyze data. A handle on transportation, geography and other business-related subjects would be an added advantage.

One may also opt for higher degrees in supply chain management, transport management or logistics. This would surely add to his credentials and would help him to find a better job.

The qualities which are required in a logistics manager are the abilities that relate to managing, coordinating, and enhancing complete supply chain management. The person must have a high degree of analytical, numerical and geographical know-how. A capability to think on his feet and manage people would come in very handy. The knowledge of IT packages and methods of electronic communication such as Internet and e-mail etc. would also be important. He must be able to perform under strict deadlines and must be able to prioritize his work and be a self-motivator.

Multitudes of organizations worldwide – from small firms to multinational companies, employ logistics managers. The organizations may range from wholesalers, manufacturers to local government, electricity suppliers, armed forces and charity institutions. The openings for a job in logistics may also extend to freight forwarder, retail managers and marketing executives. Logistics managers may need to work on a rotational basis depending upon the requirements of their respective organization.

Exercise 5. Answer the questions on text 1.

1. What opportunities can a career in logistics offer to people?
2. Why are companies seeking personnel at all levels nowadays?
3. What qualities differentiate the superior manager from the run-of-the-mill one?
4. What is logistics manager responsible for?
5. What other duties may logistics manager be also assigned?
6. What would surely be an advance when beginning a career in logistics?
7. What would be an added advantage?
8. What qualities would help to be better logistics

personnel? 9. Who can employ logistics managers? 10. What are the openings for a job in logistics nowadays?

Exercise 6. Use the phrases “in time”, “on time”, “at times”, “ever time”, “timely”, “by some time” in sentences of your own.

Exercise 7. Translate the following sentences into English:

1. Логістика з часом відкрила величезні можливості для людей. 2. Кар'єра в логістиці може запропонувати відмінну винагороду (оплату) разом із сприятливими можливостями подорожувати. 3. Менеджер з логістики співпрацює з іншими службовцями, щоб гарантувати вчасне отримання товарів на складі компанії. 4. Менеджер з логістики опікується тим, щоб товари зберігалися належним чином, та спостерігає за їх вчасним відправленням. 5. Він аналізує домінуючі системи та мережі, створює плани розвитку нових систем та мереж для підвищення їх ефективності. 6. Щоб розпочати кар'єру в логістиці, потрібно мати диплом із дисциплін, пов'язаних із логістикою, таких як управління ланцюгами постачання або управління на транспорті. 7. Майбутній логістик повинен мати високий рівень аналітичних, цифрових та географічних ноу-хау. 8. Логістик має виконувати роботу в жорсткі терміни, вміти встановлювати пріоритети в своїй роботі, мати самомотивацію. 9. Список організацій, що наймають менеджерів з логістики, включає оптовиків, виробників, постачальників, органи місцевого управління, збройні сили та благодійні установи.

Exercise 8. Match the definitions with proper logistics terms.

Definitions

Terms

- | | |
|---|----------------------|
| 1. The four basic career patterns – linear, steady state, spiral, and transitory – by which people perceive their careers | a) career path |
| 2. The sequence of jobs planned for or by a person that leads to a career objective | b) career risk |
| 3. Distinct but interrelated steps or phases of a career | c) career concepts |
| 4. Whether or not an entrepreneur will be able to find a job or go back to an old job if his or her venture fails | d) career counseling |

5. Experience of performance bases for providing salary increases for professional employees e) career stages
6. Distinct patterns of self-perceived talents and abilities, motives and needs, and attitudes and values that guide and stabilize a person's career after several years of real-world experience and feedback f) career anchors
7. A stage in one's career from which further advancement is not expected g) career plateau
8. The process of systematically matching an individual's career aspirations with opportunities for achieving them h) career curve
9. Process of discussing with employees their current job activities and performance, their personal job and career goals, their personal skills, and suitable career development objectives. i) career planning

Exercise 9. Read dialogue 1 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 1

A: Before I tell you a little about our Logistics Company, let me give you some idea of the importance of Logistics to every organization.

B: That's interesting. Will you please, tell everything considered to be helpful for our activity in this field.

A: Logistics is essential for every organization. Without Logistics, no materials move, no operations can be done, no products are delivered, and no customers are served.

B: Oh yes, there are few aspects of human activity that do not ultimately depend on the flow of goods from point of origin to point of consumption.

A: But everyone agrees that Logistics can be very expensive. Organizations may reduce their overheads as much as possible but they are often left with surprisingly high Logistics costs.

B: Does the cost of Logistics vary between different industries?

A: Yes, it does. Building materials such as sand and gravel, have very high Logistics costs compared with, say, jewellery, pharmaceuticals and cosmetics.

B: Some people say that fuel, land, safety, environmental protection and employee costs are all rising and making Logistics more expensive. They argue that this trend will inevitably continue.

A: An opposing view says that improvements in Logistics are more than compensating for price rises, and the overall cost is falling. But the true picture depends on circumstances within each organization. Now about our company...

Notes

to be considered – вважатися

essential – суттєвий

ultimately – зрештою, кінець кінцем

to reduce – зменшувати, скорочувати

overheads – *pl.* накладні витрати

to vary – різнитися, відрізнятися

building materials – будівельні матеріали

sand – пісок

gravel – гравій

compared with – порівняно з

jewellery – ювелірні вироби

pharmaceuticals – фармацевтика

cosmetics – косметика

fuel – паливо; пальне

cost – вартість, собівартість

costs – витрати, видатки

overall cost – повна вартість

employee costs – витрати на персонал

to argue – стверджувати, заявляти; аргументувати, доводити, наводити докази; дискутувати

trend – тенденція, напрям

inevitably – неминуче

opposing view – протилежна точка зору, думка

improvement – вдосконалення, поліпшення, покращення

circumstance – обставина

Exercise 10. Change the following sentences into the Past Indefinite.

1. Multitudes of organizations worldwide – from small firms to multinational companies, employ logistics managers. 2. A logistics manager is responsible for making sure that the goods are stored in a proper and safe manner in addition to looking after their timely dispatch. 3. The person who intends to get into this field must demonstrate possession of the ability to analyze data. 4. The qualities which are required in a logistics manager are the abilities that relate to managing, coordinating, and enhancing complete supply chain management. 5. The organizations range from wholesalers, manufacturers to local government, electricity suppliers, armed forces and charity institutions. 6. Logistics managers need to work on a rotational basis depending upon the requirements of their respective organization. 7. This person doesn't have a high degree of analytical, numerical and geographical know-how. 8. He is not able to perform under strict deadlines and prioritize his work and be a self-motivator.

Exercise 11. Memorize the basic terminology to text 2.

to run the business – вести справу, бізнес

smooth – 1) гладенький, рівний; 2) однорідний; 3) плавний; спокійний

to worry – хвилювати(ся), турбувати(ся)

to streamline – прискорювати; раціоналізувати (*виробничі процеси*)

shipment – 1) вантаження (на корабель); 2) вантаж, партія товарів; 3) відправлення (товарів); 4) перевезення товарів

pick-up – вивезення (*вантаж*)

hygienic condition – гігієнічний стан

to attain – досягати, отримувати; домагатися

customer service – обслуговування клієнта

appreciation – 1) висока оцінка; 2) належна оцінка; 3) правильне розуміння; 4) вдячність; 5) схвальний відгук

to retain – 1) утримувати; підтримувати; 2) зберігати

prospective customer – потенційний клієнт

to regard (as) – 1) дивитися на; розглядати як; 2) брати до уваги, зважати

set – набір, ряд; серія (*чогось*)

real-time data – оперативні дані

utmost – 1) величезний, найбільший; 2) крайній, граничний

to shrink (*p.p.p. shrunk*) – скорочувати(ся)
to draft – 1) складати план; готувати проект; 2) робити креслення; 3) робити відбір
implementation – здійснення, виконання
to face – стикатися, зустрічати сміливо, віч-на-віч
advance – просування; прогрес; успіх; поліпшення
domestic – внутрішній; вітчизняний
international – міжнародний, інтернаціональний
competitive – конкурентний; конкурентоспроможний
sourcing – пошук джерел (*фінансування, поставок*); пошук (*постачальників, підрядників*)
footprint – 1) слід, відбиток; 2) зона впливу або спостереження
multi-modal service – мультимодальне обслуговування, обслуговування з використанням різних видів транспорту
unique feature – унікальна особливість
timely delivery – своєчасна, вчасна доставка
complete assistance – повне сприяння
life cycle – строк експлуатації; строк служби; час існування; життєвий цикл
expansion – розширення
transparency – прозорість (*про звітність, процедури, практику*)
visibility – видимість, прозорість
savings – економія, заощадження
to match – 1) підходити, відповідати; 2) добирати
architecture – 1) побудова, будова; 2) структура; 3) архітектура; 4) модель
thereby – 1) таким чином; у такий спосіб; 2) у зв'язку з цим
satisfaction – задоволення

Exercise 12. Read, translate and give the gist of the text.

Text 1. Logistics Companies

Logistics companies help other companies to run their business smoothly without worrying about the transportation issues. They help streamline the task of delivering shipments of their customer companies. They specialize in the field of transportation and can perform all activities from pick-up of the shipments to assisting on tracking the

geographical location of the shipments and to safely deliver the goods at the right time and in a safe and hygienic condition thereby attaining customer service and appreciation. By doing this, they retain their existing customers and prospective customers come their way.

Logistics is regarded as the complete set of functions that are concerned with planning, controlling and managing a smooth flow of products and services, people, real-time data and information that are considered to be of utmost importance. This also includes the steps that are involved in delivering the products and services without shrinking the budget of the company.

It is commonly believed that no manufacturing, distribution or marketing activity can be completed without the support of an effective logistics system. The logistics system needs to be drafted in such a manner that it is able to achieve the business goals of the company besides being a supporting hand in the successful implementation of the plans and policies of the company.

A logistics company may face numerous problems or challenges while performing its duties:

1) **Globalization of Supply Chain.** Due to the advances in the field of logistics, supply chains are now considered to be global as their area of distribution has spread far. Logistics companies have their network levels, both domestically and internationally. In the present competitive environment, there is an urgent need for them to manage their complex operations around supply chains that have characteristics of effective distribution, multi-point sourcing and global delivery.

2) **Growth of existing networks and service footprint.** These days customers are not merely satisfied with delivery of goods. A logistics company must be able to provide multi-modal services, additional and unique features, timely delivery and complete assistance across the life-cycle of the shipments. There must be steps taken by the logistics company for the development of new routes in addition to the expansion of services offered and networks.

3) **Transparency in supply chain.** Logistics companies must be ready to offer visibility of supply chain to its customers which can enable the customers to effectively plan and manage any variations in the levels of demand and supply beside inventory.

Thus, it can be said that logistics companies can help ensure cost savings and enhanced efficiencies in addition to lowering the level of inventory. They also help companies by delivering infrequently matched enterprise access to important business information using web-based architecture. They are also helpful in improving the delivery time and thereby resulting in enhancing levels of customer satisfaction.

Exercise 13. Answer the questions on text 2.

1. How do logistics companies help other companies to run their business smoothly? 2. What is considered to be of utmost importance in logistics? 3. How does logistics system need to be drafted? 4. What problems or challenges may a logistics company face while performing its duties? 5. What is an urgent need for logistics companies in the present competitive environment? 6. What is to be done by logistics companies in addition to the expansion of services offered to the customers? 7. What can the offering of supply chain visibility enable customers to do? 8. What kind of help can logistics companies also provide?

Exercise 14. Give verbs corresponding to the following nouns:

satisfaction, analysis, interest, addition, expansion, competition, provision, application, description, completion, consumption, service, relation, communication, experience, assembly, belief, knowledge, decision, determination.

Exercise 15. Translate the following sentences into English:

1. Спеціаліст з логістики потрібен у всіх організаціях, діяльність яких пов'язана з постачанням товарів. 2. Робота логіста досить різноманітна: він аналізує інформацію та на її основі приймає рішення щодо шляхів та термінів постачання товарів. 3. Логістик розраховує вартість транспортування, координує роботу перевізників, взаємодіє з постачальниками, працівниками складів, митними службами (customs services). 4. Для успішної роботи логістику потрібні аналітичний розум, інтуїція (intuition), знання прикладної математики, юриспруденції (jurisprudence), основ економіки. 5. Рівень доходу логістиків досить високий та може перевищувати середню заробітну плату (average wage) в галузі промисловості удвічі. 6. Досвід роботи відкриває широкі

перспективи для створення власного бізнесу, пов'язаного з організацією перевезень та постачанням товарів як вітчизняних, так і закордонних (foreign).

Exercise 16. Insert articles (a, the) where necessary and comment on their usage.

1. In order to become ... logistics coordinator, it is important to understand what ... job requires, career advancement opportunities, and ... potential employers. 2. There are ... multiple career paths to become ... logistics coordinator. 3. The primary responsibility of ... logistics coordinator is to manage ... movement of materials. 4. Logistics is ... term used to describe ... movement of goods from originating source to ... consumer. 5. Although there are community and ... career college programs to become ... logistics coordinator, successful completion is not mandatory. 6. Most employers will accept ... business diploma or completion of ... bachelor of arts (BA) degree as sufficient training to become ... logistics coordinator. 7. Work experience in ... logistics is very important in this role. This experience is typically obtained through ... position as ... shipping clerk, package movement technician, courier, driver, or related position. 8. Many people work on the front lines of ... courier industry plan to advance into this role as ... part of their long-term career plan. 9. Customer service is ... large part of ... skill set required to become ... logistics coordinator. 10. These skills can be obtained in ... wide range of positions, from telephone customer service to retail sales. ... ability to listen, communicate clearly, and work with others are all ... very important skills for ... logistics coordinators.

Exercise 17. Memorize the basic terminology to text 3.

vacancy – вакансія; вільне місце

to deal (with) – мати справу (з), вирішувати проблему

to cover – 1) покривати; накривати; вкривати; 2) охоплювати, містити в собі

point of destination – місце, пункт призначення

ample opportunity – широкі можливості

to evolve – 1) розвивати(ся); еволюціонувати; 2) розгортати(ся)

commercial contracts manager – комерційний директор

to ensure support – гарантувати підтримку

legal support – юридична підтримка

thorough – ретельний, ґрунтовний; детальний, досконалий
property – власність, майно
law – 1) закон; 2) право; правознавство, юрисдикція
thorough – 1) повний, цілковитий; 2) ґрунтовний
enactment – нормативний акт; закон, декрет, указ
analyst – аналітик
cost reduction – зниження вартості
alongside – поруч, пліч-о-пліч
analytical bent of mind – схильність до аналітичної розумової діяльності; аналітичний розум
to possess – володіти, мати, мати при собі
change management – управління змінами
lean implementation consultant – консультант із питань спрощеного впровадження рішень
due – належний
emphasis – наголос
to assist – допомагати, надавати допомогу, сприяти
to leverage – використовувати (на свою користь)
to frame – складати, утворювати, формулювати, розробляти
to predefine – визначати наперед
deadline – крайній строк (термін)
procurement – закупки; постачання; придбання
accurate – точний, правильний
economical – 1) економний, ошадний; 2) економічний
in excess – більше, понад, понад нормою (*норму*)
deficit – дефіцит; нестача
actual – дійсний, фактично наявний
to interface – 1) з'єднувати; 2) бути пов'язаним; 3) слугувати засобом зв'язку
to update – модернізувати; оновлювати інформацію (дані)
enterprise resource planning (ERP) – планування бізнес-ресурсів
to negotiate – вести переговори, перемовини; домовлятися
vendor – продавець, торговець
pricing – ціноутворення
maintenance – підтримання; утримання; ведення (*рахунку*)
documentary – документальний; задокументований
records – обліково-звітні матеріали
bar-coding – штрих-кодування

employee – найманий робітник, службовець, працівник

Exercise 18. Read and translate text 3.

Text 3. Ample Opportunities in the Field of Logistics

There is a variety of different types of logistics vacancies in today's business environment. Logistics has been defined as the art and science of various functions that deal with the aspects of planning, managing and controlling the flow of goods and services, people and information. It covers all steps taken to ensure that the delivery of a product or service is managed in such a way that there is no trouble in delivering the product from the point of origin to the final point of destination.

There are ample opportunities in the field of logistics which have evolved significantly over the years. The nature of duties and responsibilities attached to different vacancies related to the field of logistics are discussed below.

Commercial Contracts Manager. The primary role of a commercial contracts manager is to ensure legal and commercial support towards various aspects of an organization such as sales, marketing and logistics. This requires a thorough experience of various law and enactments such as intellectual and property laws.

Logistics Analyst. The role of a logistics analyst is to ensure that cost reductions are made alongside improvements of process. The role may involve engaging with various operating units and ensuring an enhanced customer service. A thorough understanding of aspects related to distribution and warehousing is required. The person must have an analytical bent of mind and must possess knowledge regarding change management.

Lean Implementation Consultant. The key role of a lean implementation consultant is to deliver lean implementation projects with the due emphasis on changes occurring in the human culture element. One must have adequate related knowledge and experience.

Supply Chain Logistics Consultant. The role of a supply chain logistics consultant is to assist clients in leveraging logistics value and also to design networks and frame steps necessary for effective managing and to implement orders of the organization. He is also responsible for designing and reviewing the network of supply chain

and implementation of systems to make sure that the predefined objectives are achieved under strict deadlines.

Procurement Consultant. The candidate must have knowledge in the field of procurement logistics and supply chain management consulting. His role is to ensure that all the procurements made by the organization are accurate in every regard and are economical. He takes all steps necessary enough to make sure that the procurements are not in excess or deficit of the actual requirements of the organization.

Supply Chain Manager. The role of a supply chain manager is to ensure responsibility of the entire supply chain that is being interfaced for development of products. His role also extends to production planning, customer service, sales and material supply and warehousing. He needs to ensure an optimal performance of operations, warehousing and materials supply.

Assistant Manager, Logistics and Stores is responsible for material or inventory control besides assisting in updating records in Enterprise Resource Planning (ERP) and also negotiates with transport vendors.

Warehouse Manager. A warehouse manager is responsible for planning, maintaining and directing the overall warehouse operations. He is also responsible for pricing, maintenance of documentary records and bar-coding.

So, there are quite varied roles and duties which are performed by a logistics employee according to the particular job or field.

Exercise 19. Answer the questions on text 3.

1. What are the types of logistics positions in today's business environment? 2. How has logistics been defined? 3. What is the role of a commercial contracts manager? 4. What does the role of logistics analyst involve? 5. What types of consultants can there be in logistics? 6. What is the task of a lean implementation consultant? 7. What is supply chain logistics consultant responsible for? 8. What knowledge must the candidate applying for the position of procurement consultant have in the field of logistics? 9. Who is to ensure responsibility of the entire supply chain and an optimal performance of operations, warehousing and materials supply? 10. What are the responsibilities of the assistant and warehouse manager?

Exercise 20. Give English equivalents.

Вакансії в бізнес-середовищі; доставка продукту або послуги; місце походження; кінцевий пункт призначення; широкі можливості; юридична та комерційна підтримка; достатній досвід; нормативний акт; інтелектуальне та майнове право; логістичний аналітик; покращене обслуговування клієнтів; схильність до аналітичної розумової діяльності; управління змінами; належні знання та досвід; використання собі на користь; виконувати замовлення; наперед визначена мета; крайній термін виконання; постачання; товарно-матеріальні запаси; вести переговори; обліково-звітні матеріали; штрих-кодування; торговець; службовець.

Exercise 21. Give definitions to the following terms:

commercial contracts manager, logistics analyst, lean implementation consultant, supply chain logistics consultant, procurement consultant, warehouse manager.

Exercise 22. Speak on:

1. Career in logistics: concepts and paths.
2. Peculiarities of a logistics manager's career.
3. Vacancies in the field of logistics.

Unit 3. EMPLOYMENT OF LOGISTICS SPECIALISTS

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

distinctly, voluntarily, unexpectedly, resume, reference, enthusiasm, strength, rule of thumb, supervise, supervisor, technique, oblige, flaunt, confidence, superintendent, credibility, visibility, candidate, credential, persistence.

Exercise 2. Study the definitions. Give their Ukrainian equivalents.

employ (v) – to hire or engage the services of an individual or his or her equipment;

employment (n) – occupation , employment;

employment (n) – the state of being employed or having work that renders payment;

employer (n) – a person, organization, or corporation that has workers in its employ;

employee (n) – anyone who works for a wage or salary and performs services for an employer;

employability (n) – a person's capability for gaining and maintaining employment;

employable (adj) – describing people in the population who are able to work and who fall within certain age limits; capable of being employed;

employed (adj) – having a job; working.

Exercise 3. Translate the following blocks of sentences paying attention to the words and word combinations in italics. Make use of a dictionary.

1. The main ways for *employers* to find workers and for people to find *employers* are via jobs listings in newspapers and online, also called job boards. *Employers* and job seekers also often find each other via professional recruitment consultants who receive a commission from the *employer* to find, screen and select suitable candidates.

2. An *employer's* level of power over its workers is dependent upon numerous factors, the most influential being the nature of the contractual relationship between the two. This relationship is affected by three significant factors: interests, control and motivation.

3. An *employee* contributes labour and expertise to an endeavor of an *employer* and is usually hired to perform specific duties which are packaged into a job. In most modern economies, the term "*employee*" refers to a specific defined relationship between an individual and a corporation, which differs from those of customer or client.

4. *Employees* can organize into trade or labour unions, which represent the work force to collectively bargain with the management of organisations about working and contractual conditions.

5. Usually, either an *employee* or *employer* may end the relationship at any time. This is referred to as *at-will employment*. The contract between the two parties specifies the responsibilities of each when ending the relationship and may include requirements such as notice periods, severance pay, and security measures.

6. I *was employed* by a president of a leading logistics company of Australia. How long have you been *employed* at this job? I would like to

be in the government's *employ*. Recently *employed* worker quickly showed high level of professionalism and productivity.

7. *Employers* must balance interests such as decreasing wage constraints with a maximization of labour productivity in order to achieve a profitable and productive *employment* relationship. Our corporation can only provide *seasonal employment*, not *steady employment* that you are seeking.

8. In order to enhance the *employability* of its graduates, the University aims to provide a range of experience which go beyond its individual academic programmes. In many cases excellent *employability skills* are needed in order to find a good job. Young people who had developed these skills would be highly *employable*. Graduates will be expected to gain the skills that will help them to remain *employable* throughout their working life.

Exercise 4. Memorize the basic terminology to text 1.

to be aware – знати, усвідомлювати

to end up – припиняти(ся); завершувати(ся)

distinctly – ясно, чітко, виразно, помітно

working lifetime – тривалість роботи

to stumble – 1) спотикатися, затинатися; 2) помилятися

voluntarily – добровільно, за власним бажанням; навмисно

unexpectedly – несподівано, непередбачувано; раптово

full-time – повний робочий тиждень / день; штатний (*про працівника*)

permanent – постійний, незмінний

ad (*скор.* від advertisement) – реклама; оголошення

employment agency – бюро з працевлаштування

quality – якість; властивість, ознака

communication – спілкування, комунікація; інформація; повідомлення (дія)

to communicate – спілкуватися; подавати (*на ознайомлення, схвалення*); передавати (*повідомлення*); розсилати (*примірники, копії*)

persistence – 1) впертість, наполегливість; 2) витривалість, життєздатність; 3) постійність; тривалість

aptitude – здатність, схильність

hands-on experience – безпосередній досвід; практичний досвід

resume – резюме

accomplishment – 1) завершення, виконання; 2) досягнення, реалізація
achievement – 1) досягнення; успіх; здобуток; перемога
reference – 1) рекомендація, характеристика (на особу);
2) посилання (на когось, щось)
strength – сила, міць; сильна риса
to stand out – бути помітним, вирізнятися
to supervise – спостерігати, наглядати, здійснювати нагляд, інспектувати, контролювати
confidential – конфіденційний; секретний, таємний
cover letter – супровідний лист
interview – співбесіда; інтерв'ю; опитування
rule of thumb – практичне правило
response – відповідь; реагування, реакція
request – 1) запит; 2) прохання; 3) запитувати, робити запит
technique – метод, прийом
impression – враження; думка, уявлення
to praise – хвалити, вихваляти
supervisor – інспектор, контролер; наглядач, начальник
letter of recommendation – (письмова) рекомендація, рекомендаційний лист
to oblige – зобов'язувати, зв'язувати зобов'язанням; примушувати
shelf life – строк збереження товарної якості продукції; строк придатності при зберіганні
prospective – майбутній; можливий, ймовірний; потенційний
confidence – 1) впевненість; 2) довіра
to forego – 1) передувати; 2) утримуватися, відмовлятися (від чогось)
on the spot – одразу, негайно; на місці
title – 1) заголовок, назва; 2) титульна сторінка; 3) титул; звання
superintendent – керівник; управитель; завідувач, директор
congressman – конгресмен, член Конгресу (США)
fine – прекрасний, чудовий
to transcribe – переписувати
to flaunt – виставляти напоказ, хизуватися
glowing – яскравий
credibility – 1) довіра; 2) достовірність, правдивість; надійність

Exercise 5. Read, translate and give the gist of the text.

Text 1. Job Hunting

As you consider the possibility of a job hunt or career change, you need to be aware that most people end up having at least three distinctly different careers in their working lifetimes, and often those careers are different from each other. Yet people usually stumble through each job campaign, unsure of what they should be doing. Whether you find yourself voluntarily or unexpectedly in a job hunt, the direct approach is the job hunting strategy most likely to yield a full-time permanent job. The direct approach is an active, take-the-initiative style of job hunting in which you choose your next employer rather than relying on responding to ads, using employment agencies, or depending on other methods of finding jobs.

“Lack of experience” is often the last reason people are not offered jobs, according to the companies who do the hiring. If you are changing careers, you will be glad to learn that experienced professionals often are selling “potential” rather than experience in a job hunt.

Companies look for personal qualities that they know tend to be present in their most effective professionals, such as communication skills, initiative, persistence, organizational and time management skills, and creativity. Frequently companies are trying to discover “personality type,” “talent,” “ability,” “aptitude,” and “potential” rather than seeking actual hands-on experience, so your resume should be designed to aggressively present your accomplishments. Attitude, enthusiasm, personality, and a track record of achievements in any type of work are the primary “indicators of success” which employers are seeking.

You need to provide references during a job hunt, but you may not be sure of how and when to use references for maximum advantage. You can use references very creatively during a job hunt to call attention to your strengths and make yourself “stand out.” You should ask from three to five people, including people who have supervised you, if you can use them as a reference during your job hunt. You may not be able to ask your current boss since your job hunt is probably confidential.

A common question in resume preparation is: “Do I need to put my references on my resume?” No, you don’t. Even if you create a references page at the same time you prepare your resume, you don’t

need to mail, e-mail, or fax your references page with the resume and cover letter. Usually the potential employer is not interested in references until he meets you, so the earliest you need to have references ready is at the first interview. Obviously there are exceptions to this standard rule of thumb; sometimes an ad will ask you to send references with your first response. Wait until the employer requests references before providing them.

An excellent attention-getting technique is to take to the first interview not just a page of references (giving names, addresses, and telephone numbers) but an actual letter of reference written by someone who knows you well and who preferably has supervised or employed you. A professional way to close the first interview is to thank the interviewer, shake his or her hand, and then say you'd like to give him or her a copy of a letter of reference from a previous employer. Hopefully you already made a good impression during the interview, but you'll "close the sale" in a dynamic fashion if you leave a letter praising you and your accomplishments. For that reason, it's a good idea to ask supervisors during your final weeks in a job if they will provide you with a written letter of recommendation which you can use in future job hunts. Most employers will oblige, and you will have a letter that has a useful "shelf life" of many years. Such a letter often gives the prospective employer enough confidence in his opinion of you that he may forego checking out other references and decide to offer you the job on the spot or in the next few days.

Whom should you ask to serve as references? References should be written by people who have known or supervised you in a professional, academic, or work situation. References with big titles, like school superintendent or congressman, are fine, but remind busy people when you get to the interview stage that they may be contacted soon. If you're asked to provide references on a formal company application, you can simply transcribe names from your references list. In summary, follow this rule in using references: If you've got them, flaunt them! Your references probably won't ever get you a job, but glowing letters of reference can give you credibility and visibility that can make you stand out among candidates with similar credentials and potential.

Exercise 6. Say whether the following statements are true or false. Correct the false ones.

1. The direct approach is the job hunting strategy in which your prospective employer chooses you using employment agency. 2. “Lack of experience” is often the first reason people are not offered jobs, according to the companies who do the hiring. 3. Companies look for personal qualities to be present in their most effective professionals, such as communication skills, initiative, persistence, organizational and time management skills, and creativity. 4. Your resume should be designed to calmly present your accomplishments. 5. You need to provide references during a job hunt and use them very creatively, for maximum advantage calling attention to your strengths. 6. You should ask your current boss to give you a reference even if your job hunt is confidential. 7. You need to put your references on your resume as the potential employer is interested in references until he meets you. 8. A professional way to close the first interview is to thank the interviewer, shake his or her hand, and say you’d like to give him or her a copy of letter of reference from a previous employer.

Exercise 7. Read the job advertisement for a position of Logistics Manager and fill in the blanks with the words from the box

Sales Manager, Logistics Manager, recruit, dispatch, receipt, schedule deliveries, on-time delivery, responsibilities, communication skills, management skills, career, routing system, warehousing, transport, profitable, depot.

Job Description

A leading manufacturing organisation is looking to ... a Logistics Manager for their ... in Milton Keynes. Reporting to the Regional Manager the role is wholly responsible for both the ... and ... operation. The main ... for this position include but are not limited to the following:

- to ensure the ... of the correct product;
- to liaise and provide operational support to the regional ... ensuring the ... running of the depot;
- responsibility for the ..., storage and ... of all materials purchased for stock and to the customer requirements;
- ...to the customers by utilizing both own vehicles and 3rd party transport.

Skills & Experience

You will ideally be an experienced ... although the client is willing to extend this opportunity to those who are looking to make this the next step within their Candidates must have excellent ..., both verbal and written. With excellent ..., the successful candidate will be able to demonstrate experience of developing teams within a Logistics environment. To be successful within this role you will need to be highly motivated, energetic, dynamic and confident. Knowledge of Paragon ... will be an advantage.

Exercise 8. Read the job advertisement for a position of Supply Chain & Logistics Coordinator and translate it into Ukrainian..

Job Description

A leading retail business, Hudson, based in London is currently seeking a Supply Chain & Logistics Coordinator to join the business. This is a fantastic opportunity for the right candidate to join a brand name with excellent growth and development opportunities.

The Supply Chain Manager's role will focus on:

- driving logistics efficiencies in the market;
- customer satisfaction concerning shipping quality and distribution services;
- coordination of courier and transport operations;
- increase logistics innovation and competitiveness of UK market;
- define the strategy for parcel distribution within the UK market.

The suitable candidate is a person with at least 2 years experience gained working in a Supply Chain role.

Please note you will receive an automated response advising you that we have received your CV.

Hudson is a leading provider of permanent recruitment, contract professionals and talent management solutions worldwide.

Exercise 9. Read dialogue 1 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 1

A: Who can be considered a potential employer for logistics managers?

B: I think that logistics involves so many critical business activities that nearly every company can employ logistics specialists.

A: What kinds of organizations employ logistics managers?

B: These are manufacturing firms, third party logistics firms (warehousing, dedicated carriers, forwarders etc.), transportation firms, educational organizations (Universities and training firms), government agencies (military, department of transportation), service institutions (banks, hospitals), consulting firms and different merchandising firms (retailers, wholesalers, distributors).

A: Now I agree that logistics is connected to nearly every aspect of business management but what do most people say about Logistics?

B: Most people say Logistics is getting the right product to the right place in the right quantity at the right time, in the right condition at the right cost and finally to the right customer.

A: I know it as 7 R's. But this is a complex task that is not limited to the truck that does the delivery. So, Logistics is more than transportation.

B: Of course, it is a complex notion.

Notes

to employ – брати на роботу, (на)давати роботу за наймом, наймати
manufacturing – 1) виробництво, виготовлення; 2) виробничий;

промисловий

dedicated – 1) спеціалізований; 2) відданий

government agency – урядова установа, урядовий орган

retailer – роздрібний торговець

truck – вантажний автомобіль, вантажівка

Exercise 10. Match the definitions with proper terms.

Definitions

Terms

- | | |
|---|-------------------------|
| 1. An organization that assists firms in recruiting employees and aids individuals programs in their attempts to locate jobs | a) employee assistance |
| 2. A selection method involving the assessment of a job applicant's characteristics through paper-and-pencil responses or simulated exercises | b) employee orientation |
| 3. Any supplements to wages or pay that employees get based on their working for the organization | c) employee rights |

4. A formal process of helping new employees adjust to the organization, job, and work group d) employment agency
5. Guarantees of fair treatment from employers, particularly regarding an employee's right to privacy e) employee benefits
6. Programs designed to help employees deal with social problems, such as alcoholism, drug addiction, and excessive stress f) employment test
7. Granting power to employees to initiate change, thereby encouraging them to take charge of what they do g) employment at will
8. The legal principle that holds that either employee or employer can terminate employment at any time for any reason. h) employee empowerment

Exercise 11. Memorize the basic terminology to text 2.

literal – буквальний, дослівний; точний

academic community – наукова спільнота

curriculum vitae (CV) – біографія, біографічна довідка; анкетні дані; резюме

to accomplish – завершувати, виконувати, досягати

stranger – незнайомиць, стороння особа

to screen out – виявляти (*внаслідок перевірки*)

concise – стислий, скорочений, сумарний

apparent – явний, видимий; очевидний;

recent – нещодавній, недавній

reverse – зворотний; перевернутий; протилежний

curiosity – цікавість; допитливість

background – підготовка, кваліфікація

brief – короткий, стислий

hit – 1) удар; 2) бити, ударяти; уражати, влучати в ціль

letter of interest – лист-зацікавлення

to accompany – супроводжувати

to introduce – 1) представляти (*когось*); знайомити, рекомендувати; 2) вводити

highlight – 1) основний момент (факт); 2) підкреслювати, виділяти

word processing – текстова обробка

reply – 1) відповідь; 2) відповідати
to lurk – залишатися непоміченим; критися
MBA (Master of Business Administration) – магістр управління
бізнесом / ділового адміністрування
requirement –1) вимога; необхідна умова; 2) потреба
best fit – максимальна відповідність
to commit (to) – зобов'язувати, зв'язувати зобов'язанням
to lock in – замикати та не випускати, замикати на ключ
to handle – поводитися (з чимось), розглядати (щось)
delighted – приємно вражений
salary history – хронологія заробітної плати
habit –1) звичка; 2) особливість, характерна риса
tailor-made – 1) зроблений (пошитий) на замовлення;
2) призначений спеціально для (когось / чогось)
to set up – призначати
approach – підхід, концепція, позиція, принцип
exact – точний, цілком правильний
to forward – відправляти, пересилати, надсилати
to arrange – влаштовувати
at your convenience – як (коли) вам буде зручно
determined – рішучий, сповнений рішучості, твердий
to follow up – 1) доводити до кінця; 2) супроводжувати;
підкріплювати

Exercise 12. Read and translate text 2.

Text 1. Writing and Using Your Resume

Very literally, your resume should motivate the person reading it to dial the phone number or e-mail the screen name you have put on the resume.

Your resume should be written on one page, maybe two. Usually only people in the academic community have a resume (which they usually call a *curriculum vitae*(CV)) longer than one or two pages. Remember that your resume is almost always accompanied by a cover letter, and a potential employer does not want to read more than two or three pages about a total stranger in order to decide if he wants to meet that person! Besides, don't forget that the more you tell someone about yourself, the more opportunity you are providing for the employer to

screen you out at the “first-cut” stage. A resume should be concise and exciting and designed to make the reader want to meet you in person!

Employers almost always prefer a chronological resume; in other words, an employer will find a resume easier to read if it is immediately apparent what your current or most recent job is, what you did before that, and so forth, in reverse chronological order. A resume that goes back in detail for the last ten years of employment will generally satisfy the employer’s curiosity about your background. Employment more than ten years old can be shown even more briefly in an “Other Experience” section at the end of your “Experience” section. Remember that your intention is not to tell everything you’ve done but to “hit the high points” and especially impress the employer with what you learned, contributed, or accomplished in each job you describe.

When you mail, e-mail, or fax your resume, always send a “cover letter.” A “cover letter,” sometimes called a “resume letter” or “letter of interest,” is a letter that accompanies and introduces your resume. Your cover letter is a way of personalizing the resume by sending it to the specific person you think you might want to work for at each company. Your cover letter should contain a few highlights from your resume – just enough to make someone want to meet you. Cover letters should always be typed or word processed on a computer – never handwritten.

1. Learn the art of answering ads.

There is an “art,” part of which can be learned, in using your “bestselling” resume to reply to advertisements. Sometimes an exciting job lurks behind a boring ad that someone dictated in a hurry, so reply to any ad that interests you. Don’t worry that you aren’t “25 years old with an MBA” like the ad asks for. Employers will always make compromises in their requirements if they think you’re the “best fit” overall.

What if the ad you’re answering asks for “salary requirements?” The first rule is to avoid committing yourself in writing at that point to a specific salary. You don’t want to “lock yourself in.”

There are two ways to handle the ad that asks for “salary requirements.” First, you can ignore that part of the ad and accompany your resume with a cover letter that focuses on “selling” you, your abilities, and even some of your philosophy about work or your field.

You may include a sentence in your cover letter like this: “I can provide excellent personal and professional references at your request, and I would be delighted to share the private details of my salary history with you in person.”

Analyze the ad and “tailor” yourself to it so that your background, work habits, and interests seem “tailor-made” to the company’s needs.

2. Talk to friends and relatives.

Don’t be shy about telling your friends and relatives the kind of job you’re looking for. They may be able to make introductions and help set up interviews. About 25% of all interviews are set up through your network of contacts, so don’t ignore this approach.

3. Finally, and most importantly, use the “direct approach.”

More than 50% of all job interviews are set up by the “direct approach.” That means you actually mail, e-mail, or fax a resume and a cover letter to a company you think might be interesting to work for.

In general, you should write directly to the *exact name* of the person who would be hiring you: say, the vice-president of marketing or data processing. If you’re in doubt about to whom to address the letter, address it to the president by name and he or she will make sure it gets forwarded to the right person within the company who has hiring authority in your area.

It is ideal to end the cover letter accompanying your resume by saying, “I hope you’ll welcome my call next week when I try to arrange a brief meeting at your convenience to discuss your current and future needs and how I might serve them.” Keep it low key, and just ask for a “brief meeting,” not an interview. Employers want people who show a determined interest in working with them, so don’t be shy about following up on the resume and cover letter you’ve mailed.

Exercise 13. Give English equivalents.

Супровідний лист; хронологічний порядок; резюме (біографія); максимальна відповідність; лист-зацікавлення; хронологія заробітної плати; зустрітися особисто; робоча звичка; кваліфікація; цікавість; рукописний; зроблений на замовлення; стислий (короткий); як вам буде зручно; призначати; приємно вражений; вимога; магістр управління бізнесом; залишатися непоміченим; відповідати; рішучий; зворотний; компроміс.

Exercise 14. Answer the questions on text 2.

1. What is a “good” resume?
2. How long should your resume be?
3. Should resumes be functional or chronological? Why?
4. Whom should you address your cover letter?
5. Why is it useful to talk to your friends and relatives about the job you are looking for?
6. What’s the correct way of following up on a resume you send?

Exercise 15. Translate the following sentences into English:

1. Ваше резюме повинно бути написане на одній, можливо на двох сторінках, та спонукати людину, що читає його, набрати ваш телефонний номер або відправити вам електронне повідомлення.
2. До вашого резюме слід додати супровідний лист.
3. Найкраще резюме – стисле та захоплююче, складене так, аби роботодавець забажав зустрітися з вами особисто.
4. Роботодавцю буде легше читати ваше резюме, якщо в ньому чітко видно, яка ваша поточна або остання робота, чим ви займались до цього, тобто місця вашої роботи необхідно подати у зворотному хронологічному порядку.
5. Супровідний лист повинен містити в собі декілька основних моментів із вашого резюме.
6. Ваша кваліфікація, робочі навички та інтереси мають здаватися спеціально призначеними для потреб компанії.
7. Не соромтеся розповідати вашим друзям та родичам про роботу, яку ви шукаєте, можливо, вони зможуть допомогти вам.
8. Якщо ви маєте сумніви щодо того, кому адресувати ваш супровідний лист, напишіть його на ім’я президента компанії.

Exercise 16. Choose the correct alternative.

14 most common reasons job hunters are not offered jobs (according to the companies who do the interviewing and hiring):

1. **Low / high / strong** level of accomplishment
2. **Good / Poor / Bad** attitude, lack of self-confidence
3. **Too many / Lack of / Independence of** goals
4. Lack of **words / enthusiasm / character**
5. Lack of **interest / practice / experience** in the company’s business
6. **Ability / Inability / Desire** to sell or express yourself
7. Unrealistic salary **demands / supplies / offers**
8. Poor **appearance / clothes / things**
9. Lack of maturity, no **leadership potential / relationship potential**

10. Lack of *extracurricular activities / current activities / previous work*

11. Lack of preparation for the *conversation / interview / work*, no knowledge about company

12. Objecting *to work / to travel / to obey*

13. *Low/Excessive / Lively* interest in security and benefits

14. Inappropriate *underground / background / behaviour*

Exercise 17. Memorize the basic terminology to text 3.

nervous – 1) нервовий; 2) неспокійний, тривожний

fear – страх, острах; побоювання

to head – 1) очолювати; стояти (іти) попереду; 2) перевершувати, бути першим

declining industry – галузь, що переживає занепад

annual report – річний звіт

fit – 1) підходящий; 2) придатний; 3) пристосований

burden – 1) вага; ноша; 2) тягар

interviewer – інтерв'юер

hard-working – працьовитий

loyal – 1) вірний, відданий; 2) лояльний

imaginative – 1) наділений багатою уявою; 2) образний

cost-cutter – той, хто здатний скоротити видатки

to confess – 1) зізнаватися; визнавати (*помилку*); 2) сповідати(ся)

lazy – лінивий, ледачий

workaholic – трудівник, самовідданий працівник, трудоголік

perfectionist – перфекціоніст (людина, що в усьому прагне досконалості)

frustrated – прикро вражений, (дуже) засмучений, розчарований

to share – поділяти (*думку, смак тощо*)

weakness – слабе місце, недолік, вада

to perceive – сприймати; усвідомлювати; розуміти

long-range – довгостроковий

to motivate – мотивувати

clichéd – банальний, стереотипний

troubleshooting – розслідування конфлікту (*для його врегулювання*)

tough problem – складна для вирішення проблема

to bring up – порушувати (*питання*); ставити на обговорення

nose-dive – стрімкий, раптовий спад

to prosecute – переслідувати (в судовому порядку), притягати до
судової відповідальності
bribe – підкуп; хабар; предмет хабарництва
unemployed – незайнятий; безробітний

Exercise 18. Read and translate text 3.

Text 3. Preparing for a Job Interview

Don't worry *too* much if you're nervous before interviews. You're supposed to be a little nervous, especially if the job means a lot to you. But the best way to kill unnecessary fears about job hunting is through 1) making sure you have a great resume and 2) preparing yourself for the interview. Here are three main areas you need to think about before each interview.

Do you know what the company does? Find out before the interview what the company's main product or service is. Where is the company heading? Is it in a "growth" or declining industry?

Information about what the company does is in annual reports, in newspaper and magazine articles, and on the Internet.

Do you know what you want to do for the company? Before the interview, try to decide how you see yourself fitting into the company.

Understand before you go to each interview that the burden will be on you to "sell" the interviewer on why you're the best person for the job and the company.

How will you answer the critical interview questions? Put yourself in the interviewer's position and think about the questions you're most likely to be asked. Here are some of the most commonly asked interview questions:

"What are your greatest strengths?"

Don't say you've never thought about it! Go into an interview knowing the three main impressions you want to leave about yourself, such as "I'm hard-working, loyal, and an imaginative cost-cutter."

"What are your greatest weaknesses?"

Don't confess that you're lazy or have trouble meeting deadlines! Confessing that you tend to be a "workaholic" or "tend to be a perfectionist and sometimes get frustrated when others don't share my high standards" will make your prospective employer see a "weakness"

that he likes. Name a weakness that your interviewer will perceive as a strength.

“What are your long-range goals?”

Say your long-range goal is to be *with* the company, contributing to its goals and success.

“What motivates you to do your best work?”

Don't get dollar signs in your eyes here! “A challenge” is not a bad answer, but it's a little clichéd. Saying something like “troubleshooting” or “solving a tough problem” is more interesting and specific. Give an example if you can.

“What do you know about this organization?”

Don't say you never heard of it until they asked you to the interview! Name an interesting, positive thing you learned about the company recently from your research. Don't get onto a negative area of the company if you can think of positive facts you can bring up. Of course, if you learned in your research that the company's sales seem to be taking a nose-dive, or that the company president is being prosecuted for taking bribes, you might politely ask your interviewer to tell you something that could help you better understand what you've been reading.

“Why should I hire you?”

“I'm unemployed and available” is the wrong answer here! Get back to your strengths and say that you believe the organization could benefit by a loyal, hard-working cost-cutter like yourself.

You should decide in advance, before you go to the interview, how you will answer each of these commonly asked questions.

Exercise 19. Give English equivalents.

Працьовитий; лінивий; самовідданий працівник; перфекціоніст; слабе місце; хабар; притягати до судової відповідальності; інтерв'юер; тягар; безробітний; банальний; розчарований; складна проблема; розслідування конфлікту; довгостроковий; придатний; стрімкий спад.

Exercise 20. Play the roles of the interviewer and the interviewee with your partner asking and answering the following questions:

1. What is your full name? 2. Are you married? What is your marital status? 3. What university did you graduate from? When? 4. What

department did you study at? 5. Have you ever worked part-time or during the summer? 6. Do you have any work experience in logistics? 7. Why are you applying for a post of logistics manager? 8. How did you find out about this position? 9. Why are you interested in joining our company? 10. Why do you feel you are qualified for this job? 11. What do you know about our company? 12. Are you capable to work overtime? 13. What are your greatest strengths for the job? 14. What are your weaknesses? 15. What motivates you in your work? 16. What are your long-range goals? 17. What is your expected salary? 18. Why should I hire you?

Exercise 21. Translate the word combinations with the word “job” into Ukrainian. Use them in sentences of your own.

Low-level job, job campaign, job-seeker, job market, job hunt, job description, job details, job hunter, part-time job, full-time job, present job, hold a second job, job applicant, managerial job, withdrawal from a job, job skill, job interview, job cluster, job content, job environment, job evaluation, job family, job performance standards, job involvement, job placement, job progression ladder, job rotation, job relationships, job requirements, job satisfaction, job sharing, job specification, job step.

Exercise 22. Read, translate and analyze the following example and write your own résumé.

Example of a resume

CORNELIUS WHITAKER

1110 Hay Street, Fayetteville, NC 28305
preppub@aol.com
(910)483-6611

OBJECTIVE

To offer my experience related to all aspects of supply, logistics, and warehouse management as well as my strong computer skills and budgetary knowledge.

EDUCATION & TRAINING

Have completed 52 hours of general studies, Central Texas College, Killeen, TX. Studied Principles

of Banking/Teller Training, Baylor University, Waco, TX. Excelled in extensive military-sponsored training which included the following courses:

- Standard Property Book Systems Redesign
- Unit Level Logistics Systems (ULLS-S4) Instructor
- Research and Development
- Defense Reutilization and Marketing Personnel Records

EXPERIENCE

Am advancing in leadership roles while building a reputation for my knowledge of logistics management, personnel supervision, and warehouse operations, U.S. Army:

LOGISTICS MANAGEMENT SPECIALIST.

Fort Hood, TX (2005-present). Have handled multiple areas of responsibility in similar consecutive assignments which have included maintaining accountability for property valued in excess of \$35 million; am recognized as a subject matter expert in the field of logistics.

- Advanced to supervise two people.
- Maintain records and parts inventories for more than 200 items of equipment.
- Was a key player in the establishment of new automated systems which are a vital factor in units receiving “commendable” ratings in inspections.
- Control a \$100,000 annual unit budget.
- Was cited for my proficiency in maintaining the property books for two separate units.
- Displayed communication skills and technical knowledge which led to my selection as an instructor for the Army’s new Unit Level Logistics System S4 (ULLS-S4); was chosen from among a group of 15 well-qualified professionals and trained more than 80 people including specialists, supervisors, and managers.
- Supervised a military installation closing project

and physical relocation of all organizational assets with no losses of equipment or funds. Oversaw the design and renovation of new facilities with little assistance and within severe time constraints.

COMPUTERS

Am adept at diagnosing, identifying, and correcting malfunctions to ULLS-S4 systems as well as in loading program software and solving operator and system problems.

Programs and software: Microsoft Word, Excel, PowerPoint, Form Flow, ULLS (S4 and Ground), and Standard Property Book Systems-Redesign.

PERSONAL

Am known for my ability to react quickly and make sound decisions under pressure. Offer expert skills in varying areas including purchasing, budgeting, forecasting, and contracting.

Exercise 23. Make the following sentences interrogative and negative.

1. The interview will begin at eight. 2. Our retailer will be in Kyiv the day after tomorrow. 3. Logistics management officer will introduce you to the management team at your convenience. 4. I will work for a leading 3PL. 5. I will be responsible for coordinating all activities for the weekly and monthly manufacturing plans. 6. In my job I will have to ensure all working procedures are clearly defined. 7. My job will involve supervising information flows for the enterprise. 8. I will work in logistics area, namely in the logistics department.

Exercise 24. Change the following into the Future Indefinite.

1. The employer of this logistics company hires new professionals twice a year. 2. I spend all my time preparing to the interview. 3. Our logistician left for London on Monday. 4. My best friend is an operations manager and I am a warehouse manager. 5. I saw him at the employment agency. 6. Her husband worked at the factory as a material control chief. 7. I am busy writing a resume and a cover letter on weekdays. 8. I completed the questionnaire and the interviewer agreed to consider my application form.

Exercise 25. Translate into English using the Future Indefinite tense.

1. Завтра службовці обговорюватимуть питання тривалості роботи на підприємстві. 2. На порядку денному буде питання можливості створення нового дистриб'юторського центру та проведення співбесід з кандидатами на нові посади. 3. Ви підете на співбесіду сьогодні ввечері? 4. Коли прийде начальник зміни? 5. Я напишу супровідний лист самостійно, але ще обов'язково потрібно мати характеристику (на особу). 6. Наступного тижня ми вивчатимемо одразу й нове практичне правило, й нові методи роботи. 7. У понеділок роботодавець особливо пильно спостерігатиме за виконанням роботи менеджера із закупівель, а також адміністратора з організації виробництва. 8. Ваш майбутній керівник зобов'яже вас бути конфіденційним. 9. Можливо, лише за кілька місяців він знатиме, як отримати посаду спеціаліста з логістичного управління.

Exercise 26. Match job descriptions with corresponding names of positions.

Job descriptions	Positions
1. Assists merchandise buyer in selecting merchandise for order, placing order, and inventory distribution	a) strategic planning manager
2. Assigns drivers and vehicles to convey freight or passengers	b) top supply chain management executive
3. Manages a group of buyers who select merchandise for order, place orders, and stay involved in inventory distribution for a division	c) assistant merchandise buyer
4. Enhances product workflow by analyzing and developing logistics plans that affect production, distribution, and inventory	d) supply chain & logistics coordinator

- | | |
|--|-----------------------------------|
| 5. Allocates merchandise to stores according to warehouse and store inventory levels | e) dispatcher |
| 6. Responsible for the receipt, storage and dispatch of all materials purchased for stock and to customer requirements | f) warehouse manager |
| 7. Manages total quality programs, policies, and initiatives | g) logistics analyst |
| 8. Responsible for the planning and scheduling of materials through the production schedules | h) logistics manager |
| 9. Drives logistics efficiencies in the market, coordinates courier and transport operations, and satisfies customers concerning shipping quality and distribution services | i) merchandise allocator |
| 10. Responsible for planning and directing an organization's strategic and long-term goals | j) scheduler |
| 11. Responsible for working in-house, managing the day to day management, development and motivation of a team, ensuring that they consistently meet productivity and quality objectives | k) divisional merchandise manager |
| 12. Plans and directs all aspects of an organizations supply chain policies, objectives, and initiatives. | l) quality manager |

Exercise 27. Speak on:

1. The process of job hunting and employment.
2. Job advertisements for logistics specialists.
3. Resume and a cover letter.
4. Preparing for a job interview...

Unit 4. LOGISTICS ORGANIZATION: STRUCTURE AND FUNCTIONING

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

departmentalization, organization, organizational, organize, organizer, organizing, organized, distributed, hybrid, hierarchy, hierarchical, silo, structure, company, vary, various, variation, variety, variable, variability, wholesaler, retailer, generic, manufacturer, strategy, assembly, metrics, matrix.

Exercise 2. Read dialogue 1 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 1

A: How can an organization be defined?

B: An organization is the result of the organizing process and can be defined as a structured grouping of people working together to achieve organizational objectives.

A: Does every organization have its own structure?

B: Yes, it does. Every organization must choose an overall structure that meets its needs best and allows interactions among individuals and departments to attain its goals.

A: Is handling of a relatively small business comparatively simple?

B: Yes, however when any company enlarges its scope of business, it has to hire more employees. Instead of a single logistician or bookkeeper, it will have to employ an entire logistics or accounting department.

A: How will it be possible for a single person to control the business?

B: One or other formal type of organization then becomes necessary. Large organizations use various techniques such as departmentalization, delegation, and others.

A: What is departmentalization?

B: Departmentalization is dividing work activities into units within the organization. This method has been used in different organizations throughout the world.

A: And what is organizational structure?

B: An organizational structure is a hierarchical concept of subordination of entities that work together and contribute to serve one common aim.

It is usually built in one of a variety of styles. It will determine the modes in which the organization shall operate and will perform.

Notes

interaction – взаємодія

instead of – замість когось / чогось

individual – особа, окремих представник

department – відділок; відділення; цех; секція

relatively – 1) стосовно, щодо; 2) відносно, порівняно; 3) відповідно

to enlarge – поширювати, розширювати; розширюватися

scope – масштаб, розмах; сфера

bookkeeper – бухгалтер; рахівник

accounting – бухгалтерський облік; звітність; бухгалтерська справа

single – єдиний; один

various – різний; різноманітний

departmentalization – департаменталізація, поділ на відділи

delegation – делегування, передача (повноважень)

unit – 1) організаційна одиниця

2) службовий підрозділ або філіал фірми

throughout – через, по всьому; протягом, упродовж

hierarchical – ієрархічний

subordination – підпорядкування; субординація

entity – особа; підприємство; організація; організація-суб'єкт
права; юридична особа

mode – 1) метод, спосіб; 2) спосіб дій; манера; 3) форма, вид

to operate – діяти; працювати; функціонувати

Exercise 3. Match English-Ukrainian equivalents.

- | | |
|------------------------|-------------------------|
| 1. departmentalization | a) відділення |
| 2. entity | b) бухгалтерський облік |
| 3. delegation | c) ієрархічний |
| 4. bookkeeper | d) взаємодія |
| 5. hierarchical | e) службовий підрозділ |
| 6. accounting | f) поділ на відділи |
| 7. subordination | g) бухгалтер |

- | | |
|----------------|--------------------------------|
| 8. interaction | h) організація – суб'єкт права |
| 9. department | i) підпорядкування |
| 10. unit | j) передача (повноважень) |

Exercise 4. Memorize the basic terminology to text 1.

- matrix organization – матрична організація
distributed logistics organization – розподілена логістична організація
hybrid – 1) гібрид; 2) гібридний; змішаний
silo – 1) силос; силосна башта; 2) бункер; 3) стартова шахта
to illustrate – пояснювати; ілюструвати
to incorporate – 1) включати (до складу); 2) об'єднувати(ся), приєднувати(ся), сполучати(ся)
key performance indicator (KPI) – ключовий показник / індикатор продуктивності
to starve (for) – жадати, прагнути (чогось)
tremendous – 1) величезний; приголомшливий; 2) жахливий, страшний
lost sale – втрачений збут (внаслідок відсутності товару чи втрати клієнтів)
to shatter – 1) розбивати(ся) вщент; 2) розладнувати (здоров'я); руйнувати (надії)
target – 1) ціль; об'єкт; 2) планове завдання
to structure – 1) структурувати, систематизувати; 2) запроваджувати, інтегрувати (в модель, систему)
metrics – 1) система показників; 2) метрика, вимірювання, висхідні величини
to feature – 1) характеризувати; 2) зображати; змальовувати
transitional – 1) перехідний; 2) проміжний; 3) нестійкий
command – 1) панування, влада; 2) команда; наказ; 3) командування
measure – 1) міра; одиниця виміру 2) міряти, вимірювати; 3) оцінювати, визначати (характер)
performance measure – одиниця вимірювання продуктивності, міра виконання діяльності
equal – 1) рівний, рівноправний; однаковий; відповідний; достатній; 2) рівнятися; дорівнювати
to serve – 1) слугувати; бути корисним; 2) обслуговувати
master – 1) господар; власник; 2) опановувати
chief logistics officer (CLO) – головний спеціаліст з логістики

productivity – 1) продуктивність; вихід продукції, вироблення;
2) продуктивність, ефективність
report – 1) звіт; 2) звітувати
in charge of – відповідальний за
response – реагування, реакція
cross-functional – між-функціональний
to align – ставити в ряд, вирівнювати
reliable – надійний, певний, достовірний, гідний довіри
vaguely – неоднозначно, неясно, невиразно
to suffer – страждати; зазнавати
to fall (into) – поділитися (на)
to be adept (at) – бути обізнаним (в), знатися (*на чомусь*)
patiently – 1) терпляче; 2) наполегливо; вперто
to complain – скаржитися
high-minded – 1) благородний; великодушний; високої душі;
2) гордовитий; пихатий
in essence – по суті
template – еталон; зразок, шаблон
vision – 1) уявлення, погляд, бачення; передбачення; 2) видимий
об'єкт
to leverage – 1) інвестувати позикові кошти / використовувати
позикові кошти; 2) використовувати на свою користь
to dedicate – спеціально виділяти; призначати
synergy – синергія (сумарний ефект взаємодії двох або більше
чинників)
response time – час реагування (час на отримання відповіді на
запит)
otherwise – 1) інакше, по-іншому, в інший спосіб; 2) або ж, а
інакше, а то; 3) інша річ; в інших відношеннях
spreadsheet – зведена (електронна) таблиця (*фінансового стану*)
research and development (R&D) – науково-дослідні й дослідно-
конструкторські роботи
sale – *pl.* обіг; товарообіг; збут; реалізація продукції; обсяг продажу
total quality management (TQM) – система менеджменту якості;
система забезпечення стовідсоткової якості; концепція
тотальної якості

Exercise 5. Read and translate text 1.

Text 1. Logistics Organization Models

There is a variety of logistics organizational models. These model alternatives include: functional organization; process organization; matrix organization; integrated logistics organization; global logistics organization; business unit logistics organization; distributed logistics organization and a hybrid model.

Functional Organization Model

The functional or *silos* organization model is a carryover from the past World War II manufacturing organizations.

A typical functional organization concept from a retail client is illustrated in Fig. 1.

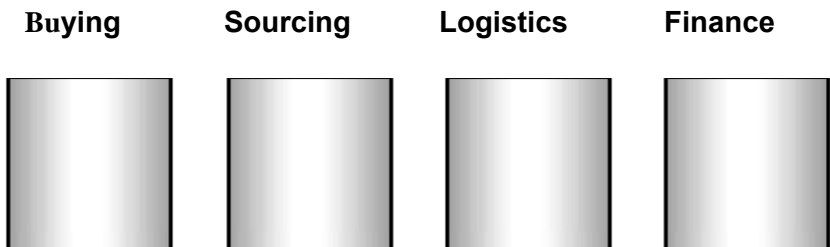


Fig. 1. Functional organization model for retail operations

In their case, logistics only incorporated the traditional transportation and warehousing functions. Because the key performance indicator (KPI) for logistics was storage and handling cost per unit, the logistics organization would hold outbound store deliveries for as long as possible to create large picking waves and larger outbound shipments. In the meantime, the stores were starved for key products resulting in tremendous lost sales costs in the stores.

The premise of the silo/functional organizational model is that if each silo is optimized, then the entire enterprise performance must be optimized. Of course, this premise turned out to be false. Customers and shareholders are not interested in silo performance, and customer/shareholder value is only really enhanced when the functional, political, and technical silos are shattered and restructured/refocused to target customer, shareholder, and employee satisfaction.

Process Organization Model

The process organizational model structures people, metrics, and systems around critical business processes. Fig. 2 illustrates Kraft Food’s process organizational model with silo overlays. The model features five key business processes – brand development, consumer development, customer development, supplier development, and supply chain management – that focus the corporate resources – marketing, manufacturing, and logistics – on customer service.

The model requires individuals from a variety of academic and business disciplines to work together toward common goals that relate directly to customer and shareholder value creation.

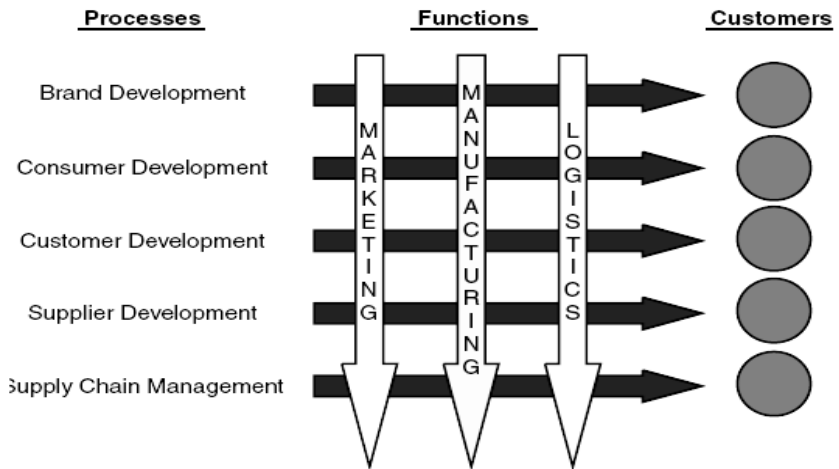


Fig. 2. Kraft Food’s process organizational model

Matrix Organization Model

The matrix organizational model (Fig. 3) is an attempt to combine the functional and process models. It is oftentimes a transitional organization structure, an organizational structure in which two (or more) channels of command, budget responsibility, and performance measurement exist simultaneously. For example, both product and functional forms of organization could be implemented simultaneously, that is, the product and functional managers have equal authority and employees report to both managers. The experience of most of clients is that the matrix model serves neither the interests of the customers,

shareholders, nor internal management. The proverb that says “You cannot serve two masters” holds true. The matrix organization type has been used in organizations such as Procter & Gamble, the Harvard Business School and others.

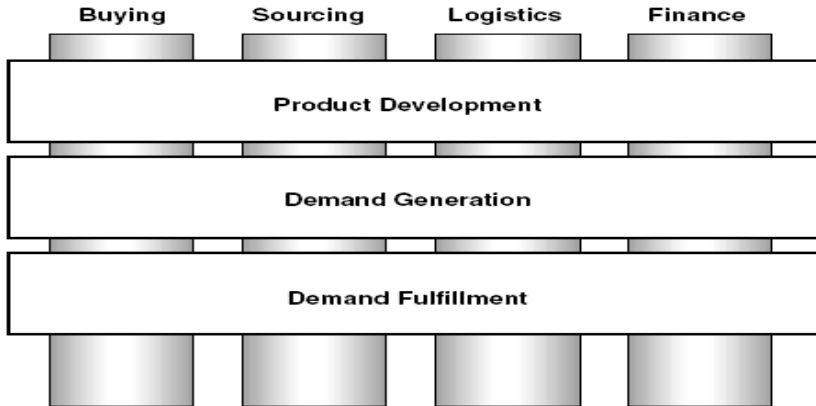


Fig. 3. Matrix organization structure

Integrated Logistics Organizational Model

The integrated logistics organizational model (Fig. 4) is really focused on the processes of customer satisfaction, supply development, and logistics cost/capital management. The model requires a *chief logistics officer* (CLO) or vice president of logistics who is responsible for the four key total logistics performance indicators: total logistics cost, perfect order percentage, total logistics cycle time, and logistics productivity. The CLO has four direct reports, one each in charge of customer response (customer service and order processing), supply (inventory planning and procurement), distribution (transportation and warehousing), and logistics planning/optimization. The model requires that each direct report delivers superior results in his/her elements of the cross-functional measures of total logistics cost, perfect order percentage, total logistics cycle time, and total logistics productivity.

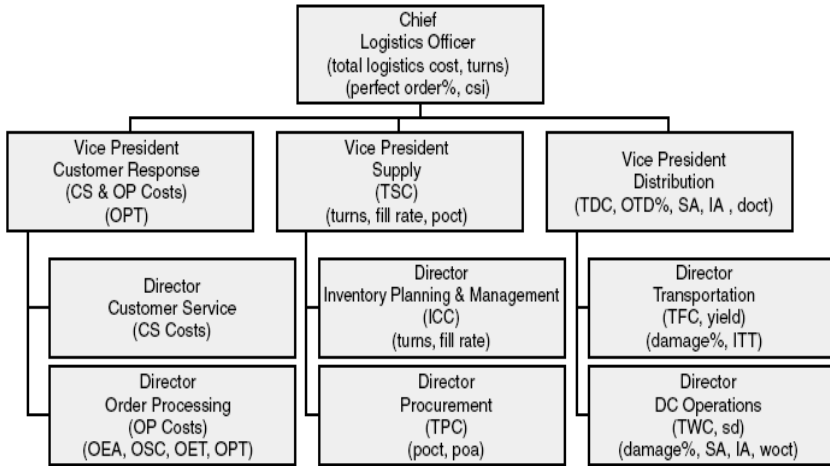


Fig. 4. Integrated logistics organization model with Chief Logistics Officer

There are two reasons this model works particularly well. First, the organization structure is cleanly aligned with well defined, reliable, and benchmarkable logistics performance indicators. Any time the metrics are vaguely presented and/or the organizational structure is at odds¹ with the metrics that are in use, the total organizational performance will suffer. Second, individual personalities in logistics tend to fall into the three suborganizations: customer response, supply, and distribution. The customer response team is typically and necessarily comprised of the happiest, most joyful, and most optimistic professionals in logistics. These are the individuals who are most adept at customer recovery and can patiently leave a complaining customer smiling at the end of a difficult conversation or series of e-mails.

The supply team is typically and necessarily made up of the nerdy analysts with impressive academic credentials, expert spreadsheet skills, and thick glasses. These are the individuals that are the checks and balances between the high-minded objectives of the sales and marketing organization and the conservative concerns of the finance organization.

The distribution team is typically and necessarily made up of the rolled-up shirtsleeves crowd² that is not afraid to get their hands dirty³

¹ to be at odds – не узгоджуватись

² rolled-up shirtsleeves crowd – чернь, простолод, готовий до важкої роботи

³ to get their hands dirty – забруднити руки

driving a lift truck or fixing a tractor. These are the individuals who will get the job done.

Global Logistics Organization Model

The global logistics organizational model is an extension of the integrated logistics model (Fig. 5).

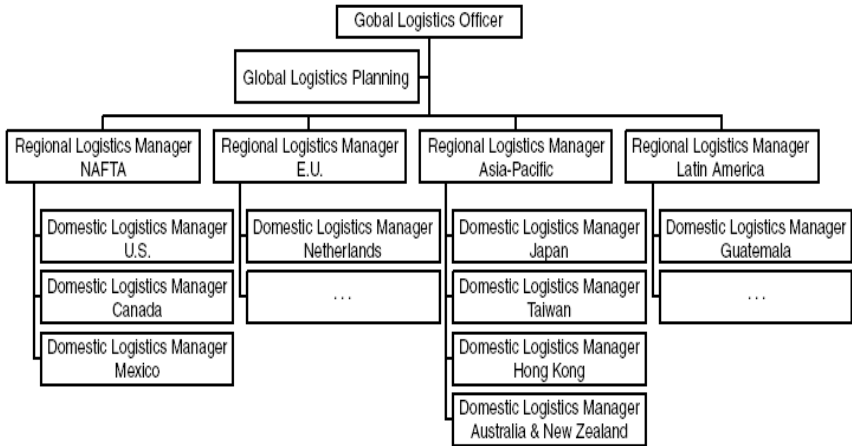


Fig. 5. Global logistics organization model

In essence, the global logistics model includes an integrated logistics organization for global logistics planning and policy making, regional logistics planning and policy making, and in-country/local logistics planning and policy making. Each level has an individual responsible for total logistics, customer response, supply, and distribution. In a typical global logistics organization model, the global logistics management team makes global policy/plans (that is, communication standards, metrics definition, system selections, best practice templates, vision setting, and so on), and the regional/local management teams adopt those global standards to the unique regional/local conditions. The global logistics organization model has been adopted successfully by Coca-Cola, Nestle, and a variety of pharmaceutical firms.

Business Unit Logistics Organization Model

One of the most difficult questions to answer in logistics organization design and development is if and when a business unit should have its own logistics organization. The classic trade-off is

between the leveraging of assets that is available when multiple business units utilize the same logistics assets (distribution centres, transportation fleets, inventory, logistics information systems, and logistics personnel) and the control that may be lost to a particular business unit when a designated logistics infrastructure is not dedicated to those particular needs. The evaluation usually comes down to an analysis of the logistics synergies that are available across business units (Fig. 6).

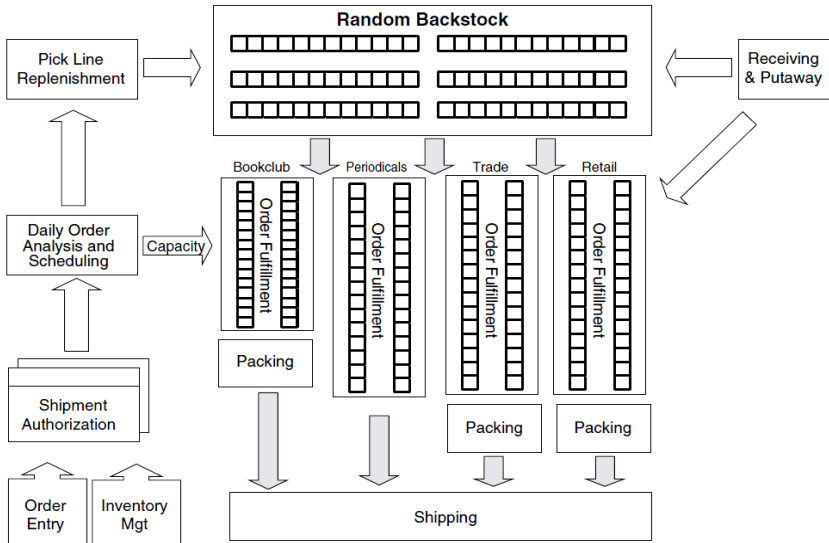


Fig. 6. Business unit logistics organization model

Those synergies are created when different business units are logistically similar in key areas, including order profiles, response time requirements, customer base, supplier base, carrier base, and inventory profiles. If those similarities are not evident, it most often is advisable to dedicate a logistics organization to a business unit. Otherwise, the logistics similarities can be leveraged to create high efficiencies in the leveraging of logistics assets across business units.

Distributed Logistics Organizational Model

The distributed logistics organizational model (Fig. 7) eliminates any formal logistics organization other than a CLO.

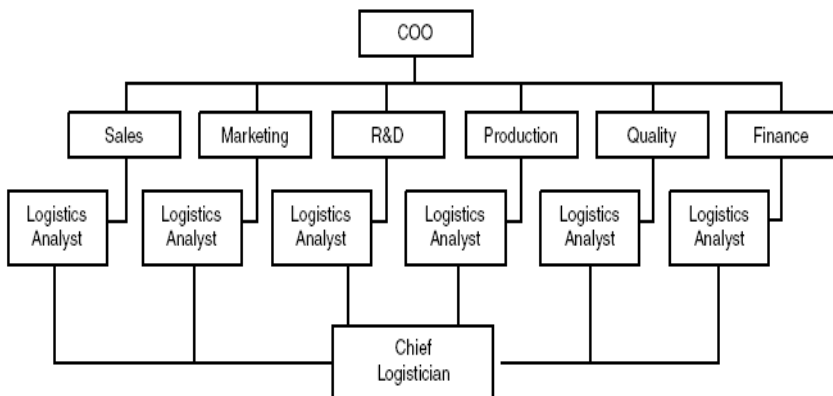


Fig. 7. Distributed logistics organization model

Instead, logisticians are recruited and developed by the CLO and placed in the other areas of the corporation with the responsibility to incorporate sound logistics practices into the traditional corporate activities of marketing, research and development, sales, manufacturing, information systems, finance, and so on.

The model works similar to the concept of total quality management adopted by Motorola where total quality management (TQM) experts are placed in each area of the corporation to introduce quality management disciplines. Dell Computer is one of the most successful distributed logistics organizational models.

Exercise 6. Find English equivalents in text 1.

Вартість обслуговування; вихідна умова, передумова; пережиток (*минулого*); накладання, перекриття; акціонер; бренд, фабрична марка; бюджет, фінансовий кошторис; одночасно; оцінювання якості роботи; віце-президент; зразковий, ідеальний; безпосередній підлеглий; тривалість циклу; реагування на виконання замовлення клієнта; особливо, особливим чином; команда, група; особистість; радісний, веселий, щасливий; тупий, нудний; відшкодування, повернення (*втраченого*); розвиток, розробка; спроба, намагання; електронна таблиця; система стримувань і противаг; навантажувач; збільшення, розширення; визначення політичного курсу; активи, кошти, капітал; парк (літаків, автомашин); схожість, подібність; відсоток, процент,

відсоткове відношення; рекомендований; правильний, розумний; внутрішній; місцевий; оцінюваний за еталоном; бути справедливим, справджуватися.

Exercise 7. Complete the sentences choosing a, b or c.

1. The logistics organization model alternatives do not include
 - a) International logistics organization
 - b) Global logistics organization
 - c) Integrated logistics organization
2. Another name for functional organization is
 - a) matrix
 - b) silo
 - c) carryover
3. The premise of the functional organizational model is the following:
 - a) if each silo is maximized, then the entire enterprise performance must be maximized
 - b) if each silo is minimized, then the entire enterprise performance must be optimized
 - c) if each silo is optimized, then the entire enterprise performance must be optimized
4. The process organizational model structures
 - a) people, indicators and systems
 - b) people, metrics and systems
 - c) people, metrics and critical business processes
5. The process organization model has five business processes that
 - a) focus the customers on value
 - b) focus the corporate resources on customer service
 - c) focus the company on functions
6. The matrix organizational model is an attempt to combine
 - a) the functional and hybrid models
 - b) the process and integrated models
 - c) the functional and process models
7. The integrated logistics organizational model requires
 - a) a chief executive officer
 - b) a chief logistics officer
 - c) a managing director

8. In a typical global logistics organization model, the global logistics management team makes

- a) global business
- b) global policy
- c) international meetings

9. The control may be lost to a particular business unit when

a) a designated logistics infrastructure is not dedicated to particular needs

b) a designated logistics company is not dedicated to particular infrastructure

c) an infrastructure is designated to particular needs

10. The distributed logistics organizational model works similar to

a) just-in-time (JIT)

b) Service Response Logistics (SRL)

c) the concept of total quality management (TQM).

Exercise 8. Match the definitions with proper logistics terms.

Definitions

Terms

1. Also frequently called “Foxhole” or “Stovepipe”, relates to a management/organization style where each functional unit operates independently, and with little or no collaboration between them on major business processes and issues

a) functional silo

2. A warehousing output measure that considers the volume (weight, number of units) of items stored during a given time period

b) performance indicator

3. This term signifies the type of organization in which each individual functional area, such as purchasing, finance, marketing, and accounting, focuses primarily on its internal operations, rather than on its obligations to the success of the corporation as a whole

c) throughput

4. A predetermined factor of performance (standard) against which actual performance is measured to see

d) total supply chain response time

whether the actual is above or below standard

5. Indicators of the work performed and the results achieved in an activity, process, or organizational unit

e) matrix organization

6. A measure of a supply chains ability to change rapidly in response to marketplace changes

f) performance measures

7. An organizational structure that emphasizes the horizontal flow of authority; the company treats logistics as a project, with the logistics manager overseeing logistics costs but traditional departments controlling operations.

g) silo

Exercise 9. Translate into Ukrainian with the help of a dictionary and entitle the text. Put key questions to each paragraph.

1. At the time of the founding of the United States, companies tended to be “one-person” operations. Only a few people at most were needed to run the entire operation. The companies were generally small and specialized and served a local area.

2. Toward the middle of the 19th century, as companies began to grow, it was no longer possible for one person or a few people to manage all of the organization’s operations. Companies began hiring people to specialize in working with or managing various functions, such as manufacturing, sales, distribution, and accounting. It was believed that this created efficiency and expertise.

3. By the beginning of the 20th century, as companies continued to grow and diversify their product or service offerings, functional specialization by itself was no longer sufficient for effective management. Large organizations began to set up divisions organized vertically around similar product or service offerings. Employees became specialized in terms of function and product.

4. In some organizations, functions that did not directly affect the organization’s product or service offering and that cut across divisional boundaries were left at a “corporate” level, supporting various divisions. There was no reporting relationship between “line” divisional employees and “staff” or corporate employees.

5. By the 1950s, some large organizations realized that the divisionalized structure was not working well. It did not provide linkages between line people in various divisional and corporate positions, so that the synergies of being part of a large corporation were lost.

6. To combat this problem, many organizations began to implement matrix organizations. Instead of replacing the divisional structure, a matrix structure overlays the divisional structure. In addition to divisional reporting relationships, managers in matrix organizations have reporting responsibility to another person in their function outside of the division, often at a corporate level.

Exercise 10. Read dialogue 2 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 2

A: OK, we'll get started with our logistics seminar then, shall we? I was talking to the head of Logistics Services the other day. He was telling me about the generic logistics strategies. The point is that manufacturers, wholesalers, and retailers all perform logistics activities, but they are often organized differently.

B: It's a good point. We must bear that in mind. But how exactly are they organized?

A: Manufacturers may use one of three organizational strategies: process-based, market-based or the channel-based strategy.

C: Oh, I've heard a great deal about process-based strategy. May I explain?

A: By all means.

C: *Process-based strategy* is concerned with managing a broad group of logistics activities as a value-added chain. The emphasis of a process strategy is to achieve efficiency from managing purchasing, manufacturing, scheduling, and physical distribution as an integrated system.

A: Right. And *market-based strategy* is concerned with managing a limited group of logistics activities across a multidivision business or across multiple business units...

B: Ah, that's interesting. As I know, *channel-based strategy* focuses on managing logistics activities performed jointly in combination with dealers and distributors.

A: Rapid response is critical! Now, let's move on to the next point concerning wholesalers and retailers.

Notes

to get started (with) – (роз)почати; братися (за щось)

head – голова, головуючий, завідувач, керівник, начальник

generic – загальний, типовий, характерний

point – 1) момент, питання; справа; 2) сутність, головне; зміст

to bear in mind – мати на увазі, тримати в думці, пам'ятати

exactly – 1) точно; 2) якраз, саме

based – заснований (на чомусь)

channel – канал

great deal – багато, значна

to explain – пояснювати, роз'яснювати, тлумачити

by all means – 1) звичайно, будь ласка; 2) у будь-який спосіб; 3) за будь-яку ціну

broad – широкий; головний, загальний

value-added – додана вартість

chain – ланцюг

to achieve – досягати; отримувати

scheduling – календарне планування

physical distribution – фізичний розподіл, рух товарів

integrated system – інтегрована система

limited – обмежений

multidivision business – організація із значною кількістю філіалів

multiple – 1) численний; 2) складний; що має багато відділів (частин)

to focus (on) – зосереджувати(ся) (на), зосереджувати увагу (на)

jointly – спільно, сукупно, разом

in combination with – у поєднанні з

dealer – торговець, дилер; посередник

distributor – дистриб'ютор, агент продажу

to move on – проходити далі, переходити до

Exercise 11. Translate the following sentences into English:

1. Виробники можуть скористатися однією з трьох організаційних стратегій: стратегією, орієнтованою на процес, на ринок або на канал збуту. 2. Стратегія, орієнтована на процеси, передбачає управління широкою групою логістичних видів діяльності у вигляді ланцюга з доданою вартістю. 3. Стратегія, орієнтована на канал, обирається для управління видами логістичної діяльності, які виконуються спільно з дилерами та дистриб'юторами. 4. Крім традиційних функцій транспортування та зберігання, оптова торгівля зараз виконує низку послуг на додану вартість. 5. Через безпосередній контакт із кінцевими споживачами та гостру конкуренцію роздрібні торговці надають більшої ніж виробники уваги таким видам діяльності, як управління запасами, складування та обслуговування споживачів.

Exercise 12. Memorize the basic terminology to text 2.

to view – розглядати; оцінювати

to position – 1) ставити; розташовувати; 2) визначати
місцерозташування

production – 1) виробництво; виготовлення, видобуток; 2) продукція;
вироби

human resources – відділ кадрів; людські ресурси; кадри; робоча
сила; робітники, працівники, співробітники

option – вибір; право вибору

debatable – спірний, дискусійний, неоднозначний

cross-sectional – міжсекційний

operational – оперативний

criterion (*pl. criteria*) – критерій, мірило

frequently – часто; звичайно

mid- (medium-) sized – середнього розміру

to open up – розкривати(ся); робити доступним; викривати,
виявляти

degree – ступінь, міра

despite – незважаючи на

comprehensive – всеохоплюючий, універсальний, комплексний

division – відділ, відділення (*структурний підрозділ*)

consideration – розгляд, обговорення; принципи; міркування

in terms of – 1) з точки зору; 2) мовою; у перекладі на

outside – зовні, поза, за межами, за межі

competitive edge – конкурентна перевага, перевага в конкурентній боротьбі

hierarchy – ієрархія; ієрархічність

membership – членство; кількість (сукупність) членів, склад (сукупність членів органу)

small or medium-sized enterprise (SME) – мале та середнє підприємство / компанія

labour – 1) праця, робота; завдання; робоча сила, робітники

superordinate – 1) підпорядкований; 2) супідрядний

phase – 1) період; стадія; 2) фаза; 3) аспект; бік

guideline – керівний принцип; офіційний норматив

to govern – керувати, управляти

solution – рішення, вирішення (*питання*)

line of products (product line) – асортимент товарів

to consolidate – консолідувати; поєднувати; об'єднувати; включати

to apply (to) – звертатися (до), стосуватися (до)

profit centre – госпрозрахунковий підрозділ; центр прибутку (автономний із фінансового погляду підрозділ компанії)

marketplace – ринок

to spin (span, spun) off – створювати нову компанію шляхом відділення від існуючої та передання їй частини активів

outsourcing – 1) аутсорсинг, закупівля із зовнішніх джерел; 2) використання позаштатних працівників; 3) доручення певних функцій підряднику; виконання завдання або частини діяльності підрядником (*а не штатними працівниками підприємства*)

fluid – нестійкий, нетривкий, мінливий

two-tier – 1) дворівневий; 2) що складається з двох ланок (рядів); 3) другого ряду / класу

distinction – 1) різниця; розбіжність; відмінність; 2) характерна ознака, особливість, відмітна риса; 3) розрізнення, розпізнавання

to draw – добувати, діставати, черпати (*інформацію*)

significant – значний; важливий; істотний

shift – переміщення, перестановка, перенесення

Exercise 13. Read and translate text 2.

Text 2. Logistics in the Organizational Structure

Logistics in a functional organization (Fig. 8)

Logistics as a function in a company

Logistics can be classified into various positions depending on how it is viewed as a function in a company. If logistics plays a critical role in a company's success, it makes sense to position it in the functional organization beside the basic functions of finance, production or human resources. Another option could be further centralization of logistics. But it is debatable whether this serves the cross-sectional function of logistics.

Logistics as an operational function

The functional organization is based on the classification criterion of operations, and is frequently used in small and mid-sized companies. Logistics can be included centrally or decentrally in the current organizational structure as an additional operation. As a result, it is put on the same level as other fundamental operational functions such as production, sales and procurement.

The basic condition for this is that logistics is considered an operational function. Broad centralization can be achieved if logistics is placed directly under the managerial level. However, the functional organization opens up wide design possibilities as there are various types of this organizational form – this depends on the degree of centralization, the hierarchical classification and the functional place of logistics tasks in the present organizational units.

Despite the possibility of creating a comprehensive centralization, it must be stressed that a functional classification does not reflect the cross-sectional character of logistics. For this reason, this classification is termed skeptically as the “functional-silo approach”.

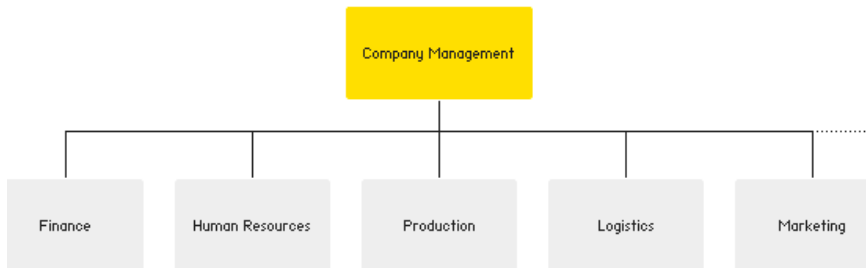


Fig. 8. Logistics in a functional organization

Logistics in a divisional organization (Fig. 9)

Logistics as a central division and unit

When a company is organized by business divisions such as regions or products, there are several ways to integrate logistics. A critical consideration is to classify logistics in terms of its importance to commercial success. This extends from a central organization outside all divisions to a logistics unit in every division. If the approach is carried out well, competitive edges can be achieved.

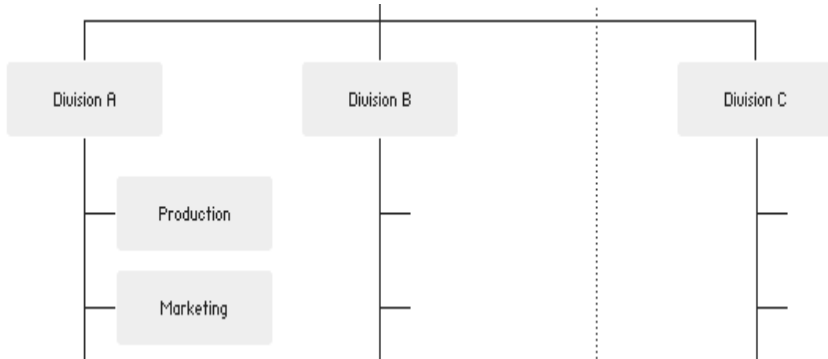


Fig. 9. Logistics in a divisional organization

Centralized, decentralized and hybrid organization

Large companies frequently are matrix organizations. A matrix organizational structure is a management structure that is in part based on hierarchy but also based on project management, so special teams are created for specific tasks. In these project teams the structure is often much less hierarchical. A matrix structure involves teams with varying membership. Such structure is also common in small or medium-sized enterprises (SMEs). Large companies employ organizational units based on operational function such as production, human resources and finance as well as organizational units based on divisions such as business segments A, B and C. A matrix organization has three ways of grouping logistics – centralized, decentralized or hybrid.

Logistics as a central unit

In a divisional organizational structure, operational activities on the top level of a company's management are structured by object – for example, by product groups or regions. This base model also has various ways of integrating logistics. To achieve synergies among the

divisions, logistics tasks are taken from the divisions and placed in a central unit.

Logistics as a central unit and function in each division

In a decentralized approach, tasks can also be carried out in the division. This frequently leads to a division of labor with the central level's carrying out tasks that have a superordinate character in terms of phase. An example is the setting of guidelines that govern logistics services. In this case, the central unit of logistics has absolute policy-making authority. Operational tasks, in particular, are carried out on the basis of these guidelines. This is an efficient solution when the divisions offer a broad line of different products and the potential for consolidating logistics tasks is small. If such potential exists, operational tasks can be performed centrally. This also applies to outsourced logistics services.

Logistics as a separate division

Another option is to create a separate division of logistics. This division can be operated as a profit centre and can offer services in the marketplace to other companies. It can even be spun off as a separate company, creating a formal type of outsourcing for logistics.

Particularly in a divisional organization, the difference between a company organization and a group organization is fluid. In the real business world, a two-tier centralization problem frequently exists because a distinction must be drawn between central organization units on the company and group level. This aspect is significant for one reason: if central group logistics units are employed, a shift of central tasks from the company to the group level can occur.

Exercise 14. Answer the questions on text 2.

1. How is logistics classified and positioned in a functional organization? 2. What is functional organization based on? 3. How can logistics be included into a functional organization? 4. How can broad centralization be achieved? 5. What design possibilities are opened up by functional organization? 6. When are there several ways to integrate logistics? 7. What are the ways of grouping logistics in a matrix organization? 8. How are operational activities structured on the top level of a company's management? 9. What is the way to achieve synergies among the divisions? 10. What does a decentralized approach

lead to? 11. When does the central unit of logistics have absolute policy-making authority? 12. How is logistics operated as a separate division?

Exercise 15. Give English equivalents.

Спірний, дискусійний; людські ресурси; критерій; переміщення, перенесення; створювати нову компанію шляхом відділення від існуючої та передання їй частини активів; другого ряду / класу; закупівля із зовнішніх джерел; асортимент товарів; підпорядкований; нестійкий; значний; керувати, управляти; керівний принцип; консолідувати; госпрозрахунковий підрозділ; мале та середнє підприємство/компанія; конкурентна перевага; ієрархія; членство; між-секційний; розглядати; добувати, черпати (*інформацію*); ступінь, міра; відділ, відділення (*структурний підрозділ*); праця, робота; ринок.

Exercise 16. Fill in the blanks with the prepositions from the box.

by, with, at, for, of, between, on, in, into, to
--

1. A matrix organization is one where functional leaders are responsible ... more than one area. 2. This type ... organization is known as a matrix organization because when the relationship ... an employee and the management team is illustrated ... a diagram it is ... a matrix square. 3. People working ... a matrix organization are often called two-boss-employees because they report ... two supervisors ... the same time. 4. The matrix organization type is also used successfully ... global companies. 5. Global companies must achieve simultaneous coordination ... various products in each country they operate. 6. An indirect report is someone who may work ... you, but is not subordinate ... you. 7. Organizations can be classified ... four main types: line, line-and-staff, committee, and matrix organizations. 8. Line structures ... nature are informal and involve few departments, making the organizations highly decentralized. 9. An example ... a line department might be the production department because it is directly responsible ... producing the product. 10. A staff department, ... the other hand, has employees who advise and assist—making sure the product is advertised or that the customer service representative's computer is working. 11. ... an organizational chart a direct report is a solid black line while an indirect report is usually a dashed line or light grey line.

Exercise 17. Memorize the basic terminology to text 3.

hardly – 1) навряд; 2) насилу, ледве

handling – 1) управління, регулювання; 2) переміщення, маневрування, перевезення; 3) спосіб експлуатації; 4) поводження (з *чимось*); користування (*чимось*)

primary – 1) основний; найважливіший, головний; 2) первинний

repositioning – перерозташування, знаходження нової ринкової ніші

unfinished goods – незавершені товари, неготові вироби, напівфабрикати

finished inventory – запаси готових виробів

to require – 1) вимагати 2) потребувати

to entrust (with) – довіряти, доручати (*щось*)

to maintain – 1) підтримувати; зберігати 2) утримувати

in accordance with – згідно з

goal – мета, ціль

to reach – досягати, домагатися

to summarize – підсумовувати; підбивати підсумок, резюмувати

safe – безпечний

manner – спосіб; метод; манера

to coordinate – координувати, узгоджувати

timely – своєчасний, вчасний

procedure – метод, методика проведення

synchronization – синхронізація

service provider – обслуговуюча організація; постачальник, провайдер послуг

fraud – обман; шахрайство; підробка

payment – оплата, сплата, платіж

numerous – численний

middleman – посередник

thereby – 1) таким чином; у такий спосіб; 2) у зв'язку з цим

manufacturing flow – 1) виробничий процес; 2) рух видатків виробництва

raw material – сировина

semi-finished goods – напівзавершені товари, наполовину готові вироби, напівфабрикати

premise – *pl.* будинок (*із прилеглими будівлями*)

with regard to – щодо; стосовно

hedging – хеджування, страхування ризику

selection – вибір; відбір, підбір

mode of transportation – вид транспортування

modern-day – сучасний

to conclude – робити висновок, доходити висновку

Exercise 18. Read and translate text 3.

Text 3. Logistics Department Tasks

Logistics is considered to be the complete process involving planning, managing and controlling the flow of goods and services, information, real-time data and human resources from the point of origin to the point of destination. There is hardly any manufacturing or marketing activity that can be achieved without the support of an effective logistical department.

The logistics process consists of the process of integration of several aspects such as material handling, warehousing, information, transportation, packaging and inventory. The primary duty of an effective logistics system is to ensure geographical repositioning of unfinished goods, and it is also concerned with the finished inventories of the organization being at the required place at the lowest possible cost.

The logistics department is entrusted with the responsibilities of ensuring that the entire process of logistics is maintained and developed in accordance with the goals of the business at an economical cost. The tasks of the logistics department involve storage, distribution, warehousing, movement of goods from one place to another (internally or externally), tracking and delivery of goods. It includes a complete process of planning, managing, controlling and coordination to make sure that the goods reach the right place, at the right time, for the right cost and in a right condition. The various tasks performed by the department may be summarized as follows:

1. Ensuring all the requirements of the customers are met on time in an efficient and safe manner. 2. To coordinate with third party logistics (3PLs). 3. To ensure that there is a safe and timely dispatch of goods.

4. To draft plans, policies and procedures for successful implementation of logistics system. 5. To ensure that the business goals of the organization are in synchronization with logistics system. 6. To

create and maintain customer support. 7. To maintain coordination with vendors, service providers and transport carriers. 8. To ensure that no fraud is committed. 9. To ensure timely supply and payment of goods and reduce inventories.

Besides the performance of the above tasks, the department also performs numerous other tasks, namely:

Customer service management process

The department ensures that the goods are reached on time, in a safe condition and at the right place. It also serves as a middleman between organization, vendors and carriers for tracking down the geographical location of the goods and thereby provides customer support.

Procurement process

Strategic plans are developed by the department to support development of fresh product and manufacturing flow management. This helps in bringing raw materials or semi-finished goods to the premises of the organization in a safe and proper condition at an economical cost. This also involves interactions with 3PLs. The department is also responsible for coordination with suppliers with regard to scheduling, hedging and timely delivery.

Physical distribution

This process is concerned with the movement of finished goods to reach the point of destination. The department is responsible for the selection of the best mode of transportation while delivering the goods to the place of destination.

Thus it can be rightly concluded that the logistics department does play an important role in ensuring the delivery of goods and is therefore rightly considered as an integral part of a modern-day organization.

Exercise 19. Say whether the following statements are true or false.

Correct the false ones.

1. Logistics is considered to be the incomplete process involving planning, managing and controlling the flow of goods and services, information, real-time data and human resources from the point of origin to the point of destination. 2. Any manufacturing or marketing activity can be achieved without the support of an effective logistical department. 3. The integration of material handling, warehousing, information, transportation, packaging and inventory are aspects the logistics process usually consists of. 4. The tasks of the logistics

department involve storage, distribution, warehousing, movement of goods from one place to another, tracking and delivery of goods. 5. Ensuring all the requirements of the customers are met on time in an efficient and safe manner is not a task to be performed by the logistics department. 6. The department ensures that the goods are reached on time, in a safe condition and at the right place. 7. The department is also responsible for coordination with customers with regard to scheduling, hedging and timely delivery. 8. The department is responsible for the selection of the best mode of transportation and does play an important role in ensuring the delivery of goods.

Exercise 20. Match the definitions with proper logistics terms.

Definitions

Terms

- | | |
|--|-------------------------------|
| <p>1. A person / firm to whom the main contractor (the principal) has contracted work</p> | <p>a) extended enterprise</p> |
| <p>2. A new type of corporation where the boundaries between the suppliers systems and those of the firm seem to disappear, the relationships and structures formed change according to the changing needs of the customer</p> | <p>b) cross-functional</p> |
| <p>3. The combined power of a group of things when they are working together which is greater than the total power achieved by each working separately</p> | <p>c) reengineering</p> |
| <p>4. The notion that supply chain partners form a larger entity which works together as though it were a single unit</p> | <p>d) virtual corporation</p> |
| <p>5. Sending production work outside to another manufacturer</p> | <p>e) synergy</p> |
| <p>6. A term used to describe a process or an activity that crosses the boundary between functions</p> | <p>f) sub-contractor</p> |
| <p>7. A fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in performance.</p> | <p>g) subcontracting</p> |

Exercise 21. Fill in the blanks with the following words and word combinations from the box.

reengineering, organizational unit, merged companies, organizations, agricultural equipment, third parties, division, costs, effective, centres, design, distributor, resources

An ... and efficient logistics organization is a vital part of a firm's strategic management process. Many organizations have engaged in ...; that is, they are essentially "recreating" their ... and systems. Many firms have not employed their strategic ... properly. Some argue that their lack of success may have been due to the lack of a competitive organizational ... or structure. An example can be seen in IBM's PC Examples of firms that have been successful in reengineering include Atlas Supply and Case Corporation, a manufacturer of Atlas Supply, a ... of automotive parts, was formed in 1992 to integrate the distribution and logistics of two It developed a shared system that allowed them to reduce the number of distribution ... by over 50 percent. Transportation ... fell over 20 percent. The savings resulted from pulling together a number of logistics-related activities under a single ... and utilizing ... where it made sense to do so.

Exercise 22. Answer the questions.

1. What are many organizations engaged in? 2. Due to what do many firms lack success? 3. What firms have been successful in reengineering? 4. Is Case Corporation a manufacturer of automotive parts or agricultural equipment? 5. Is Atlas Supply a manufacturer or a distributor? 6. When and why was Atlas Supply formed? 7. What did Atlas Supply develop? 8. What did the savings result from?

Exercise 23. Decipher the abbreviations.

JIT, SRL, TQM, DC, SME, CLO, KPI, 3PL, R&D, MBA.

Exercise 24. Match the definitions with proper logistics terms.

Definitions

Terms

1. The act of delaying something or arranging for it to take place at a later time than originally planned or agreed

a) value chain

2. When a vehicle is damaged beyond repair in an accident and constitutes an insurance claim on this basis

b) downstream

3. The state of being no longer needed or no longer desirable because something newer or more efficient has been invented

c) postponement

4. Increased or improved value, worth, functionality or usefulness

d) upstream

5. A series of activities, which combined, define a business process; the series of activities from manufacturers to the retail stores that define the industry supply chain

e) value-added

6. Associated with a single unit of product or a single unit of measure underlying a resource, activity, product or service

f) write-off

7. Referring to the demand side of the supply chain. One or more companies or individuals who participate in the flow of goods and services moving from the manufacturer to the final user or consumer

g) unit cost

8. Refers to the supply side of the supply chain. Such partners are the suppliers who provide goods and services to the organization needed to satisfy demands which originate at point of demand or use, as well as other flows such as return product movements, payments for purchases.

h) obsolescence

Exercise 25. Make the following sentences interrogative and negative.

1. Something is going wrong in global financial system. 2. Peruvian companies are seeing growing opportunities for financing themselves domestically. 3. The use of computers as a management tool is steadily increasing. 4. In Britain tourism is now supporting about 1.4 million jobs. 5. The leading logistics companies are looking to build dominant

global positions. 6. Some Canada manufacturers are having difficulty obtaining raw materials needed. 7. The Internet is enabling a new way of life. 8. Now manufacturing and improvement are getting more emphasis. 9. The organizational structure in today's factory is still undergoing change. 10. These countries are increasing competitive pressures in international trade.

Exercise 26. Define the tense form of the predicates. Put questions to the italicized words.

1. *Every organization* must choose *an overall structure* that meets its needs best. 2. *An organizational structure* will determine *the modes* in which the organization shall operate and will perform. 3. *Manufacturers, wholesalers, and retailers* all perform *logistics activities*. 4. *A great number of retailers* are purchasing many logistics services *from third parties*. 5. There are *two* reasons this model works particularly well. 6. *Each level of the organization* had *an individual responsible for total logistics, customer response, supply, and distribution*. 7. The model works *similar to the concept of total quality management* adopted by *Motorola*. 8. *Team structures* are becoming increasingly popular.

Exercise 27. Put the infinitive in brackets in the proper Indefinite or Continuous form.

1. We (to enlarge) our department in summer. 2. The CLO is at the meeting now. He (to speak) about the delegation and subordination. 3. Departmentalization (to be) the dividing of work activities into units within the organization. 4. Where you (to hurry)? 5. As a rule our company (to prepare) research and development figures in time. 6. Don't shout. We (to carry out) performance measurement. 7. We (to leave) our counterpart's work group holding the bag at the moment. 8. This merchandiser never (to deny) short lead time.

Exercise 28. Translate into English using the Present Continuous tense.

1. Ми готуємось до реструктуризації нашої організації наступного року. 2. Впродовж цього місяця оптимізуватимемо всю діяльність нашого підприємства. 3. Ми спостерігаємо за організаційними змінами, що відбуваються, та підтримуємо ідею реінжинірингу. 4. Споживання логістичних послуг у світі

зростає, а в логістичних компаній з'являється дедалі більше клієнтів. 5. Наразі ми займаємося структуруванням усіх логістичних організацій, на місцевому рівні. 6. Наш головний спеціаліст з логістики сам проводить логістичну конференцію, а потім розмовляє з відвідувачами. 7. Його безпосередній підлеглий зараз розмовляє по телефону. 8. Віце-президент компанії скаржиться на погану роботу міжфункціональної команди. 9. Не заходьте до тієї кімнати. Там зараз працює тимчасовий комітет з вирішення проблеми утримання на складі компанії напівфабрикатів. 10. Постійний комітет зараз готується до зборів. 11. Проектна команда, на відміну від робочої групи, збирається скористатися автономією та повноваженнями щодо керування цим проектом. 12. Організаційні зміни зараз відбуваються не лише в центральному відділенні компанії.

Exercise 29. Speak on:

1. Logistics organizational models.
2. Logistics as a separate division.
3. Logistics department tasks.

Unit 5. INTERNATIONAL AND GLOBAL LOGISTICS

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

silo, machining, assembly, ergonomics, procurement, assimilate, synthesize, inventory, readily, complexity, collaboratively, multiplicity, inherent, virtual, prerequisite, discipline, consistent, appropriate appropriateness.

Exercise 2. Memorize the basic terminology to text 1.

machining – 1) використання механізмів; 2) використання транспортних засобів

workplace logistics – матеріально-технічне забезпечення робочого місця

founder – засновник, фундатор

facility – 1) засоби обслуговування, зручності; послуги; 2) обладнання, пристосування, апаратура; будівля; виробнича споруда, виробничий об'єкт

facility logistics – матеріально-технічне забезпечення об'єктів
workstation – робоча станція, робоче місце
corporate logistics – корпоративна логістика
assembly line – складальний конвеєр, лінія збирання
ergonomics – ергономіка (галузь наукової організації праці, що вивчає трудові процеси і умови праці)
interworkstation – об'єкти між робочими місцями
intrafacility – внутрішній об'єкт
nonvalue added activities – неприбуткова діяльність
physical distribution – рух товарів; просування товару
business logistics – матеріально-технічне забезпечення комерційної організації
intrachain – внутрішній ланцюг
to oversimplify – надто спрощувати, розуміти дуже спрощено
to inflate – завищувати
computing industry – галузь інформаційних технологій
handoff – супровідна документвція
inherent – притаманний
collaborative logistics – спільне матеріально-технічне забезпечення
fourth-party logistics (4PL) – логістичний сервіс-провайдер четвертого рівня (провайдер логістичних послуг четвертого рівня)

Exercise 3. Read and translate text 1.

Text 1. The Evolution of Logistics and Supply Chain Management

Paralleling advances in management theory and information systems, logistics has evolved in scope and influence in the private sector since the mid to late 1940s. In the 1950s and '60s, the military was the only organization using the term “logistics”. There was no true concept of logistics in private industry at that time. Instead, departmental silos including material handling, warehousing, machining, accounting, marketing, and so on, were the norm. There are five phases of logistics development—workplace logistics, facility logistics, corporate logistics, supply chain logistics, and global logistics.

Workplace Logistics

Workplace logistics is the flow of material at a single workstation. The objective of workplace logistics is to streamline the movements of an individual working at a machine or along an assembly line. The principles and theory of workplace logistics were developed by the founders of industrial engineering working in WWII and post-WWII factory operations. A popular name today for workplace logistics is ergonomics.

Facility Logistics

Facility logistics is the flow of material between workstations within the four walls of a facility (that is, interworkstation and intrafacility). The facility could be a factory, terminal, warehouse, or distribution centre. Facility logistics has been more commonly referred to as material handling. The roots of facility logistics and material handling are in the mass production and assembly lines that distinguished the 1950s and 1960s. In those times and even into the late 1970s, many organizations maintained material-handling departments. Today, the term material handling has fallen out of favour because of its association with nonvalue added activities.

In the 1960s, material handling, warehousing, and traffic were grouped together to become known as physical distribution; procurement, marketing, and customer service were grouped together to become known as business logistics. (Even today in many academic institutions, logistics is still divided along these lines; where logistics is taught in the business school, it is taught as business logistics, and in the engineering schools as physical distribution.)

Corporate Logistics

As management structures advanced and information systems accordingly, the ability to assimilate and synthesize departments (material handling, warehousing, and so on) into functions (physical distribution and business logistics) in the 1970s permitted the first application of true logistics within a corporation. Corporate logistics became a process with the common objective to develop and maintain a profitable customer service policy while maintaining and reducing total logistics costs.

Corporate logistics is the flow of material and information between the facilities and processes of a corporation (interworkstation, interfacility, and intra-corporate). For a manufacturer, logistics activities

occur between its factories and warehouses; for a wholesaler, between its distribution centres; and for a retailer, between its distribution centres and retail stores. Corporate logistics is sometimes associated with the phrase physical distribution that was popular in the 1970s. In fact, the *Council of Logistics Management* (CLM) was called the *National Council of Physical Distribution Management* (NCPDM) until 1982.

Supply Chain Logistics

Supply chain logistics is the flow of material, information, and money between corporations (interworkstation, interfacility, intercorporate, and intrachain). There is a lot of confusion surrounding the terms logistics and supply chain management. They may be distinguished by explaining that the supply chain is the network of facilities (warehouses, factories, terminals, ports, stores, and homes), vehicles (trucks, trains, planes, and vessels), and *logistics information systems* (LIS) connected by an enterprise supplier's suppliers and its customer's customers. Logistics is what happens in the supply chain.

Logistics activities (customer response, inventory management, supply, transportation, and warehousing) connect and activate the objects in the supply chain. To borrow a sports analogy, logistics is the game played in the supply chain arena. It is unfortunate that the phrase supply chain management has been so readily and commonly adopted as a reference to excellence in logistics. First, it is not supply (or demand) that should dictate the flow of material, information, and money in a logistics network. Actually, there are some links in the chain and some circumstances in which supply should dictate flow and some in which demand should dictate flow. Second, if you drew lines connecting all the trading partners in a typical supply chain, what you would see would not look anything like a chain. You would see something that looks more like a complex web of links.

A chain stretched full is a line. The danger in the choice of the term *chain* is that the term oversimplifies the complexities in logistics management and leads to inflated expectations for what can be achieved by supply chain management systems. Finally, the term *management* suggests that a single party in the chain can truly manage and dictate the operations of the supply chain.

Instead, the best any party can do is to collaboratively plan the operations of the chain. Consider the computing industry supply chain

with players like HP, Microsoft, Intel, UPS, FEDEX, Sun, Ingram-Micro, Compaq, CompUSA, and so on. There is not a single one of those parties who can or should manage the entire computing industry supply chain.

Global Logistics

Global logistics is the flow of material, information, and money between countries. Global logistics connects our suppliers' suppliers with our customers' customers internationally. Global logistics flows have increased dramatically during the last several years due to globalization in the world economy, expanding use of trading blocs, and global access to Web sites for buying and selling merchandise. Global logistics is much more complex than domestic logistics, due to the multiplicity of handoffs, players, languages, documents, currencies, time zones, and cultures that are inherent to international business.

Next-Generation Logistics

There are many theories as to the next phase of logistics development. Many logisticians believe that *collaborative logistics*, logistics models built with continuous and real-time optimization and communication between all supply chain partners, will be the next phase of evolution. Other camps in the logistics community believe the next phase of evolution will be *virtual logistics* or *fourth-party logistics*, where all logistics activities and management will be outsourced to third-party logistics providers who are in turn managed by a *master* or *fourth-party logistics* providers acting kind of like a general contractor.

Exercise 4. Answer the questions on text 1.

1. What are the phases of logistics development?
2. What was the only organization using the term logistics in the 1950s and 60s?
3. What departmental silos were the norms?
4. What is the definition and objective of workplace logistics?
5. What is the second (popular) name for workplace logistics?
6. What is facility logistics?
7. Why was the term "material handling" fallen out of favour today?
8. What activities were grouped together to become known as physical distribution?
9. What activities were grouped to become known as business logistics?
10. What is the application of true logistics within a corporation called?
11. What was the Council of Logistics Management called until 1982?
12. What is the difference between supply chain management and

logistics? 13. What is the flow of materials, information, and money dictated by? 14. Why is global logistics more complicated than domestic logistics? 15. What logistics theories connected with the next stages of its development do you know?

Exercise 5. Give English equivalents.

Масштаб; використання транспортних засобів; матеріально-технічне забезпечення робочого місця; обладнання; корпоративна логістика; логістика каналу постачання; складальний конвеєр, лінія збирання; просування товару; закупівля; внутрішній ланцюг; галузь інформаційних технологій; галузь наукової організації праці, що вивчає трудові процеси й умови праці; об'єкти між робочими місцями; супровідна документація.

Exercise 6. Match the definitions with proper logistics terms.

Definitions	Terms
1. The flow of material and information between the facilities and processes of a corporation	a) facility logistics
2. Logistics activities and management outsourced to third-party logistics providers managed by a <i>master logistics</i> providers acting like a general contractor	b) global logistics
3. The flow of material between workstations within the four walls of a plant or warehouse	c) supply chain logistics
4. The flow of material, information, and money between countries	d) fourth-party logistics
5. It aims to streamline the movements of an individual working at a machine or along an assembly line	e) ergonomics
6. The flow of material, information, and money between corporations (interworkstation, interfacility, intercorporate, and intrachain)	f) collaborative logistics

7. Logistics models built with continuous and real-time optimization and communication between all supply chain partners

g) workplace logistics

8. The science of designing user interaction with equipment and workplaces to fit the user.

h) corporate logistics

Exercise 7. Translate into Ukrainian paying attention to the use of Past Continuous and Future Continuous Tenses. Put general questions to each sentence.

1. By 1940s logistics *was evolving* in scope and influence in the private sector. 2. When the founders of industrial engineering *were working* in WWII and post-WWII period factory operations they developed the principles and theory of workplace logistics. 3. While corporate logistics *was developing* profitable customer service policy it *was also reducing* total logistics costs. 4. In 1970s many organizations *were maintaining* material-handling departments. 5. During the next decades global logistics *will be expanding* the global access to Web sites for buying and selling merchandise. 6. If appointed, Mr.G. *will be aiming* to do the same job for CLM. 7. He expects that by 2017, some 10\$ billion *will be coming* from new areas of business.

Exercise 8. Translate the following sentences into English.

1. Етапи розвитку логістики складаються з матеріально-технічного забезпечення робочого місця, матеріально-технічного забезпечення об'єктів, корпоративної логістики, логістики каналу постачання, глобальної логістики. 2. Виробничим об'єктом може бути завод, термінал, склад, оптова база. 3. Завантаження та розвантаження матеріалів, зберігання на складах, перевезення відносять до руху товарів, а закупівлю товарів, маркетинг, обслуговування клієнтів – до матеріально-технічного забезпечення комерційної організації. 4. Корпоративна логістика – це потік матеріалів та інформації між виробничими об'єктами та процесами корпорації. 5. Канал постачання – це мережа виробничих об'єктів (складів, заводів, терміналів, портів, магазинів, будинків), транспортних засобів (вантажівок, потягів, літаків, морських суден) та логістичних інформаційних систем, пов'язаних з

постачальниками постачальників підприємства та клієнтами його клієнтів.

Exercise 9. Write a summary of text 1.

Exercise 10. Memorize the basic terminology to text 2.

to necessitate – робити необхідним

sourcing – пошук джерел, підбір джерел (фінансування, поставок тощо)

expansive – здатний розширюватися (поширюватися)

implication – положення, висновок

extended – 1) тривалий; затягнений; 2) продовжений, збільшений

supply lead time – час на виконання поставки

unreliable – ненадійний

transit time – час транспортування/перевезення

break-bulk – 1) розподіл великої партії вантажу на невеликі;
2) завантаження насипом

consolidation – об'єднання невеликих вантажів, консолідація

freight mode – вид транспортування фрахту

cost option – вибір ціни

just-in-time (JIT) operation – діяльність «точно у термін»

waste – 1) зайва витрата; 2) збиток

Exercise 11. Read, translate and give the gist of the text.

Text 2. Typical Attributes and Logistics Implications of Globalization

One area of significant change in recent years has been the increase in the number of companies operating in the global marketplace. This necessitates a broader perspective than when operating as an international company. In the latter, although companies may have a presence across a wide geographic area, this is supported on a local or regional basis through local or regional sourcing, manufacturing, storage and distribution. In the former, the company is truly global, with a structure and policy that represent a global business. Typical attributes will include: global branding; global sourcing; global production; centralization of inventories; and centralization of information.

To service global markets, logistics networks become, necessarily, far more expansive and far more complex. Once again, the need is to plan and manage logistics as a complete and integrated system. As well as the attributes already mentioned, companies operating in a global market are often involved in the outsourcing of some manufacturing and the use of “focused” factories that specialize in a limited number of products.

The major logistics implications of globalization are:

- extended supply lead times;
- extended and unreliable transit times;
- multiple break-bulk and consolidation options;
- multiple freight mode and cost options;
- production postponement with local added value.

It is obvious that there is a direct conflict between globalization and the move to the just-in-time operations that are being sought by many companies. In global companies there is a tendency to see order lead times increase and inventory levels rise because of the distances involved and the complexity of logistics. In companies moving to the just-in-time philosophy there is a desire to reduce lead times and to eliminate unnecessary stock and waste within their operations. For those companies trying to achieve both goals, there is a clear challenge for logistics.

Exercise 12. Answer the questions on text 2.

1. What makes a company international? 2. Under what conditions does a company become global? 3. What is necessary for logistics networks to service global markets? 4. What are global companies involved in? 5. What are major logistics implications of globalization? 6. Why do global companies see order lead times increase? 7. What do companies moving to the just-in-time operations aim at?

..

Exercise 13. Give English equivalents.

Значна зміна; збільшення; робити необхідним; пошук джерел; зберігання; розповсюдження; матеріально-технічні запаси; здатний розширитися; об'єднана система; час, необхідний для виконання замовлення; час на виконання поставки; діяльність «точно в строк»; розподіл великої партії вантажу на невеликі; затримка; додана вартість; непотрібний запас; зайва витрата; досягати цілі.

Exercise 14. Match the definitions with proper logistics terms.

Definitions	Terms
1. The period of time that it takes for goods to be delivered after someone has ordered them	a) sourcing
2. The separation of a single consolidated bulk load into smaller individual shipments for delivery to the ultimate consignees	b) outsourcing
3. Modern manufacturing / supply concept where, instead of holding stocks of materials / components etc, supplies are fed in only as immediately required in order to minimize storage costs	c) lead time
4. A number of procurement practices, aimed at finding, evaluating and engaging suppliers of goods and services	d) break-bulk
5. The practice of buying goods and services from outside suppliers, rather than producing them within a firm.	e) just-in-time (JIT)

Exercise 15. Memorize the basic terminology to text 3.

relevant (to) – пов’язаний із

continuing education – післядипломне навчання

to cover – охоплювати

extensive – широкий

outside speaker – незалежний доповідач

pertinent – який стосується до (чогось)

vocational qualification – професійна кваліфікація

pan-European – загальноєвропейський

to endorse – підтверджувати, схвалювати

recognition – визнання

retraining – перепідготовка

pilot project – експериментальний, пілотний проект

to pursue – невідступно йти, слідувати

dissemination – розповсюдження, поширення

propulsion – 1) просування; 2) рушійна сила

turnover – товарообіг

to amount – складати, дорівнювати

production company – виробнича фірма
stakeholder – 1) зацікавлена сторона / особа; 2) партнер, співвласник
to reward achievements – винагороджувати за досягнення
honorary – 1) почесний; 2) неоплачуваний
tailored – спеціалізований, цілеспрямований
executive and advisory board – виконавчо-консультативна рада
cross-section – 1) профіль; 2) зріз даних, вибірка даних
to have finger on the pulse – бути обізнаними з останніми
розробками, досягненнями, тримати руку на пульсі
commitment – 1) зацікавленість, прихильність; 2) зобов'язання
to showcase – показувати, виставляти
hands-on – практичний
vis-à-vis – відносно, щодо згода
insight – 1) розуміння, згода; 2) раптове знаходження рішення,
здатність розібратися у чому справа (річ)
promotion committee – комітет зі сприяння дослідницькій роботі
in-depth – вичерпний; ретельний
pre-eminent – винятковий, видатний
leading-edge thinking – прогресивне, передове мислення
relevance – значущість, важливість
breadth – 1) рівень світогляду захисту (*прав, домагань тощо*);
2) широкий розмах, широкість (*світогляду, поглядів*)

Exercise 16. Read and translate text 3.

Text 3. Logistics Associations

There are many fine associations relevant to supply chain management and customer satisfaction. They include:

Institute of Management Consultants (IMC)

The Institute of Management Consultants (USA) exists to establish professional and ethical standards for management consultants, to provide continuing education and information relevant to the profession, and to increase public awareness of the management consulting profession.

The Council of Supply Chain Management Professionals (CSCMP)

CSCMP is an association of distribution, logistics and supply chain management professionals. The organization is very comprehensive in

the supply chain management field. It covers issues of customer satisfaction, inventory management, transportation, warehousing, systems, management and strategy. It is the largest and most comprehensive supply chain management organization.

CSCMP has an extensive network of local organizations called Round Tables. These often meet monthly in local environments to present outside speakers or conduct seminars. CSCMP conducts high-level annual meetings attended by five to seven thousand supply chain management professionals.

The International Customer Service Association (ICSA)

ICSA is an organization of customer service professionals. In general the organization is focused on issues pertinent to running a customer service department--personnel, organization, career paths, and so on. ICSA conducts annual meetings attended by two to three thousand people.

The Warehouse Education and Research Council (WERC)

WERC is an organization of individuals primarily focused on warehouse operations. Most of WERC's members have a direct connection with or are responsible for warehousing. The organization conducts local chapter meetings and has an annual conference.

ELA, the European Logistics Association, is a federation of 30 national organisations, covering almost every country in Central and Western Europe.

The goal of ELA is to provide a forum for co-operation for any individual or society concerned with logistics within Europe and to assist industry and commerce in Europe.

ELA formulates European Logistics Education Standards and encourages the acceptance of these standards by each of its member nations. A Vocational Qualification procedure is in place to enable the standards to be accepted on a pan-European basis.

ELA is often asked to participate in, or endorse, or lend support to a variety of research projects. For that reason ELA published the broad principles for ELA's support for research and provides advice on how to engage with the Association in this field.

AILOG, Italian Association of Logistics and Supply Chain Management since 1978 represents the professional and cultural point of reference in Italy on the issues of logistics and supply chain management for companies, for industry and for the institutions.

AILOG, excluding any profit-making, promotes the study, knowledge and application of logistics in its different aspects: technological, organizational, economic, social and environmental impact.

In particular, it proposes to: promote exchanges of experience and collaboration between members to enhance their professionalism; spread the knowledge of logistics and promote full recognition of the logistics function in the economy, industrial, commercial and political; promote training and retraining, with the cooperation of public or private institutions; develop in the companies and public institutions the introduction of advanced logistics systems; establish and maintain links with institutions and organizations, public and private, domestic or foreign, involved in logistics; take any useful initiative to achieve the aims of the Association.

In order to achieve these objectives AILOG organizes the following activities: conferences and seminars, working groups and pilot projects, training courses, sponsored by the magazine “Logistics Management”.

The Association operates throughout the national territory through its Territorial Departments. These sections pursue the general objectives of AILOG with the aim of territorial development, exchange of experiences and knowledge of logistics and increasing the dissemination of logistics disciplines as a means of propulsion in the process of further economic development planning.

Within AILOG also operates, since 1994, the section Ailog Youth, created in order to facilitate the matching between demand and supply of labour and, more generally, to spread culture and professionalism of the logistics disciplines in the world of youth .

Among the members AILOG includes the best known of the Italian logistics: there are many business executives, supply chain managers, purchasing managers or production (materials and distribution) managers, some are entrepreneurs, some successful consultants, academicians and other young graduates.

AILOG now has more than 1000 members, belonging to private companies and public bodies, whose total turnover amounts to some € 250 billion. Production companies, members of several areas of business, distributors, logistics operators, service providers and equipment companies and logistics information systems, also belong to the association institutions, public administration and university bodies.

The Logistics Association of Australia (LAA) is a professional membership association representing the interests of professionals in logistics and the supply chain. Its vision is to serve and advance the Logistics and Supply Chain profession in Australia. Its mission is to be the Australian professional organization to which people associated with logistics and supply chain belong, by ensuring that the organization creates value for members and stakeholders, develops the profession by facilitating the exchange of knowledge and experience; encourages, recognizes and rewards achievements and excellence within the profession; collaborates responsibly with relevant organizations.

The core goal of LAA is professional development of individual people operating in the logistics, transport and supply chain profession.

The LAA provides professional development by providing good quality products, services and programs.

On many occasions the LAA collaborates with various industry bodies to bring to the membership good quality programs and services.

The mission of the nonprofit **German Logistics Association (BVL)** founded in 1978 is to act as a neutral platform to promote an awareness for the importance of logistics and supply chain management in industry, science and the public sphere, to systematically document logistical problem definitions, to develop methods and processes to solve these problems on an interdisciplinary and sector-focused basis and to promote and continuously optimize the application of the relevant solutions.

Today, BVL has more than 10,000 members - companies and individuals from the worlds of industry, commerce, services and science who are actively involved in the business of logistics and supply chain management. BVL is a primarily honorary network of experts that sees its job as to support the exchange of knowledge ideas among members. At the same time, BVL consciously avoids representing corporate interests, does not act as a lobbyist and has no agenda in the political field.

The members and bodies of BVL possess the experience and expertise that enable them to identify new trends in the early stages - and then to develop and present tailored ideas and concepts to the key current and future players in industry, politics and science with the aim of addressing key issues, helping to promote opinion formation in general and the competitiveness of BVL's members in particular.

The members of the Executive and Advisory Boards of BVL are leading figures who represent a broad cross-section of logistics expertise in industry and research. BVL always has its finger on the pulse of the logistics world, ensuring a constant flow of information on the latest trends and supplying a comprehensive range of expert knowledge that benefits each and every member.

The work and commitment of BVL's 29 Regional Groups form the solid foundation of the association. At over 160 events every year, the regional groups showcase real-world and "hands-on" logistics strategies, concepts and solutions. They provide an excellent platform for establishing new - or building on existing - contacts where both members and guests can talk to each other one to one and find out about the events and services offered by BVL. In December 2008, BVL founded its first Regional Group outside Germany in Shanghai. The next one was established in Beijing in February, 2010.

The goal of the Research Council, a voluntary group of leading scientists and logistics experts, is to identify research deficits in the field of logistics vis-à-vis the public at large and to use the resulting insights as a basis for the development of important and necessary projects. The Promotion Committee is not itself a research body but aims to initiate, support and review key research projects.

Future-oriented working groups and 29 active regional groups ensure rapid knowledge transfer and facilitate personal contacts for those seeking in-depth information.

The Chartered Institute of Logistics and Transport in the UK - CILT(UK) - is the pre-eminent independent professional body for individuals associated with logistics, supply chains and all transport throughout their careers.

As the focus for professional excellence and the development of the most modern techniques in logistics and transport, the Institute aims to encourage the adoption of policies that are both efficient and sustainable. Its aim is to facilitate the development of personal and professional excellence; to encourage the development of leading-edge thinking and best practice in logistics, supply-chains and all transport;

to provide relevant and valued services to members and employers, to provide professional integrity and excellence, quality support and service for members, relevance and value for money, breadth and quality of membership.

Exercise 17. Answer the questions on text 3.

1. What is the IMC main objective? 2. What issues does the CSCMP cover? 3. What is called “Round Table”? 4. What issues is ICSA focused on? 5. In what field is WERC known? 6. What does ELA formulate? 7. What is the aim of a Vocational Qualification procedure? 8. Application of what aspects of logistics does AILOG promote? 9. What is the purpose of AILOG Youth? 10. Who are the AILOG members? 11. What is the LAA? 12. What are the LAA mission and core goal? 13. Why was BVL founded? 14. What forms the solid foundation of BVL? 15. Where were BVL’s regional groups first founded? 16. What is the Research Council? 17. What does CILT(UK) aim to do?

Exercise 18. Give English equivalents.

Післядипломне навчання; професійна кваліфікація; охоплювати різні питання; управління матеріально-технічними запасами; зберігання на складах; широка мережа; зустрічатися щомісяця; щорічні збори; керування відділом; кар’єрне просування; передусім; проводити збори; забезпечувати форум; допомагати промисловості та торгівлі; загальноєвропейська база; працювати з; застосування; збільшувати; перепідготовка; громадський заклад; підтримувати зв’язок; експериментальний проект; слідувати цілям; поширення; просування; попит і пропозиція; керівник відділу збуту; товарообіг; виробнича фірма; обмін знаннями; винагороджувати досягнення та успіхи; застосування відповідних рішень; головні теперішні та майбутні учасники; конкурентоспроможність; постійний потік інформації; професійна кваліфікація.

Exercise 19. Match the definitions with proper logistics terms.

Definitions

Terms

1. An organization which provides logistics services as an intermediary between the shipper and the carrier, typically on international shipments

a) customs house broker

2. A country, firm, or person that buys goods from another country for use in their own country

b) consignee

- | | |
|--|----------------------|
| 3. A business firm that oversees the movement of international shipments through customs and ensures that the documentation accompanying a shipment is complete and accurate | c) shipment |
| 4. A country, firm, or person that sells and sends goods to another country | d) freight forwarder |
| 5. The party to whom goods are shipped and delivered. The receiver of a freight shipment | e) customs |
| 6. A country, firm, or person that buys goods from another country for use in their own country | f) carrier |
| 7. The official department that administers and collects the duties levied by a government on imported goods | g) importer |
| 8. An amount of a particular kind of cargo that is sent to another country on a ship, train, aeroplane, or other vehicle. | h) exporter |

Exercise 20. Translate the following sentences into English using Past Continuous and Future Continuous Tenses.

1. Тоді як розвинені країни поліпшували стан економіки, країни третього світу рухалися у зворотному напрямку (to move backwards). 2. Транспортний сектор спостерігав зростаючі можливості для мультимодальних перевезень. 3. Наступного десятиліття цей світовий вантажний перевізник збільшуватиме свою конкурентоспроможність. 4. Із розвитком Інтернету користування послугами митного брокера зробить можливим новий спосіб життя, так званий «спосіб життя в мережі» (Web lifestyle). 5. Деякі консигнатори та перевізники стикалися зі складностями щодо отримання необхідних документів, що стосувалися правил місцевої митниці. 6. Із набуттям досвіду невеликі посилкові фірми перетворюватимуться на постійних експортерів та імпортерів. 7. Отримавши пропозицію заснувати спільну експортну фірму, він оцінював політичну стабільність країни, в якій планувався бізнес.

Exercise 21. Decipher the abbreviations and translate them.

CLM, NCPDM, LIS, IMC, CSCMP, ICSA, WERC, ELA, AIOLOG, LAA, BVL, CILT(UK), ULA, RPS, LTL, SCS, JIT, TL.

Exercise 22. Speak on:

1. Logistics development phases.
2. Major logistics implications of globalization.
3. Main logistics associations.

Unit 6. TERMINAL OPERATIONS AND CONTAINER INFRASTRUCTURE

Exercise 1. Read dialogue 1 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 1

A: Do you have any information on container ports of the world?

B: Yes, I have just found a special list of top 10 container ports in an on-line logistics magazine. There is also the statistical data.

A: What is the most important criterion according to which container ports are analyzed?

B: They are analyzed taking into account a standard measure describing the capacities of terminals: twenty-foot equivalent units (TEU) per year.

A: So, what is the biggest container terminal in the world according to the top list of ports?

B: It's the Kwai Tsing container terminal in Hong Kong (China). It has nine container terminals with 24 berths of about 8,500 metres of frontage.

A: What terminal area does it cover in total?

B: It covers a total terminal area of about 2.7 km² including container yards (CY) and container freight stations.

A: What is the total handling capacity of these nine container terminals?

B: Its over 18 million TEU per year.

A: What are the other ports following the list?

B: These are the ports of Singapore, Shanghai, Shenzhen (China), Busan (South Korea), Kaohsiung (Taiwan), Rotterdam (Netherlands), Hamburg (Germany), Dubai (OAE), Los Angeles (USA).

A: What are the terminals with the lesser part of TEU per year?

B: Here we can mention Antwerp (Belgium), Bremen (Germany) and Gioia Tauro (Italy) with 6, 488, 3,735 and 3,161 TEUs, respectively.

Notes

on-line magazine – електронний журнал

to take into account – зважати на, брати до уваги

terminal capacity – продуктивність, пропускна здатність терміналу

terminal area – 1) площа терміналу; 2) службово-технічна територія (СТТ)

twenty-foot equivalent units (TEU) – двадцятифутовий еквівалент (стандартна одиниця вимірювання контейнерних вантажів, що відповідає транспортному контейнеру завдовжки 20 футів, завширшки 8 футів та заввишки 8,5 футів, відповідно 6,10×2,44×2,59 м)

container terminal – контейнерний термінал, контейнерна вантажна станція

berth – причал, місце якірної стоянки

frontage – фасад, лицевий бік; довжина майданчика (площадки)

container yard (CY) – сортувальний контейнерний майданчик (сортувальна контейнерна станція)

container freight station – вантажний контейнерний майданчик

handling capacity – 1) транспортно-завантажувальні характеристики; 2) вантажопідйомність

Exercise 2. Write out internationalisms from the dialogue. Compare their pronunciation and meaning in English and Ukrainian.

Exercise 3. Find in dialogue 1 words that can function both as nouns and verbs. Give their translation.

Exercise 4. Practice the pronunciation of the following words repeating after the teacher:

analyze, containerize, yard, berth, frontage, route, quay, vessel, sequence, consequence, shipping, transshipment, cooling, stuffing, stripping, guided, driven, designated, predefined, layout, equip, import, export, stack, reefer, hazardous, shed, arrival, identify, register, destination, transfer, row, bay, tier, vehicle, concurrent, gantry,

category, hinterland, trolley, rubber, chassis, trigger, straddle, stochastic, manual, automated.

Exercise 5. Memorize the basic terminology to text 1.

intercontinental – міжконтинентальний

unit-load concept – концепція обслуговування одиничних вантажів

transshipment – перевалка, перевантажування

shipping – вантажовідправлення, відвантаження

transfer facility – вузол перевалки контейнерів

route – маршрут

routing – маршрутизація

deep sea – 1) великі глибини моря / океану; 2) глибоководний

maritime transport – морські перевезення, морський транспорт

to containerize – здійснювати контейнерні перевезення

consequence – наслідок

considerably – значно, суттєво

handling – обробка / оброблення (*вантажів*)

manually driven / operated – на ручному керуванні, керований
ручним способом

crane – підймальний кран

quay crane – портовий кран

stacking crane – кран-стосоукладач, кран-штабелювач

single-trolley crane – вантажопідйомний кран із одним підкрановим
візком

dual-trolley crane – вантажопідйомний кран із подвійним
підкрановим візком

gantry crane – козловий кран

bridge crane – мостовий кран

rail-mounted gantry (RMG) crane – козловий кран на рейковому ході

rubber-tier gantry (RTG) crane – контейнерний перевантажувач на
пневмоколісному ході

vehicle – транспортний засіб, засіб пересування; візок; автомобіль

automated guided vehicle (AGV) – автоматичний самохідний візок,
що керується програмованою комп'ютерною системою,
робочар (*в автоматичному режимі не потребує людського
керування*)

transtainer – контейнерний портовий кран (перевантажувач
контейнерів)

cart – візок
growth rate – темп зростання
significant gain – значна вигода
advanced – сучасний; досконалий
layout – схема планування, розміщення
software system – система програмного забезпечення
sub-system – підсистема
operation area – функціональна зона, робоча ділянка
to equip (with) – споряджати, обладнувати
stack – штабель, стелаж
stack area – зона / ділянка штабелювання
reefer (refrigerated) container (RC) – контейнер-рефрижератор,
рефрижераторний контейнер
electrical supply – електропостачання
cooling – охолодження
to store – зберігати на складі
hazardous goods – небезпечні товари
shed – депо
stuffing – комплектування
stripping – демонтаж; розбирання
to link (to) – з'єднувати, зв'язувати, сполучати (з)
outside – зовнішній
arrival – прибуття, надходження
to identify – виявляти, ідентифікувати, розпізнавати
to register – реєструвати(ся); записувати(ся); фіксувати,
відмічати(ся)
to pick up – піднімати
row – ряд
bay – 1) ніша; 2) прогін між колонами
tier – ярус, ряд
lifting vehicle – піднімальний транспортний засіб
designated – призначений; зазначений
predefined – визначений (*наперед*); запропонований; приписаний
stacking – штабелювання
concurrent – збіжний, паралельний; узгоджений; супутній
complex – складний, комплексний; важкий
predictability – передбачуваність
regarding – щодо, стосовно

intermediate platform – проміжна платформа
buffering – проміжне зберігання; буферизація
straddle carrier – транспортер / навантажувач (для довгомірних вантажів)
reach stacker (truck) – контейнерний навантажувач із висувною стрілою та телескопічним захватом, річ-стакер, річ-трак
chassis-based transporter – транспортер, розміщений на шасі
yard – 1) двір; 2) парк, сортувальна станція
hinterland – прилегла територія, хінтерланд, узбережна зона
multi-trailer system (MTS) – мульти- трейлерна система
manned truck – вантажний автомобіль, керований людиною
automated lifting vehicle (ALV) – автоматичний підймальний візок
stochastic – випадковий, ймовірний
pre-planning – попереднє планування
look-ahead – випереджальний, попередній
to trigger – приводити в дію, задіювати, спонукати, давати імпульс
time span – проміжок часу
landside transportation – перевезення береговою лінією
storage slot – слот, посадкове місце для зберігання
determination – визначення
simulation – моделювання

Exercise 6. Read and translate text 1.

Text 1. Container Terminal Operations

Over the recent years, the use of containers for intercontinental transport has dramatically increased. A further continuous increase is expected in the upcoming years, especially between Asia and Europe.

Since their introduction in the 1960s containers represent the standard unit-load concept for international freight. Transshipment of containers between different parties in a supply chain involves manufacturers producing goods for global use, freight forwarders, shipping lines, transfer facilities, and customers. Container terminals primarily serve as an interface between different modes of transportation, e.g. domestic rail or truck transportation and deep sea maritime transport.

Some major freight routes are even containerized up to 100%. As a consequence, the number and capacity of container terminals increased

considerably. At the same time, there is an ongoing trend in the development of container terminal configurations to use automated container handling and transportation technology, particularly, in countries with high labour costs. Hence, manually driven cranes are going to be replaced by automated ones and often automated guided vehicles (AGVs) are used instead of manually operated carts.

Driven by huge growth rates on major container routes, competition between container ports has considerably increased. Not only handling capacities of container terminals worldwide got larger and larger. Moreover, significant gains in productivity were achieved through advanced terminal layouts, more efficient IT-support and improved logistics control software systems, as well as automated transportation and handling equipment.

Although container terminals considerably differ in size, function, and geometrical layout, they principally consist of the same sub-systems (Fig. 1).

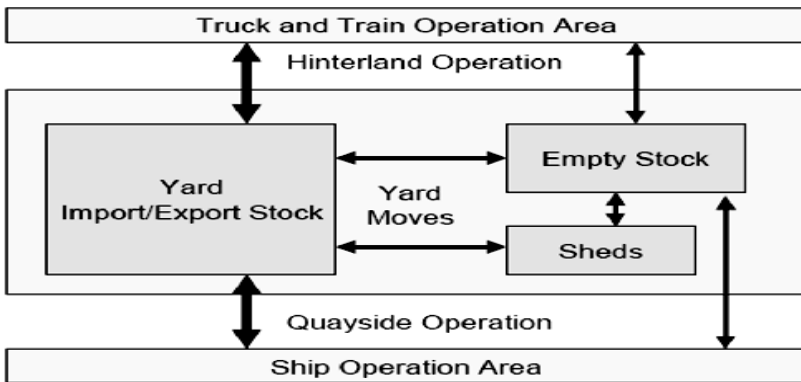


Fig. 1. Operation areas of a container terminal and flow of transports

The operation area is equipped with cranes for loading and unloading. Import as well as export containers are stocked in a yard which is divided into a number of blocks. Special stack areas are reserved for reefer containers, which need electrical supply for cooling, or to store hazardous goods. Separate areas are used for empty containers. Some terminals employ sheds for stuffing and stripping containers or for additional logistics services. The truck and train operation area links the terminal to outside transportation systems.

The chain of operations for export containers can be described as follows (Fig. 2).

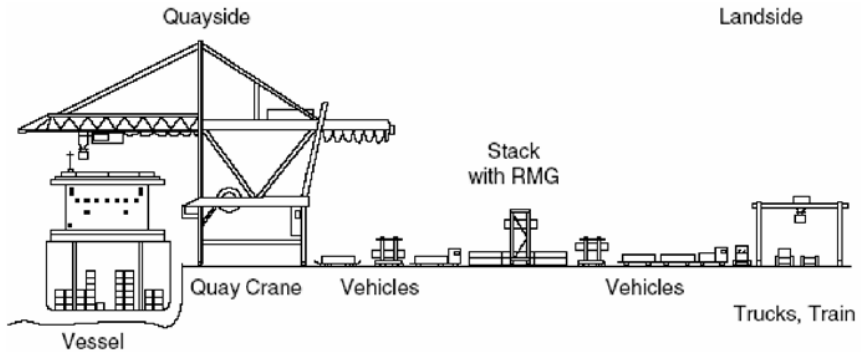


Fig. 2. Transportation and handling chain of a container

After arrival at the terminal by truck or train the container is identified and registered with its major data (e.g. content, destination, outbound vessel, shipping line), picked up by internal transportation equipment and distributed to one of the storage blocks in the yard. The respective storage location is given by row, bay, and tier within the block and is assigned in real time upon arrival of the container in the terminal. To store a container at the yard block, specific cranes or lifting vehicles are used. Finally, after arrival of the designated vessel, the container is unloaded from the yard block and transported to the berth where quay cranes load the container onto the vessel at a pre-defined stacking position. The operations necessary to handle an import container are performed in the reverse order.

Scheduling the huge number of concurrent operations with all the different types of transportation and handling equipment involved is an extremely complex task. In view of the ever changing terminal conditions and the limited predictability of future events and their timing, this control task has to be solved in real time.

Container terminals greatly differ by the type of transportation and handling equipment used. Regarding quay cranes, single or dual-trolley cranes can be found. The latter employ an intermediate platform for buffering the loaded or unloaded container. The most common types of yard cranes are rail-mounted gantry (RMG) cranes, rubber-tired gantry (RTG) cranes, straddle carriers, reach stackers, and chassis-based transporters. Of these types of cranes only RMG cranes are suited for fully automated container handling. Fig. 3 exhibits the working principle of the different types of handling equipment and their

comparative performance figures with respect to the number of TEUs, which can be stored per hectare.

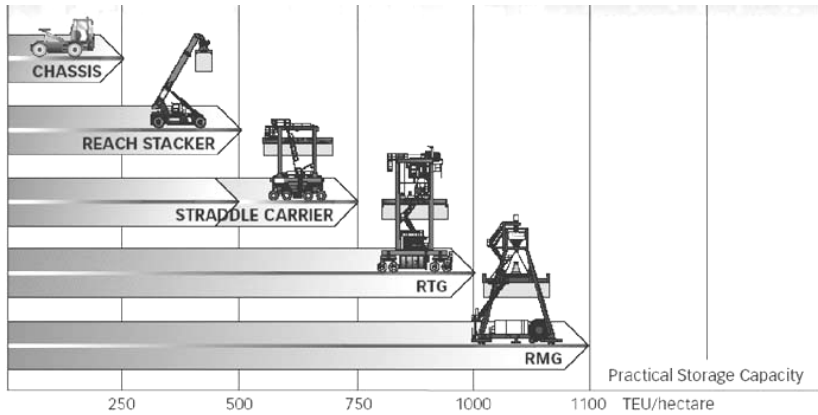


Fig. 3. Different types of handling equipment

The most common types are multi-trailer systems (MTS) with manned trucks, automated guided vehicles (AGVs), and automated lifting vehicles (ALVs). The latter ones, in contrast to AGVs, are capable of lifting a container from the ground by themselves.

Container terminals represent highly dynamic and highly stochastic logistics systems, which do not allow pre-planning of detailed transportation and handling activities for a look-ahead horizon of more than 5-10 minutes. Hence, *real-time control* of logistics activities is of utmost importance. Real-time control (or real-time planning) is usually triggered by certain events or conditions and requires that the underlying decision problem is solved within a very short time span, in practice usually within less than a second. Real-time decisions include the assignment of transportation orders to vehicles and routing and scheduling the vehicle trips for landside transportation as well as for transportation between the berth and the storage yard, the assignment of storage slots to individual containers, and the determination of detailed schedules and operation sequences for quay and stacking cranes.

Exercise 7. Answer the questions on text 1.

1. When were containers introduced into freight service? 2. How long have containers represent a standard unit-load concept for international freight? 3. Between what countries is the container

transportation expected to increase in the upcoming years? 4. What does transshipment of containers between different parties in a supply chain involve? 5. What do container terminals serve for? 6. What are the results of containerization on some major freight routes? 7. How were the most significant gains in productivity achieved within the increased competition between container ports? 8. What do container terminals differ in? 9. What areas are employed by terminals? 10. How can the chain of operations for export containers be described? 11. What is used to store a container at the yard block? 12. How are the operations necessary to handle an import container performed? 13. What are the most common types of yard cranes? 14. What do multi-trailer systems include? 15. What do container terminals represent? 16. What is the role of real-time decisions?

Exercise 8. Match the definitions with proper logistics terms.

Definitions

Terms

- | | |
|--|--------------------------------------|
| <p>1. A shipment method in which commodities are placed in containers, and after initial loading, the commodities per se¹ are not re-handled in shipment until they are unloaded at the destination</p> | a) container |
| <p>2. Standard unit for counting containers of various capacities and for describing the capacities of container ships or terminals</p> | b) simulation |
| <p>3. The packaging, such as a carton, case, box, bucket, drum, bin, bottle, bundle, or bag, that an item is packed and shipped in</p> | c) container security initiative |
| <p>4. U.S. Customs program to prevent global containerized cargo from being exploited by terrorists. Designed to enhance security of sea cargo container</p> | d) real-time |
| <p>5. A mathematical technique for testing the performance of a system due to uncertain inputs and/or uncertain system configuration options</p> | e) containerization |
| <p>6. The processing of data in a business application as it happens – as contrasted with storing data for input at a later time.</p> | f) twenty-foot equivalent unit (TEU) |

¹ per se – сам по собі; по суті

Exercise 9. Give English equivalents.

Перевалка; вузол перевантаження контейнерів; вантажний маршрут; здійснювати контейнерні перевезення; контейнерний порт; службово-технічна територія; двадцятифуртовий еквівалент; пропускна здатність терміналу; рефрижераторний контейнер; сортувальний контейнерний майданчик; вантажний контейнерний майданчик; протяжність майданчика; обробка вантажів; схема розміщення; штабелювання; зона укладання у стоси/ділянка штабелювання; охолодження; небезпечні товари; депо; місце призначення; місце зберігання; ряд; ярус; ніша; проміжна платформа; маршрутизація; комплектування; проміжок часу; перевезення береговою лінією; прилегла територія; підймальний кран; козловий кран; козловий кран на рейковому ході; вантажопідйомний кран із одним підкрановим візком; кран-стосоукладач; портовий кран; контейнерний перевантажувач на пневмоколісному ході; контейнерний навантажувач із висувною стрілою та телескопічним захватом; вантажопідйомний кран із подвійним підкрановим візком; депо; мульти- трейлерна система; автоматичний підймальний візок; вантажний автомобіль, керований людиною; автоматичний самохідний візок, робочар.

Exercise 10. Fill in the blanks with the words and word combinations from the box.

warehousing and transportation, labour, intermodal use, protective nature, shipments, advantages, temporary storage facilities, standardized materials handling equipment

The use of ... has become commonplace. The ... of containers are numerous:

- Costs due to loss or damage are reduced because of the ... of the container.
- ... costs in freight handling are reduced because of the increased use of automated materials handling equipment.
- Containers are more easily stored and transported than other types of ..., which results in lower ... costs.
- Containers are available in a variety of sizes, many of which are standardized for
- Containers are able to serve as ... at ports and terminals with limited warehousing space.

Exercise 11. Answer the questions on the text of ex.8.

1. What costs are reduced thanks to the use of containers? 2. Why are costs due to loss or damage reduced? 3. What differentiates containers from other types of materials handling equipment? 4. What other uses of containers are also possible?

Exercise 12. Read and translate text 2 and give the gist of the text.

Text 2

A container terminal is a facility where cargo containers are transshipped between different transport vehicles, for onward transportation. The transshipment may be between ships and land vehicles, for example trains or trucks, in which case the terminal is described as a maritime container terminal. Alternatively the transshipment may be between land vehicles, typically between train and truck, in this case the terminal is described as an inland container terminal.

Maritime container terminals tend to be part of a larger port, and the biggest maritime container terminals can be found situated around major harbours. Inland container terminals tend to be located in or near major cities, with good rail connections to maritime container terminals.

Both maritime and inland container terminals usually also provide storage facilities for both loaded and empty containers. Loaded containers are stored for relatively short periods, whilst waiting for onward transportation. Unloaded containers may be stored for longer periods awaiting their next use. Containers are normally stacked for storage, and the resulting stores are known as container stacks.

In recent years methodological advances regarding container terminal operations have considerably improved.

Exercise 13. Fill in the blanks with the words from the boxes below .

1. Container terminal in Singapore is the world's ... largest container hub. Port of Singapore Authority (PSA) handled ... last year. PSA operates ... and ... in Singapore, and links shippers to an excellent network of ... with connections to in The ... biggest container terminal in the world is Keppel harbour container terminal in Singapore. This terminal handles about ... each year.

123 countries, 15 million TUEs, third, 200 shipping lines, 2 multi-purpose terminals, 600 ports, second, 12.1 million TUEs, 4 container terminals

2. The Yantian container terminal in Shenzhen, China is the ... biggest container terminal in the world. It can handle ... of containers per year. Another huge container terminal is located in Busan in South Korea. As the leading port, it makes a substantial contribution to Korean economic growth by handling about ... of the total imported and exported overseas cargo and ... of container cargo. The number of vessels that use Busan Port totals about ... annually and around ... every day. This terminal in the port of Busan is the ...biggest container terminal in the world.

80 %, 50,000 vessels, fourth, 12 million TEUs, fifth, 130 vessels, 40 %

3. Europe Container Terminals (ECT) in Rotterdam is the largest and most advanced container terminal operator in Europe, handling almost ... of all containers. Covering over ..., the Netherlands' Port of Rotterdam is a city-state for freight. As a gateway, the Port of Rotterdam handles ... of the volume reaching the Netherlands and its closest markets, about Rotterdam faces stiff competition from ports such as Antwerp, Le Havre, Bremerhaven and Hamburg. Hamburg has Europe's ... busiest container terminal after Rotterdam and Netherlands. This terminal is called the HHLA container terminal and its handling capacity is over

8 million TEUs, second, 80%, 3 million TEUs, three-quarters, 40 square miles

Exercise 14. Match English-Ukrainian equivalents.

- | | |
|------------------------------|--|
| 1. automated lifting vehicle | a. портовий кран |
| 2. automated guided vehicle | b. контейнерний навантажувач із висувною стрілою та телескопічним захватом |
| 3. quay crane | c. вантажопідйомний кран із подвійним підкрановим візком |
| 4. stacking crane | d. контейнерний перевантажувач на пневмоколісному ході |
| 5. crane | e. автоматичний самохідний візок |

6. lifting vehicle	f. візок
7. single-trolley crane	g. підймальний транспортний засіб
8. dual-trolley crane	h. вантажопідйомний кран з одним підкрановим візком
9. gantry crane	i. козловий кран на рейковому ходу
10. rail-mounted gantry crane	j. кран-стосоукладач
11. rubber-tier crane	k. підймальний кран
12. straddle carrier	l. транспортер на шасі
13. transtainer	m. транспортер, розташований на шасі
14. bridge crane	n. автоматичний підймальний візок
15. reach stacker	o. козловий кран
16. cart	p. контейнерний портовий кран
17. chassis-based transporter	q. мостовий кран

Exercise 15. Translate the following sentences into English:

1. Для переробки (processing) організують контейнерні майданчики (площадки), де виконується навантаження, вивантаження, сортування, зберігання, завезення–вивезення, технічний огляд і поточний ремонт контейнерів. 2. Контейнерні майданчики бувають вантажні, вантажосортувальні (cargo segregational), сортувальні. 3. На контейнерному пункті може бути один чи декілька майданчиків. 4. Виділяють окремі ділянки для розміщення контейнерів за часом відправлення і прибуття. 5. Контейнери розміщують довшою стіною вздовж майданчика, дверима один до одного із зазором (spacing) між контейнерами від 0,20 до 5 м. 6. Два ряди контейнерів, розташованих поперек (across) майданчика, утворюють сектор. 7. Між секторами залишають проходи (lanes) від 6 м. 8. Через кожні 100 м передбачається протипожежний розрив (fire break) у 10 м. 9. На майданчику передбачають поперечні в'їзди (cross entrances) для автомобілів через кожні 19 м під час роботи з мостовими кранами і через 44 м під час роботи з кранами на рейковому ходу (rail-guided cranes). 10. Для перевантаження контейнерів застосовують козлові крани, за великого обсягу переробки – мостові.

Exercise 16. Decipher the abbreviations using a dictionary.

CY, TEU, AGV, ALV, MTS, RMG, RTG, ECT, OAE, PSA.

Exercise 17. Memorize the basic terminology to text 2.

international standards organization (ISO) – міжнародна організація зі стандартів

to headquarter – розміщувати штаб-квартиру, головне управління

cube – ємність, місткість (внутрішній об'єм контейнера)

dry (cube) container (DC) – суховантажний контейнер

high cube container (HC) – контейнер підвищеної місткості (високий)

insulated container – ізоляційний контейнер

flat rack (FR) – флетрек-контейнер

platform (PL) – контейнер-платформа

open top container (OT) – контейнер із відкритим верхом

hard top container (HT) – контейнер із жорстким верхом

thermal container – ізотермічний контейнер

tank container (TC) (tanktainer) – цистерна, танк-контейнер

tank – цистерна, бак, резервуар

to enclose – 1) замикати; 2) обгороджувати, оточувати; 3) вкладати

height – висота

foot (*pl.* feet) – фут (одиниця виміру довжини = 30,48 см)

inch – дюйм (одиниця виміру довжини = 1/12 фута = 2,54 см)

temperature sensitive material – термочутливий матеріал

heavy machinery – важке машинне (верстатне) обладнання

to fold down – складати(ся); згортати(ся); відкидатися

box – коробка, ящик

to load – вантажити, навантажувати

bulk material – насипний матеріал; сипка речовина

bulkhead – перегородка

collapsible – розкладний / розбірний / складаний

to mount – встановлювати; монтувати

steel framework – сталевий каркас

dimension – розмір, величина

liquid – рідина

width – ширина

specification – 1) специфікація; деталізація; 2) *pl.* інструкція з використання

to depart (from) – відштовхуватися; відходити (від)

planking – обшивання дошками

plywood – фанера

resilient – пружний, еластичний

to dent – залишати ум'ятину, вибоїну; втискувати, утискувати
friction – тертя
securing – кріплення, скріплювання, закріплювання
optional extra – додаткова приналежність
forklift truck – вилковий навантажувач
forklift pocket – вилковий карман
to permit – дозволяти; допускати
to install – встановлювати
travel path – траскторія; хід
gooseneck tunnel – гузнек-тунель (S-подібно вигнута опора
низькорамного напівпричепа)
recess – ніша; заглиблення; проріз; виточка
grappler pocket – карман для кріплення затискача
spreader – приладдя / пристрій для розкладення
fitting – 1) установлення; монтаж; обладнання; 2) *pl.* фітинги,
гарнітура; 3) пристосування; примірка
corner casting – виливаний / литий кутик (*контейнера*)
grappler – захоп, затискач
garment – 1) предмет одягу; 2) *pl.* одяг, вбрання
lashing ring – металеве кільце (*обруч для кріплення вантажу*)
textile – текстиль, текстильний виріб
rail – перекладка; рейка, балка
to hang (*p.pp.* hung) – 1) висіти, звисати; 2) підвішувати;
розвішувати
clothes-hanger – плічка, вішалка
bottom – низ, нижня частина
corner post – вертикальна кутова стійка (*контейнера*)
inlet – впускний отвір
plastic liner – пластиковий мішок
bulk bag – мішок для насипного / навалного вантажу
liquid bulk bag – ємність для наливного вантажу
to suspend – вішати, підвішувати
corrugated – гофрований, рифлений
door header – верхній брус дверного прорізу
to swivel out – повертатися назовні
approximately – приблизно, наближено, майже
cross member – поперечний елемент конструкції
crab – 1) коловорот, лебідка; 2) вантажний візок (*мостового крану*)
roof – дах, покрівля

to fasten (to) – зв’язувати, прив’язувати; прикріплювати
to bear (*p. bore pp. born*) – носити, нести; переносити, перевозити
to remove – 1) пересувати; переміщати; 2) усувати; виносити;
3) знімати, скидати
removable – 1) пересувний; рухомий; знімний; 2) усувний;
змінюваний
bow – дуга
tarp(aulin) – брезент, просмолена парусина
to pack – упаковувати(ся), пакувати(ся)
solely – єдино; тільки, винятково
suitable – підхожий; відповідний; придатний
overheight cargo – вантаж, висота якого перевищує максимально
допустиму
overwidth cargo – вантаж, ширина якого перевищує максимально
допустиму
heavy-lifts – великоваговий вантаж
floor structure – перекриття
loading capacity – вантажопідйомність, допустиме навантаження
to fix – укріплювати, закріплювати; фіксувати
to attach – прикріплювати; прикладати
stanchion – підпірка, стояк; стовп
payload – корисне / комерційне навантаження

Exercise 18. Read and translate text 3.

Text 3. Container Overview

ISO is an international standards organization headquartered in Geneva, Switzerland. ISO containers are produced in several standard configurations, including dry or cube/dry van (DV), insulated, flat rack (or platform), open top, refrigerated, and tank. Dry ISO containers are general purpose (GP), totally enclosed, box type containers used for general purpose transportation. These containers are also called cube containers. Standard heights for dry containers are 8 feet 6 inches. Dry containers are also manufactured with extended heights of 9 feet 6 inches, and are referred to as high cube containers. Cargo is loaded from the end of the container. Insulated or thermal ISO containers as well as¹ refrigerated, or reefer containers (RCs) are used to transport

¹ as well as – так само як

chilled and frozen goods. They are also used for temperature sensitive materials and products where a steady temperature must be maintained during shipping. The difference is that the walls of insulated or thermal containers are insulated, but the container does not have a refrigeration unit. Flat racks and platforms have no side walls, but may have end bulkheads. They are used to transport heavy machinery. Collapsible flat rack containers are open sided ISO containers with end bulkheads that can be folded down when the rack is empty. Open top ISO containers are box type containers with no top. These containers can be used to carry heavy, tall or hard to load cargo, and bulk material, such as coal or grain. Cargo can be loaded from the top or end of the container. Tank containers (TCs) have a cylindrical tank mounted within a rectangular steel framework. These containers are built to the same standard dimensions as other ISO containers. They are used to transport liquid or bulk materials. ISO containers are manufactured in standard sizes. The standard width of ISO containers is 8 feet, the standard heights are 8 feet 6 inches, and 9 feet 6 inches, and the most common lengths are 20 feet and 40 feet. Less common lengths include 24, 28, 44, 45, 46, 48, 53, and 56 feet. Although ISO set specifications for all parameters of the container, individual companies' containers may depart from this in parameters other than dimensions.

Dry or standard containers are basically steel boxes, either 40' or 20' long, by 8' wide by 8'6" high.

Standard containers are also known as general purpose containers. They are closed containers, i.e. they are closed on all sides. A distinction may be drawn between the following types of standard containers: standard containers with doors at one or both end(s); standard containers with doors at one or both end(s) and doors over the entire length of one or both sides; standard containers with doors at one or both end(s) and doors on one or both sides.

In addition, the various types of standard container also differ in dimensions and weight, resulting in a wide range of standard containers. Standard containers are mainly used as 20' and 40' containers. Containers (CTNs) with smaller dimensions are very seldom used. Indeed, the trend is towards even longer dimensions, e.g. 45'. The cost advantages have led to the predominant use of steel for container walls. The floor is generally made of wood, usually planking or plywood. Although wood is relatively expensive, it has substantial advantages over other materials: it is strong and resilient, does not dent, may be

easily replaced during repairs and, when appropriately finished, has an adequate coefficient of friction, which is important for cargo securing.

Standard containers may additionally be equipped with certain optional extras:

Forklift pockets. These allow handling of empty containers with forklift trucks. Packed containers must not be picked up in this way unless specifically permitted. Forklift pockets are installed only in 20' containers and are arranged parallel to the centre of the container in the bottom side rails. 40' containers do not have forklift pockets, since the pockets are relatively close together and such large containers would be difficult to balance. In addition, the forklift truck travel paths are often not wide enough.

Gooseneck tunnel. Many 40' containers have a recess in the floor at the front end which serves to centre the containers on so-called gooseneck chassis. These recesses allow the containers to lie lower and therefore to be of taller construction.

Grappler pockets. In general, containers are handled by top spreaders using the corner fittings or corner castings. However, some containers have grappler pockets for handling by means of grapplers.

Side Access. These containers have two doors on either sides at the centre of the two side panels or diametrically opposed to each other on the side panels.

Special fittings are available for transporting special cargoes:

Clothes rails for hanging garments. Special lashing rings attached to the top side rail serve to accommodate clothes rails on which textiles may be transported hanging on clothes-hangers. These are often used in the East Asia import trade. Additional lashing rings are installed on the bottom side rail and the corner posts.

Inlet (bulk bag or liquid bulk bag). Plastic liners may be suspended in standard containers for transporting bulk cargo or non-hazardous liquids. These come in many forms and materials for different types of cargo.

The walls of **hard-top containers** are generally made of corrugated steel. The floor is made of wood. It has two typical distinguishing structural features:

On the one hand, it is equipped with a removable steel roof. In some types, this roof has points for accommodating forklift trucks, allowing the roof to be lifted by forklift truck. The roof weighs approximately 450 kg. In addition, the door header may be swivelled out. These two structural features greatly simplify the process of packing and

unpacking the container. In particular, it is very easy to pack and unpack the container from above or through the doors by crane or crab when the roof is open and the door header is swivelled out. In the case of transport of an overheight cargo, the container roof may be left open and fastened directly to a side wall on the inside of the container. To do this, the roof only needs approx. 13 cm (5 1/8") of space.

Lashing rings, to which the cargo may be secured, are installed in the upper and lower side rails, the corner posts and the middle of the side walls. The lashing rings on the side rails and corner posts may take loads of up to 2000 kg. The lashing rings in the middle of the side walls may take loads of up to 500 kg, provided that¹ the roof is closed.

Usual hard-top container dimensions are 20' and 40'. Hard-top containers are used for all types' general cargo (dry cargo). Their principal uses are for heavy cargo, tall cargo and loading from above or through the doors by crane or crab.

High-cube containers are similar in structure to standard containers, but taller. In contrast to standard containers, which have a maximum height of 2591 mm (8'6"), high-cube containers are 2896 mm, or 9'6", tall. High-cube containers are for the most part 40' long, but are sometimes made as 45' containers.

A number of lashing rings, capable of bearing loads of at most 1000 kg, are mounted on the front top end rail and bottom cross member and the corner posts. Many 40' containers have a recess in the floor at the front end which serves to centre the containers on so-called gooseneck chassis.

Open top container is basically a dry container, with the roof removed. In place of the steel roof, there are removable bows and a removable tarpaulin (or a tarp) for loading or unloading the container from above. The roof can be left open to accommodate cargo that is overheight. The walls of open-top containers are generally made of corrugated steel. The floor is made of wood. The door header may be swivelled out.

The purpose of the roof bows of an open-top container is not solely to support the tarpaulin but also to contribute to container stability. Lashing rings installed in the upper and lower side rails and in the corner posts may take loads of up to 1,000 kg. Usual open-top container dimensions are 20' and 40'. Open-top containers are used for all types of

¹ provided that – за умови, що

general cargo (dry cargo), for packing and unpacking from above or through the doors by crane or crab.

Flatracks consist of a floor structure with a high loading capacity composed of a steel frame and a softwood floor and two end walls, which may either be fixed or collapsible. The end walls are stable enough to allow cargo securing means to be attached and several flatracks to be stacked on top of one another. Flatracks are available in 20' and 40' sizes. A number of lashing rings are installed in the side rails, the corner posts and the floor. The lashing rings may take loads of up to 2000 kg in the case of 20' flatracks or up to 4000 kg in the case of 40' flatracks. Some types of 20' flatracks have forklift pockets. 40' flatracks have gooseneck tunnels at each end. For transport of certain cargoes, flatracks may be provided with stanchions. The maximum payload may be used only if the load is distributed evenly over the floor structure. If the weight of the cargo is applied to only a small proportion of the floor, it must be distributed and the manufacturer of the flatracks may have to be consulted on safety issues.

Flatracks are mainly used to transport heavy-lifts and overheight or overwidth cargoes.

Platforms consist solely of a floor structure with extremely high loading capacity; they have no side or end walls. This high loading capacity makes it possible to concentrate heavy weights on small areas. A platform consists of a steel frame and a wooden floor structure. Platforms are used principally for oversized and very heavy cargoes.

Exercise 19. Match the English-Ukrainian terms.

- | | |
|---------------------------|-----------------------------------|
| 1. dry (cube) container | a. контейнер із відкритим верхом |
| 2. high cube container | b. флетрек-контейнер |
| 3. insulated container | c. рефрижераторний контейнер |
| 4. refrigerated container | d. суховантажний контейнер |
| 5. thermal container | e. цистерна, танк-контейнер |
| 6. open top container | f. контейнер підвищеної місткості |
| 7. hard top container | g. ізотермічний контейнер |
| 8. platform | h. ізоляційний контейнер |
| 9. tank container | i. контейнер-платформа |
| 10. flat rack | j. контейнер із жорстким верхом |

Exercise 20. Find English equivalents in text 3.

Холодильна установка; охолоджений; заморожений; бічна сторона; бічна / бокова панель; розкладний / розбірний; відкритий збоку; постійна / незмінна температура; циліндричний; прямокутний; параметр; переважне застосування; коефіцієнт; нижня бокова перекладка / балка; боковий доступ; вішалка; пластиковий мішок; безпечна рідина; відмінна риса; поперечний елемент конструкції; підлога з м'якої деревини; максимальне корисне навантаження; великоваговий вантаж; габаритний; вантаж, ширина якого перевищує максимально допустиму.

Exercise 21. Complete the sentences choosing a, b or c.

1. ISO is an international standards organization headquartered in

- a) Geneva
- b) Hamburg
- c) New York

2. ISO containers are produced in

- a) the same configurations
- b) different configurations
- c) several standard configurations

3. ISO containers are manufactured in standard

- a) quantity
- b) packages
- c) sizes

4. Dry ISO containers are

- a) crate type containers used for transportation purposes
- b) box type containers used for general purpose transportation
- c) cylindrical type containers used for special purpose transportation

5. These containers are also called cube containers

- a) refrigerator containers
- b) dry containers
- c) tank containers

6. Cargo is loaded in dry containers from

- a) the end of the container
- b) the bottom of the container
- c) the top of the container

7. Insulated or thermal container doesn't have

- a) a tail unit

- b) any cargo compartment
- c) a refrigeration unit
- 8. Flat racks have no
 - a) doors
 - b) side walls
 - c) floor
- 9. Open top ISO containers can be used to carry
 - a) frozen goods
 - b) temperature sensitive materials
 - c) bulk material
- 10. Tank ISO containers are used to transport
 - a) liquid or bulk materials
 - b) refrigerators
 - c) cylindrical boxes and crates.

Exercise 22. Answer the questions on text 3.

1. What are the standard configurations for ISO containers?
2. What are standard heights for dry containers?
3. What containers are referred to as high cube containers?
4. What containers are used for temperature sensitive materials and products?
5. What containers are used to transport heavy machinery?
6. How can cargo be loaded into flat racks?
7. What type of container is used to maintain a steady temperature during shipping?
8. What are less common lengths of ISO containers?
9. What is set by ISO for all container parameters?

Exercise 23. Give Ukrainian equivalents.

High cube container; standard dimensions; collapsible container; cylindrical tank; steel framework; width and height; bulkhead; lashing rings; corner posts; crab; steel framework; standard dimensions; garment; chassis; inch; chilled and frozen goods; insulated container; resilient; plywood; forklift; rail; hazardous liquids; recess in the floor; gooseneck tunnel; corrugated steel; tarpaulin; stanchion; heavy-lift cargo; garment; chassis; spreader; grappeler.

Exercise 24. Decipher the abbreviations and acronyms using a dictionary.

DC, GP, CY, DV, ISO, CTNs, HC, OT, RTG, TEU, ALV, AGV, HT, FR, TC, PL, RC, RMG.

Exercise 25. Translate the following sentences into English:

1. Контейнери застосовують для перевезення вантажів різними видами транспорту – автомобільним, залізничним, авіаційним і водним. 2. Контейнери класифікують за такими ознаками: конструкція, розмір, рід вантажу, форма, сфера застосування тощо. 3. За призначенням контейнери поділяють на універсальні, призначені для перевезення тарно-штучних вантажів (unitized cargo), і спеціалізовані – для перевезення насипних матеріалів, рідких, рефрижераторних, газоподібних (fluid) та інших вантажів. 4. За конструкцією розрізняють криті контейнери (roofed) та відкриті, водонепроникні (waterproof) і негерметичні (untight), металеві контейнери та контейнери з полімерних (polymeric) матеріалів з металевим каркасом (metal framework). 5. Найбільш поширеними є контейнери масою 20 і 30 т, з незмінною шириною 8 футів (2,438 м). 6. Для перевезення важких вантажів, які не псуються (do not perish) за будь-яких погодних умов, застосовуються контейнери без даху, а також контейнери-платформи для укладання на них габаритних вантажів. 7. За сферою застосування контейнери поділяють на міжнародні, магістральні, допущені до перевезення на одному або декількох видах транспорту всередині однієї держави, внутрішньо заводські (in-plant). 8. Незалежно від класифікації контейнери стандартизовані за масою брутто, габаритами, а також за конструкцією приєднувальних пристроїв (couplers) до рухомого складу (rolling stock / vehicles).

Exercise 26. Fill in the blanks with the following words and word combinations from the box.

capital outlays, minor importance, inbound and outbound cargo, labeling, container facilities, container-based transportation network, location, disadvantages, overburdened, containerization, timely and efficient movement

Text 4. Disadvantages of Containers

Containerization is not without The major problem is that ports or terminals with ... may not be available in certain parts of the world. Even if these facilities exist, they may be so ... with ... that long delays occur.

Another major problem with containerization is that large capital expenditures are required to initiate a Significant ... for port and terminal facilities, materials handling equipment, specialized transport equipment, and the containers themselves are necessary before a firm can utilize

... is related to the packaging component of global logistics. From a cost standpoint, labeling is of ... in international logistics. However, accurate labeling is essential to the ... of products across international borders. Important issues related to labeling include content, language, color, and ... on the package.

Exercise 27. Answer the questions on text 4.

1. What are the problems with containerization in certain parts of the world? 2. What is usually necessary for a firm dealing in this field? 3. Why is accurate labeling essential in international logistics? 4. What is the reason of delays? 5. What issues are related to labeling?

Exercise 28. Rewrite the sentences using the model.

Model:

The container is 6 metres long. – The length of the container is six metres. Or: The container length is six metres.

1. The package weighs 45 kg. 2. This seagoing vessel is about 30 m wide. 3. The case we need to ship is 1 m long, 50 cm wide and 35 cm high. 4. It's nearly 3 cm deep. 5. The ship is more than 65 m long. 6. The open container's door is 7 ft 10 inches high.

Exercise 29. Decipher using a dictionary.

ft, kg, oz, cm, lb, cu yd, cu ft, m², 1", pt, gal, 20'.

Exercise 30. Pronounce and write the following cardinal numerals.

3; 14; 21; 30; 50; 80; 82; 44; 35; 67; 143; 258; 414; 331; 972; 101; 1,582; 7,111; 3,013; 5,612; 2,003; 9,444; 15,500; 57,837; 45, 971; 11,443; 92,017; 235,142; 978,218; 1,352,846; 4,125,963; 257, 382, 761; 2.5; 1/4; 0.75; 2/3; 3.785; 3/4; 0.5.

Exercise 31. Read and translate the following sentences. Comment on the use of numerals.

1. Fiat has *five* chief executives. 2. She has invested *80%* of her salary. 3. Product development cost *four thousand* euro. 4. Product

development cost *thousands* of euro. 5. It is a *three-million-dollar* contract. 6. The group lost *1.9 billion* last year and around *400 m* the year before. 7. This company has *two hundred and sixty-four* employees. 8. *Two hundred sixty-four* employees of this company went on strike in New-York. 9. The sale starts on the *first* of January. 10. This is the *second* complaint we have made. 11. The *third* solution was the best one. 12. She is our *fourth* manager in two years. 13. This is our *twenty-first* product line. 14. Today is the *one hundredth* anniversary of our organization. 15. Congratulations – you are our (*one*) *hundred and first* customer! 16. Precise measurements are calculated to within *one thousandth* of a centimetre. 17. This is the *millionth* car to come off the production line. 18. The proposal was adopted by *nine* votes to *two*.

Exercise 32. Make ordinal numerals from the following cardinal numerals.

7; 4; 2; 1; 3; 8; 5; 9; 10; 13; 15; 12; 14; 20; 21; 30; 32; 40; 43; 50; 54; 60; 75; 80; 98; 100; 120; 125; 200; 230; 300; 450; 563; 891.

Exercise 33. Write the following common and decimal fractions in words.

- a) $1/7$; $1/5$; $1/9$; $1/15$; $1/25$; $3/8$; $2/5$; $4/7$;
- b) 3.5; 2.34; 12.3; 53.52; 0.1; 0.25; 5.37; 6.4.

Exercise 34. Read dialogue 2 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 2

A: Well, can you describe the container available for shipping our consignment?

B: Of course, so this is one of our larger containers – the 40 ft Open Top. Its tare weight is 4,030 kilos, that is 8,880 pounds. Its gross weight is 32,500 kilos.

A: And what are the internal measurements of the container?

B: The Open Top container's length inside is 12 metres – or 39 feet 5 inches. Its internal width is 2.35 m, and its height is 2.32 m – that's 7 feet 7 inches.

A: What is the container's maximum payload?

B: The container's maximum payload is 28,470 kilos.

A: What are the walls of this container made of?

B: The walls are made of corrugated steel. The floor is made of wood.

A: I also wonder why this heavy-duty waterproof cloth is in place of the steel roof?

B: It's a tarpaulin that is removed for loading and unloading the container from above. You can also leave it open to accommodate cargo that is overheight.

Notes

consignment – вантаж; партія вантажу

tare weight – власна маса, вага тари (*контейнера, в якому перевозиться товар, без урахування ваги самого товару*)

gross weight – вага (маса) брутто, повна вага (*маса товару з урахуванням пакування внутрішнього та зовнішнього*)

heavy-duty – надміцний

waterproof cloth – непромокна тканина

to accommodate – розміщувати

Exercise 35. Fill in the blanks with numerals giving the details of the size, weight and dimensions of the consignment to be shipped and translate the sentences.

1. Our consignment is ... by ... by ... metres. 2. This box measures ... by ... by ... metres. 3. Its measurements are ... by ... by ... centimetres. 4. The empty container weighs ... kg. 5. The net/tare weight of the container is ... kg / tons. Its gross weight is ... kilos. 6. The container's maximum payload is 7. The box is ... cm high (long, wide, deep). 8. Its height (length, width, depth) is ... cm.

Exercise 36. Study the classification of pronouns (Table 1), make up your own sentences with pronouns from each of these groups, using the lexis of unit 6.

Table 1

Classification of pronouns

	Groups of pronouns	Pronouns	Examples
1	Personal pronouns / Особові займенники	I, he, she, it, you, we, they; Me, him, her, it, us, you, them	“Who’s there?” “ It’s me ”. But I think that was him I spoke to.

2	Possessive pronouns/ Присвійні займенники	My, his, her, its, our, your, their; Mine, his, hers, ours, yours, theirs	He held out his hand. I gave him mine .
3	Reflexive pronouns/ Зворотні займенники	Myself, himself, herself, itself, oneself, ourselves, yourself (yourself-ves), themselves	He does not like to talk about himself .
4	Reciprocal pronouns/ Взаємні займенники	Each other, one another	We love each other .
5	Demonstrative pronouns/ Вказівні займенники	This (these), that (those), such, (the) same	He was the same as before.
6	Interrogative pronouns/ Питальні займенники	Who, whose, what, which	“ Who is he?” “Ivan Petrenko.” “ What is he?” “An engineer.”
7	Relative pronouns / Відносні займенники	Who, whose, which, that, as	That was a man who taught me English.
8	Conjunctive pronouns/ Сполучні займенники	Who, whose, which, what	I don't know what you've come for.
9	Defining pronouns/ Означальні займенники	Each, every, everybody, everyone, everything, all, either, both, other, anothe	Every mother loves her children.
10	Indefinite pronouns/ Неозначені займенники	Some, any, somebody, anybody, something, anything, someone, anyone, one	“Where is his home?” “He doesn't have any ”. One must do it
11	Negative pronouns / Заперечні займенники	No, none, neither, nobody, no one, nothing	There is nothing to worry about.

Exercise 37. Speak on:

1. Container terminals of the world.
2. Terminal operations.
3. Container handling equipment.
4. Standard configurations of ISO containers.

5. Optional extras for transporting cargo.
6. Advantages and disadvantages of containers.

Unit 7. LOGISTICS SYSTEMS

Exercise 1. Memorize the basic terminology to text 1.

in a timely fashion – вчасно, у термін
reasonable – недорогий, прийнятний (*про ціну*); помірний
batch – 1) партія товару, серія; 2) пачка, купа
kit – набір, комплект
safety stocks – резервний запас
to wash out – розмивати
to predict – передрікати, передбачати
resupply – поповнення запасу
capacity – 1) місткість; 2) ємність; обсяг; об'єм; 3) здатність (*до чогось* – for); 4) потужність; продуктивність
anticipation – очікування, передчуття, передбачення, сподівання
streamlining – удосконалення, оптимізація
overriding principle – основний принцип

Exercise 2. Read and translate text 1.

Text 1. Purpose of Logistics Systems

The purpose of a logistics system is simple: to obtain and move supplies and equipment in a timely fashion to the places where they are needed, at a reasonable cost. Matters are complicated by the fact that equipment and supplies usually cannot go directly from their source to the end user; they frequently must be held as inventory at one or more intermediate points along the way.

There are only four reasons for holding inventory:

1. Transportation efficiency: It is not reasonable to ship single bottles of pills across the ocean or to deliver maternal and child health (MCH) kits to a clinic daily; thus, shipments are made in batches of a size and frequency dictated by the transportation system.

2. Safety stocks: Because trucks break down and roads wash out, and because actual demand usually cannot be predicted very accurately, facilities must maintain safety stocks to ensure that they do not run out in times of high demand or late resupply.

3. Storage capacity: If a facility close to the end user has limited storage space, then inventory must be held at the next higher level in the system, and must be delivered more often.

4. Anticipation: In a program that is growing or changing, it is necessary to store inventory in anticipation of demand that does not exist yet because of the length of time between ordering supplies and receiving them.

Any system that stores inventory for reasons other than these is a candidate for streamlining. It is important to remember the overriding principle of logistics system design: the system must be simple. Its purpose is to move supplies, not to create paperwork.

Exercise 3. Answer the questions on text 1.

1. What is the purpose of logistics system? 2. Why must supplies be held as inventory? 3. How can we make transportation efficient? 4. What are the reasons for keeping safety stock? 5. What should a facility with limited storage capacity do? 6. Why is it necessary to store inventory? 7. What is the overriding principle of logistics system design?

Exercise 4. Find English equivalents in text 1.

Поставка; вчасно; помірна ціна; справа; кінцевий споживач; проміжний пункт; результативність; вантажовідправлення партіями / серіями; резервний запас; розмивати; передбачати; кінчатися (*про запаси*); значний попит; поповнення запасу; місткість складу; матеріально-технічні запаси; очікування; оптимізація; основний принцип.

Exercise 5. Match the definitions with proper logistics terms.

Definitions	Terms
1. More important than any other considerations	a) end user
2. A task, situation, or event which you have to deal with or think about, especially one that involves problems	b) safety stock
3. A quantity or consignment of goods produced at one time	c) resupply

4. The stock held to protect against the differences between forecast and actual consumption, and between expected and actual delivery times of procurement orders, to protect against stockouts during the replenishment cycle

d) matter

5. The person that product has been designed for, rather than the person who installs or maintains it

e) overriding

6. A fresh supply.

f) batch

Exercise 6. Fill in the blanks with the words from the box.

batch, reasonable, runs out, end user, safety stock, matters, overriding, reasonable

1. You have to be able to describe things in a form that the ... can understand. 2. We're still waiting for the first ... to arrive. 3. They found a restaurant serving excellent food at ... prices. 4. It seems a ... enough request. 5. The contract with Procter & Gamble ... next week. 6. The ... concern of the organizers was the financial crisis. 7. In calculating ..., account is taken of such factors as service level, expected fluctuations of demand and likely variations in lead time. 8. If it could facilitate ..., I would be happy to come to New York.

Exercise 7. Give definitions to the following terms.

Supply, reasonable cost, end user, intermediate point, in batches, safety stock, resupply, storage capacity.

Exercise 8. Translate the following sentences into English.

1. Метою логістичної системи є отримання і рух товарів та обладнання за помірну ціну, у визначений термін, до місць, де вони необхідні. 2. Справа ускладнюється тим, що поставки не можуть потрапити безпосередньо від джерела постачання до кінцевого споживача. 3. Вантажовідправлення здійснюються серіями, що за розміром та частотою обумовлені транспортною системою. 4. Оскільки фактичний попит не можна визначити точно, виробничі об'єкти повинні мати резервні запаси, щоб вони не вичерпалися у

разі великого попиту або затримки поповнення запасу. 5. Якщо виробничий об'єкт має обмежену складську місткість, необхідно тримати матеріально-технічні запаси на наступному вищому рівні системи і постачати їх частіше.

6. Основним принципом логістичної системи є простота, а головною метою – забезпечення надійних поставок товарів та обладнання.

Exercise 9. Put verbs in brackets in the Present or Past Perfect Tense. Translate the sentences. Mind the use of accompanying adverbs.

1. Since he was in charge the exchange rate (to be) stable. 2. In the last month Pyramid Ltd. (to deliver) more than 40 tons of supplies across the country. 3. He (to be) out of work for a long time. 4. Over the last 5 years the French market (to grow) its safety stocks from 10% to 35%. 5. This company (to move) its commodity since 1990. 6. The best course so far (to be) to hold inventory. 7. The actual demand (to predict) already accurately. 8. The EC countries traditionally (to prefer) to tie their imports and exports together. 9. Up to now they (not to use) any special techniques to deal with late resupplies. 10. That was the first time they (to be) out of the country. 11. By 1990 the number of freighters almost (to double). 12. Until this year the firm (to enjoy) 16 years of uninterrupted profit growth. 13. They came to view the of delivery in a way quite different from the way they (to view) it before. 14. The loss from discontinued operations was twice as high as the company (to predict).

Exercise 10. Memorize the basic terminology to text 2.

stationary facility – стаціонарний об'єкт

transportation link – транспортний зв'язок, комунікації

primary supply point – головний пункт постачання

to dispense – розподіляти

outlet – 1) ринок збуту; 2) торгова точка, магазин

to staff – комплектувати штат / кадри

confused – заплутаний

emergency backup – аварійне резервування

cost-effective – рентабельний, прибутковий

in hand – у наявності, у володінні

Exercise 11. Read and translate text 2.

Text 2. Physical Structure of the System

A logistics system's physical structure consists of two things: stationary facilities and the transportation links between those facilities. Logistics jargon¹ further distinguishes those facilities that are outside the system (such as drug manufacturers) from which commodities are supplied; these are called "sources." Facilities that receive supplies from a source (such as a central medical store) are called "primary supply points." Facilities that dispense commodities to end users are called "outlets."

Whatever names are used, there are six important things to know about the facilities:

1. Where is the facility located?
2. How is it staffed?
3. What is the actual need for each commodity at the facility and how does this need vary over time?
4. What is the facility's storage capacity?
5. What are the storage conditions, and are they suitable for the items being stored?
6. How is the inventory controlled, and is it secure?

In describing the physical structure of the logistics system, it is important to note the number of links into each facility. The more links there are, the more confused the system is likely to be. At the top, the primary supply points probably will receive commodities from a number of sources. At lower levels of the system, however, it is usually desirable to limit each facility to receiving supplies through only one link (possibly with a different link for emergency backup).

Similarly, there are five important things to know about transportation links:

1. What types of transportation are available?
2. What size batches of commodities are cost-effective to transport?
3. How long does it take to get from one facility to the next?
4. How often can shipments be made?
5. Are the answers to these questions different during different seasons of the year?

¹ jargon – професійна лексика / жаргон

With this basic information in hand, the logistics system's management structure can be designed.

Exercise 12. Answer the questions on text 2.

1. What does a logistics system physical structure consist of?
2. What are called "sources"?
3. What is "primary supply point"?
4. What are "outlets"?
5. What should one know about the facilities?
6. Why is it important to note the number of links into each facility?
7. What is it necessary to know about transportation links?

Exercise 13. Say whether the following is true or false.

1. Stationary facilities and the transportation links between those facilities constitute a logistics system physical structure.
2. "Sources" are the facilities inside the system from which commodities are supplied.
3. "Primary supply points" are facilities that receive supplies for a source.
4. "Outlets" are facilities that dispense commodities to end users.
5. Among six important things to know about the facilities is the information about facility's storage capacity, storage conditions, and the actual need for each commodity.
6. The number of links into each facility should be noted.
7. The more links there are, the more easy the system is likely to be.
8. It is usually desirable not to limit each facility to receiving supplies through only one link at lower levels of the system.
9. Among five important things to know about transportation links is the information concerning the time needed to get from one facility to the next.
10. You should check the answers to the same questions twice a year.

Exercise 14. Translate the following sentences into English using Present Perfect Tense.

1. Ця компанія активно постачає товари протягом кількох років.
2. Більшість будівель традиційно будувалася з місцевих матеріалів.
3. Ціни значно змінилися за минулі два роки.
4. Протягом останніх декількох років дедалі більше уваги надають цьому новому процесу.
5. Кількість транспортних зв'язків зменшилася цього року.
6. За останні п'ять років компанія значно збільшила кількість своїх торгових точок.
7. Ситуація з поставками зараз краща, ніж була впродовж останніх кількох років.

Exercise 15. Memorize the basic terminology to text 3.

allocation – 1) призначення; асигнування; 2) розміщення, розташування (*капіталу*); 3) розподіл (*сум*)
push – штовхати
pull – тягти, тягнути
requisition – попит; вимога; замовлення
scarce commodity – дефіцитний товар
competing – конкуруючий
in the interim – тим часом
to restock – поповнювати запаси
on a continuing basis – на постійній основі
quantification – кількісне визначення, кількісний аналіз
to graph – зображати у вигляді графіку, наносити на графік
underlying – що лежить в основі, основний
estimate – 1) оцінка; 2) оцінювати; підраховувати приблизно
to level off – вирівнювати(ся)

Exercise 16. Read and translate text 3.

Text 3. Management Structure of the System

The essential questions in understanding the management structure of a logistics system are — Who decides what (and when and how many) commodities move through a link from one facility to the next, and how does he/she decide?

There are two general types of logistics systems:

1. Allocation or “push” systems
2. Requisition or “pull” systems

In an allocation system, the higher-level facility decides what commodities move down the system and when they move down. It “pushes” them through the system. In a requisition system, the lower-level facility orders commodities as the need arises, thus “pulling” supplies through the system.

The advantages of a requisition or “pull” system are that it can be based on current information about actual needs, and thus, in theory, is more accurate and less wasteful than an allocation system. Decision making is decentralized to lower levels and each manager has a narrower scope of concern. The disadvantages of requisition systems are related directly to these advantages. Requisition systems will work only

if accurate information about needs exists or can be obtained, and if lower level staff has sufficient management training and support to make appropriate decisions about ordering.

Allocation or “push” systems are, therefore, appropriate when accurate information on needs is not available or where management skill is concentrated at higher levels of the service system. If demand significantly exceeds supply, an allocation system must be used to divide scarce commodities among competing facilities. Where allocation systems are used, every effort should be made to base allocations on appropriate estimates of actual need.

This management structure may differ at different levels of the system. Even at a single level, the system may be mixed. A regional warehouse might allocate stock to a health centre every three months, but the health centre may be able to request additional supplies, if needed, in the interim. Also, it may be desirable to use different procedures for equipment, which is essentially a one-time problem, than for supplies, which must be restocked on a continuing basis.

In addition to the question of who makes the decisions to move commodities, there is the question of how the decision is made. It already has been stated that the decision should be based on a projection of actual need; such an assessment is called forecasting or quantification. An adequate forecasting process must consider three things:

1. Historical data: The decision-maker must consider the actual past use of commodities and how that use pattern has changed over time; this can be done simply by graphing the data.

2. Future program plans: The decision-maker must know what the future plans for the program are and have some way of realistically estimating the effect of those plans on the demand for commodities.

3. Underlying assumptions: The decision-maker must use proper assumptions about how demand varies over time; for example, in a new program, demand is usually slow at first, then increases rapidly, and finally levels off.

Exercise 17. Answer the questions on text 3.

1. What are the essential questions in understanding the management structure of a logistics system?
2. What are two general types of logistics systems?
3. Who decides what commodities and when move down the system in an allocation or “push” system?
4. Who orders commodities as

the need arises in a requisition system? 5. What are the advantages of a requisition or “pull” system? 6. What are the disadvantages of the “pull” system? 7. When is allocation system appropriate? 8. Can the logistics system be mixed? 9. What is forecasting and quantification? 10. What must an adequate forecasting process consider? 11. How should the decision-maker treat historical data?

Exercise 18. Give English equivalents.

Товари; зв’язок; «виштовхуюча» система; «втягуюча система»; поточна інформація; точний; децентралізований; рівень; дефіцитний товар; конкуруючий; розміщувати запас; поповнювати запаси; на постійній основі; оцінка; оцінювання; прогнозування; припущення; використовувати зразок; впливати; попит на товари; кількісний аналіз; вирівнювати(ся).

Exercise 19. Match the definitions with proper logistics terms.

Definitions	Terms
1. A system where orders for an end item are pulled through the facility to satisfy demand for the end item	a) assumption
2. The art of estimating future demand for goods or services by anticipating how buyers are likely to react under given sets of conditions	b) push system
3. A thing that is accepted as true or as certain to happen, without proof	c) pull system
4. A system where orders are issued for completion by specified due dates, based on estimated lead-times, or where the flow of material in a product structure is controlled and determined by the lower levels	d) assessment
5. The evaluation or estimation of the nature, quality, or ability of someone or something.	e) forecasting

Exercise 20. Give antonyms to the following words.

Actual, current, narrow, advantage, scarce, continuing, at first, arise, lower level, sufficient, increase, push, demand, understanding, mixed,

adequate, general, question, accurate, less, centralized, different, single, simple, past, slow.

Exercise 21. Translate the following sentences. Define the tense form of the predicates. Put one general and 2 special questions to each sentence.

1. That was the first time they had been out of stock. 2. The news had travelled about the world long before newspapers appeared. 3. The factory manufactured goods that had arrived from abroad. 4. By the end of 2011 the number of scarce commodities had almost gone down. 5. Until this year the firm had enjoyed 20 new workstations. 6. The loss from discontinued operations was twice as high as the forecasting had predicted. 7. By the time the needed shipment arrived the production had started with raw materials from other suppliers.

Exercise 22. Speak on:

1. Purpose of logistics systems.
2. Physical structure of the system.
3. Management structure of the system.
4. The difference between “push” and “pull” systems.

Unit 8. INVENTORY MANAGEMENT

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

inventory, commodity, component, criterion, conversion, pipeline, buffer, aggregate, transit, item, unit, stockpile, decoupling, stockkeeping, fulfill, assemble, assembly, subassembly, cycle, subsidiary, ore, grain, caster, engine, inclusion, inspection, order, acceptance, purchaser, intermediary.

Exercise 2. Read dialogue 1 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 1

A: When speaking about inventory management it is essential for us to define the criteria according to which inventory is classified.

B: What is such a classification needed for?

A: The classification is needed for concrete definition of inventory in a material flow and for inventory management in the logistics system framework.

B: What is meant by inventory in logistics? What is its definition?

A: Inventory is the number of units and / or value of the stock of goods that a company holds.

B: What criteria for classifying inventories can you suggest?

A: Such parameters of material flows moving as time and location can become right criteria for classifying inventories.

B: What are the types of inventory according to product location in the logistics chain?

A: They are raw material inventory, work-in-progress inventory, and finished goods inventory.

B: And regarding the basic logistics activities?

A: There are pipeline inventory, capacity inventory, transit inventory, distribution inventory (trade stock) and aggregate (or overall) inventory.

B: What types of inventories can you define according to their functional designation?

A: Cycle inventory, anticipation inventory, buffer inventory, seasonal inventory, decoupling inventory and target stock.

B: And regarding the elements of logistics chain or intermediaries?

A: According to this criterion there are finished goods stocked by manufacturers and wholesalers and stocked by consumers, trade intermediaries' inventories, inventories of intermediaries in a physical distribution.

B: I know that inventories are also classified according to the structural role in the inventory management system, such as maximum inventory, average inventory, minimum inventory, safety stock and base stock.

A: Yes, that's right. And the last criterion we can suggest is regarding the complex logistics activities: stock, in-process inventory and cargo handling inventories.

Notes

inventory – 1) інвентаризаційний опис; 2) товарно-матеріальні запаси; матеріально-виробничий запас; 3) наявний товар; інвентар

aggregate inventory – сукупний запас
anticipation inventory – підготовчий запас
average inventory – середній запас
buffer inventory – резервний запас
capacity inventory – запаси виробництва
cargo handling inventory – матеріально-виробничі запаси для
вантажно-розвантажувальних операцій
cycle inventory – 1) циклічні запаси (*створюються протягом
періоду виробництва*); 2) періодична інвентаризація майна
decoupling inventory – запас, необхідний для незалежного
керування кожною з двох виробничих операцій
distribution inventory – товарний / збутовий запас
finished goods inventory (FGI) – запас готових виробів
(in-)transit inventory – транзитний запас (*запас у дорозі, під час
транспортування*)
minimum inventory – граничний (мінімальний) запас
pipeline inventory – запас системи постачання, запас у постачанні
raw material inventory – запас сировини
seasonal inventory – сезонні запаси
work-in-progress (WIP) inventory – запас продукції незавершеного
виробництва, запас напівфабрикатів
criterion (*pl. criteria*) – критерій, мірило
to suggest – пропонувати, радити
location – місце (перебування); визначення (встановлення,
знаходження) точного місцезнаходження
stock – 1) запас, запаси, складський запас; резерв, фонд;
2) асортимент (*товарів*); 3) наявний товар
trade stock – товарний запас
target stock – цільовий запас
safety stock – страховий (гарантійний) запас, резервний запас
base / basic stock – базовий запас (*мінімальний запас, необхідний для
підтримання безперервності виробництва / обслуговування
клієнтів*)
to hold (a stock) – тримати (*запаси*)
regarding – щодо, стосовно
intermediary – посередник
physical distribution – фізичний розподіл

Exercise 3. Make up an inventory classification scheme basing on dialogue 1.

Exercise 4. Match English-Ukrainian equivalents.

- | | |
|-----------------------------|---|
| 1) inventory management | a) запас системи постачання |
| 2) hold a stock | b) товарний запас |
| 3) inventory | c) циклічні запаси |
| 4) raw material inventory | d) товарно-матеріальний запас |
| 5) WIP inventory | e) резервний запас |
| 6) finished goods inventory | f) транзитний запас |
| 7) average inventory | g) запас незавершеного виробництва |
| 8) pipeline inventory | h) сукупний запас |
| 9) capacity inventory | i) запас сировини |
| 10) transit inventory | j) граничний запас |
| 11) cycle inventory | k) запас для незалежного керування
кожною з двох виробничих операцій |
| 12) aggregate inventory | l) управління запасами |
| 13) distribution inventory | m) підготовчий запас |
| 14) decoupling inventory | n) запас готових виробів |
| 15) anticipation inventory | o) запаси виробництва |
| 16) maximum inventory | p) тримати запаси |
| 17) buffer inventory | q) середній запас |
| 18) minimum inventory | r) максимальний запас |

Exercise 5. Memorize the basic terminology to text 1.

- store – 1) запас; 2) *pl.* запаси, припаси; сировина і матеріали; 3) склад, пакгауз; 4) запасати, накопичувати, зберігати на складі; відкладати
- on hand – у наявності; в наявності
- to fulfill – 1) виконувати, здійснювати; 2) відповідати (*чомусь*); задовольняти (*щось*); 3) завершувати
- existence – 1) існування; життя; 2) буття; наявність
- establishment – 1) установа, заклад; 2) господарство
- in stock – у наявності
- to keep running – 1) продовжувати (діяти); 2) підтримувати в робочому стані / в роботі / у дії
- stockpile – 1) запас, резерв; 2) нагромаджувати; робити запаси; 3) штабелювати

conversion – 1) переробка, трансформування; 2) перетворення
subassembly – 1) підсистема; 2) складальний вузол; субблок;
попереднє збирання
commodity – (часто *pl.*) товар, предмет торгівлі, продукт
to extract – добувати, видобувати, отримувати
subsidiary – дочірнє підприємство, дочірня компанія
to assemble – складати, збирати, компонувати, монтувати
purchaser – закупник, покупець
input – внесок, інвестиція
ore – руда
grain – 1) зерно; 2) хлібні злаки
paint – фарба
steel – сталь
nut – гайка, муфта
bolt – 1) болт; 2) засув
ball bearing – шарикопідшипник
key – ключ, гайковий ключ
wheel – колесо
engine – мотор, двигун
parent part – 1) головна частина; 2) материнська деталь
to process – піддавати технічному процесу; обробляти
to release – випускати
to await – чекати, очікувати
inspection – перевірка, інспекція, ревізія; огляд
acceptance – приймання; прийняття
inclusion – включення
to transfer – переносити, переводити, переміщувати; *бух.* робити перенесення

Exercise 6. Read and translate text 1.

Text 1. Main Categories of Inventory

Inventory is defined as a stock or store of goods. These goods are maintained on hand at or near a business location so that the firm may meet demand and fulfill its reason for existence. In case the firm is a retail establishment, a customer may look elsewhere to have his or her needs satisfied if the firm does not have the required item in stock when the customer arrives. If the firm is a manufacturer, it must maintain

some inventory of raw materials and work-in-process in order to keep the factory running. In addition, it must maintain some supply of finished goods in order to meet demand.

Inventories are stockpiles of goods waiting to be manufactured, transported or sold. Generally, inventory types can be grouped into three categories: raw material, work-in-process, finished goods inventory.

Raw materials are inventory items that are used in the manufacturer's conversion process to produce components, subassemblies, or finished products. These inventory items may be commodities or extracted materials that the firm or its subsidiary has produced or extracted. They also may be objects or elements that the firm has purchased from outside the organization. Even if the item is partially assembled or is considered a finished good to the supplier, the purchaser may classify it as a raw material if his or her firm had no input into its production. Typically, raw materials are commodities such as ore, grain, minerals, petroleum, chemicals, paper, wood, paint, steel, and food items. However, items such as nuts and bolts, ball bearings, key stock, seats, wheels, and even engines may be regarded as raw materials if they are purchased from outside the firm.

Generally, raw materials are used in the manufacture of components. These components are then incorporated into the final product or become part of a subassembly. Subassemblies are then used to manufacture or assemble the final product. A part that goes into making another part is known as a component, while the part it goes into is known as its parent. Any item that does not have a component is regarded as a raw material or purchased item.

Work-in-process (WIP) is made up of all the materials, parts (components), assemblies, and subassemblies that are being processed or are waiting to be processed within the system. This generally includes all material from raw material that has been released for initial processing up to material that has been completely processed and is awaiting final inspection and acceptance before inclusion in finished goods. Any item that has a parent but is not a raw material is considered to be work-in-process.

Finished goods inventory (FGI) is a completed part that is ready for a customer order. Therefore, it is the stock of completed products. These goods have been inspected and have passed final inspection

requirements so that they can be transferred out of work-in-process and into finished goods inventory. From this point, finished goods can be sold directly to their final user, sold to retailers, sold to wholesalers, sent to distribution centres, or held in anticipation of a customer order. Any item that does not have a parent can be classified as a finished good.

Inventory exists in various categories as a result of its position in the production process and according to the function it serves within the system. The purpose of each seems to be that of maintaining a high level of customer service or part of an attempt to minimize overall costs.

Exercise 7. Answer the questions on text 1.

1. How is inventory defined? 2. How may a firm meet demand and fulfill its reason for existence? 3. What main categories can inventory types be grouped into? 4. What are raw materials? 5. In what case may the purchaser classify a partially assembled item or an item which is considered a finished good to the supplier as a raw material? 6. What commodities can be regarded as raw materials? 7. Where are raw materials used? 8. What is the purpose of using subassemblies? 9. How is a part that goes into making another part used? 10. What is work-in-process item made up of? 11. What inventory item can be classified as finished goods? 12. Why does inventory exist in various categories?

Exercise 8. Give English equivalents.

Одиниця, найменування; субблок; у наявності; двигун; гайка; загальні витрати; материнська деталь; товари; збирати, компонувати; товаровиробник; складання, збирання; сталь; болт; гайковий ключ; призначення; приймання; перевірка; компонент; запас, резерв; переробка; дочірнє підприємство; задовольняти попит; запас; в очікуванні чогось; фарби; існування; видобувати; підтримувати в робочому стані / в роботі / у дії; закупник; руда; очікувати; шарикопідшипник; випускати; інвестиція.

Exercise 9. Translate the following sentences into English:

1. Запаси підтримуються у наявності біля місцезнаходження організації. 2. Якщо фірма є товаровиробником, вона має тримати певний запас сировини та незавершених виробів для того, щоб підтримувати виробничий процес. 3. Матеріальні запаси – це

резерви товарів, що очікують на виробництво, транспортування або продаж. 4. Трьома головними типами запасів є запаси сировини, незавершеного виробництва та готових виробів. 5. Сировина – це одиниці запасів, що використовуються в процесі виробничого перетворення для виготовлення компонентів, субблоків або готових виробів. 6. Навіть якщо одиниця товару частково складена для постачальника та вважається готовим виробом, покупець може класифікувати її як сировину. 7. До сировини відносяться такі товари, як руда, зерно, мінерали, нафта, хімічні речовини, папір, дерево, фарба, сталь та продукти харчування. 8. Сировина використовується у виробництві компонентів виробів. 9. Компоненти об'єднуються у готовий виріб або стають частиною попереднього складання. 10. Будь-яка річ, яка не містить компонентів, розглядається як сировина або закуплена одиниця товару. 11. Будь-яка річ, що є частиною материнської деталі, але не є сировиною, вважається одиницею незавершеного виробництва. 12. Готовий виріб – це завершений продукт, виготовлений на замовлення клієнта. 13. Готові вироби можуть бути продані безпосередньо кінцевому користувачу, роздрібним чи оптовим торговцям, відправлені до центрів дистрибуції, або утримуватися в очікуванні на замовлення клієнта. 14. Запас існує в різних категоріях як результат його позиції у виробничому процесі та згідно з функцією, яку він виконує в рамках системи.

Exercise 10. Memorize the basic terminology to text 2.

maintenance, repair, and
operating supplies (MRO) – технічне обслуговування, ремонт та експлуатаційні ресурси
to result (from) – відбуватися внаслідок чогось; виходити з, бути результатом чогось
to ship – перевозити; відправляти (вантаж), відвантажувати
freight consolidator – консолідатор (об'єднувач) вантажу
to pool – об'єднувати
economies of scale – ефект масштабу; економія за рахунок зростання масштабів виробництва
increase – зростання; приріст; збільшення
to suffer – зазнавати; страждати

stockout – 1) дефіцит запасу; 2) відсутність запасу; 3) негативний рівень запасів

to backorder – не виконувати замовлення

order cycle – цикл замовлення

likelihood – ймовірність, вірогідність

to impend – 1) загрожувати; 2) наближатися

to build up – накопичувати (*запаси*)

slack time – простій виробництва, «глуха пора»

to pick up – 1) піднімати(ся), збільшувати(ся); покращувати(ся); 2) відновлювати(ся)

to deplete – виснажувати, спорожнювати, вичерпувати

production time – виробничий час

to smooth – згладжувати, пригладжувати, вирівнювати

attenuation – зменшення, ослаблення; затухання

output – 1) продукт, продукція; випуск продукції; 2) продуктивність

production facility – виробниче підприємство; виробнича потужність

rate – швидкість; темп

to undergo – проходити, зазнавати (*чогось*), піддаватися (*чомусь*)

preventive – 1) профілактичний; 2) запобіжний

to interrupt – 1) переривати; зупиняти; 2) втручатися; 3) заважати

shock absorber – буфер

to cushion – пом'якшувати, згладжувати

irregularity – відхилення від норми, нерегулярність, порушення

to decouple – роз'єднувати; порушувати зв'язок

to disengage – відокремлювати

to feed – постачати, живити

economic order quantity (EOQ) – оптимальний розмір замовлення

carrying costs – 1) поточні витрати; 2) витрати на зберігання (запасів, нереалізованих товарів)

to incur – зазнавати, підпадати

setting-up costs – видатки на налагоджувальні роботи

setup costs – видатки на оформлення замовлення

order(ing) costs – видатки на виконання замовлення

decrease – зменшення

lot size – обсяг партії, розмір партії, серії (*товарів, виробів*)

Exercise 11. Match the verbs in Ukrainian with their English equivalents.

- | | |
|-----------------------------------|----------------------|
| 1. зазнавати (чогось) | a) to result (from) |
| 2. споживати | b) to backorder |
| 3. відбуватися внаслідок (чогось) | c) to pool |
| 4. переривати, заважати | d) to incur |
| 5. накопичувати (запаси) | e) to deplete |
| 6. не виконувати замовлення | f) to consume |
| 7. відправляти (вантаж) | g) to smooth |
| 8. виснажувати | h) to disengage |
| 9. постачати | i) to pass (through) |
| 10. об'єднувати | j) to increase |
| 11. роз'єднувати | k) to ship |
| 12. випускати | l) to reach |
| 13. пом'якшувати | m) to release |
| 14. зменшувати | n) to suffer |
| 15. досягати | o) to cushion |
| 16. страждати | p) to decrease |
| 17. зростати | q) to feed |
| 18. згладжувати | r) to interrupt |
| 19. проходити (через) | s) to decouple |
| 20. відокремлювати | t) to build up |

Exercise 12. Give English equivalents.

Консолідатор вантажу; вантажовідправлення; технічне обслуговування, ремонт та експлуатаційні ресурси; економія за рахунок зростання масштабів виробництва; час перевезення; дефіцит запасів; виробничий час; простій виробництва; цикл замовлення; робочий страйк; партія товару; розмір партії; відхилення від норми; оптимальний розмір замовлення; налагоджувальні роботи; витрати на зберігання нереалізованих товарів; буфер.

Exercise 13. Read and translate text 2.

Text 2. Types of Inventories According to Their Function

Inventories can also be classified according to the purpose they serve. These types include transit inventory, buffer inventory, anticipation inventory, decoupling inventory, cycle inventory, and

maintenance, repair, and operating supplies (MRO) goods inventory. Some of these also are known by other names, such as pipeline inventory, safety inventory, seasonal inventory, lot-size inventory.

Transit inventories result from the need to transport items or material from one location to another, and from the fact that there is some transportation time involved in getting from one location to another. Sometimes this is referred to as *pipeline inventory*. Merchandise shipped by truck or rail can sometimes take days or even weeks to go from a regional warehouse to a retail facility. Some large firms, such as automobile manufacturers, employ freight consolidators to pool their transit inventories coming from various locations into one shipping source in order to take advantage of economies of scale. Of course, this can greatly increase the transit time for these inventories, hence an increase in the size of the inventory in transit.

Safety stock or *buffer inventory* is any amount held on hand that is over and above that currently needed to meet demand. Generally, the higher the level of buffer inventory, the better the firm's customer service. This occurs because the firm suffers fewer "stock-outs" (when a customer's order cannot be immediately filled from existing inventory) and has less need to backorder the item, make the customer wait until the next order cycle, or even worse, cause the customer to leave empty-handed to find another supplier. Obviously, the better the customer service the greater the likelihood of customer satisfaction.

Oftentimes, firms will purchase and hold inventory that is in excess of their current need in anticipation of a possible future event. Such events may include a price increase, a seasonal increase in demand, or even an impending labour strike. This tactic is commonly used by retailers, who routinely build up inventory months before the demand for their products will be unusually high (i.e. at Christmas or the back-to-school season). For manufacturers, *anticipation inventory* allows them to build up inventory when demand is low (also keeping workers busy during slack times) so that when demand picks up the increased inventory will be slowly depleted and the firm does not have to react by increasing production time. This process is sometimes called "smoothing" because it smoothes the peaks and attenuation in demand, allowing the firm to maintain a constant level of output and a stable workforce.

Very rarely, if ever, will one see a production facility where every machine in the process produces at exactly the same rate. In fact, one machine may process parts several times faster than the machines in front of or behind it. Yet, if one walks through the plant it may seem that all machines are running smoothly at the same time. It also could be possible that while passing through the plant, one notices several machines are under repair or are undergoing some form of preventive maintenance. Even so, this does not seem to interrupt the flow of work-in-process through the system. The reason for this is the existence of an inventory of parts between machines, a *decoupling inventory* that serves as a shock absorber, cushioning the system against production irregularities. As such it "decouples" or disengages the plant's dependence upon the sequential requirements of the system (i.e., one machine feeds parts to the next machine).

The more inventory a firm carries as a decoupling inventory between the various stages in its manufacturing system (or even distribution system), the less coordination is needed to keep the system running smoothly.

The concept of economic order quantity (EOQ) is an attempt to balance inventory holding or carrying costs with the costs incurred from ordering or setting up machinery. When large quantities are ordered or produced, inventory holding costs are increased, but ordering / setup costs decrease. Conversely, when lot sizes decrease, inventory holding / carrying costs decrease, but the cost of ordering / setup increases since more orders / setups are required to meet demand. When holding / carrying costs and ordering / setup costs are equal the total cost is minimized.

Cycle inventories are sometimes called *lot-size inventories*. Usually, excess material is ordered and, consequently, held in inventory in an effort to reach the minimization point. Hence, cycle inventory results from ordering in batches or lot sizes rather than ordering material strictly as needed.

MRO goods are items that are used to support and maintain the production process and its infrastructure. These goods are usually consumed as a result of the production process but are not directly a part of the finished product. Examples of MRO goods include oils, coolants, uniforms, gloves, packing material, tools, nuts, bolts, screws, stock, and

key stock. Even office supplies such as staples, pens and pencils, copier paper, and toner are considered part of MRO goods inventory.

Exercise 14. Answer the questions on text 2.

1. What are the types of inventories according to the purpose they serve? 2. What are other names of inventories according to their functions? 3. What do transit inventories result from? 4. What is the role of freight consolidators in transportation of inventories? 5. What can increase the transit time for in-transit inventories? 6. What is called buffer inventory? 7. What is the correlation between the level of buffer inventory and the firm's customer service? 8. What tactic is commonly used by retailers? 9. What does anticipation inventory allow manufacturers to do? 10. How do machines at a production facility usually work? 11. What can be noticed while walking through the plant? 12. What is the purpose of decoupling inventory? 13. How can a firm keep the system running smoothly? 14. What do cycle inventories result from? 15. What items of goods are used to support and maintain the production process and its infrastructure? 16. What are the examples of MRO goods?

Exercise 15. Find English equivalents in text 2.

Негайно, терміново; з порожніми руками; у надлишку; випадок; тонер; неминучий; регулярно; низина; постійний, незмінний; робоча сила; у ремонті; профілактичний; навпаки; отже, тому, в результаті; скорочення до мінімуму; охолоджувальна рідина; уніформа; робочий інструмент; гвинт; фарбувальний порошок для принтерів.

Exercise 16. Translate the following sentences into English:

1. Згідно з функцією запаси бувають транзитні; резервні; підготовчі; а також запаси, необхідні для незалежного керування кожною з двох виробничих операцій; циклічні запаси; запаси товарів для технічного обслуговування, ремонту та експлуатаційних ресурсів. 2. Транзитні запаси зумовлені потребою перевозити речі або матеріали з одного місця перебування до іншого. 3. Деякі великі фірми наймають консолідаторів вантажу, аби об'єднати свої транзитні запаси в одне джерело вантажовідправлення. 4. Що вищий рівень резервних запасів, то

краще обслуговування клієнтів фірми. 5. Дефіцит запасів – це ситуація, коли замовлення клієнта не може бути негайно виконане з існуючих запасів. 6. Резервні запаси існують для того, щоб уникнути невиконання замовлення клієнта. 7. Роздрібні торговці регулярно накопичують запаси місяці доти, коли попит на їхню продукцію буде незвично високим. 8. Підготовчі запаси дозволяють накопичити запаси в ті періоди, коли попит на товари стає низьким. 9. Одна з машин може обробляти деталі у кілька разів швидше за інші. 10. Декілька машин можуть перебувати у ремонті або на профілактичному технічному обслуговуванні. 11. Запаси, необхідні для незалежного керування кожною з двох виробничих операцій, слугують буфером, зменшуючи відхилення від норми в роботі системи. 12. Концепція оптимального розміру замовлення – це спроба збалансувати витрати на зберігання товарно-матеріальних запасів із видатками на виконання чи оформлення замовлення.

Exercise 17. Match the definitions with proper terms.

Definitions	Terms
1. The products completely manufactured, packaged, stored, and ready for distribution and / or sale	a) raw materials inventory
2. The holding of goods	b) economies of scale
3. Inventory of the basic material, components, bought-out parts from which a product is to be made	c) buffer stock
4. Parts and subassemblies in the process of becoming completed assembly components	d) stock
5. Goods kept in store to cover unforeseen shortages or fluctuations in demand	e) warehousing
6. A store of goods available for sale, distribution or use	f) replenishment
7. Reducing costs per unit by increasing production	g) work-in-process inventory
8. The process of restocking inventory, especially at a store level.	h) finished goods inventory

Exercise 18. Memorize the basic terminology to text 3.

to interlink – тісно пов'язувати; зчіпляти

to overlap – 1) перекривати одне, заходити одне за одне; 2) частково співпадати

to strive – старатися, намагатися; докладати зусиль

dynamic – динамічний, енергійний, активний; діючий

review – 1) огляд, перегляд (*справи*); 2) розгляд; перевірка

operating cost – поточні витрати; реалізаційні витрати; експлуатаційні витрати

policy – 1) політика; 2) лінія поведінки, настанова, курс

competitor – суперник; конкурент

moderate – помірний

share – частина, частка

unit value – вартість одиниці продукції, середня вартість товарної одиниці

in descending order – у порядку зменшення

delegation of authority – делегування (передача) повноважень

to sanction – 1) санкціонувати; затверджувати; ратифікувати; 2) схвалювати; 3) застосовувати штрафні санкції

to lock up – замикати

vital – життєво важливий

spare part – запасна частина

extreme – 1) крайній; екстремальний; 2) надзвичайний

criticality – надзвичайна важливість

stoppage – зупинка, затримка

stockout costs – видатки через дефіцит (*пов'язані з дефіцитом*)

pattern – 1) зразок, взірець; 2) шаблон; модель; 3) система, структура; 4) стиль, характер

obsolete – застарілий

obsolescence – старіння; моральне спрацьовування (*машини*)

shortage – недостача, нестача, дефіцит

nil – нуль, нічого

to obtain – 1) отримувати; діставати; здобувати; 2) досягати

to fix – встановлювати, призначати

identification – виявлення; ідентифікація

stock-keeping unit (SKU) – 1) асортиментна позиція; 2) одиниця обліку запасів; одиниця (складського) зберігання

retrieval – 1) повернення; 2) пошук; 3) відновлення

shelf – полиця

to remain – залишатися

constraint – стримувальний фактор; обмеження

to ensue (from) – впливати (з)

inventory issue slip – накладна на видачу запасів

stock receipt slip – накладна на зберігання запасів

Exercise 19. Read and translate text 3.

Text 3. Inventory Management

In any business or organization, all functions are interlinked and connected to each other and are often overlapping. *Inventory management* is a very important function that determines the health of the supply chain. Every organization constantly strives to maintain optimum inventory to be able to meet its requirements.

Inventory is always dynamic. Inventory management requires constant and careful evaluation of external and internal factors and control through planning and review. Most of the organizations have a separate department or job function called inventory planners who continuously monitor, control and review inventory and interface with production, procurement and finance departments.

The aim of inventory management is to determine stock levels in order to minimize total operating cost while satisfying customer service requirements. In practice, a good inventory management policy should take into account five issues: the relative importance of customers; the economic significance of the different products; transportation policies; production process flexibility; competitors' policies.

Inventory has a buffer function, in order to achieve synchronization between use, on the one hand, and design and manufacturing, on the other. This makes inventory management another important instrument for planning and control.

ABC analysis. One of the most important considerations of control is the value of annual consumption of inventory items in a year. Only a small number of inventory items consume a very large share of inventory consumption during the year.

A little larger number of inventory items covers a moderate share of annual inventory consumption. A very large number of items just cover a very small share of annual inventory consumption.

HML analysis. This classification is based on unit value of an item classified as *high*, *medium* and *low* valued items. Items are listed out in descending order of unit value and management then decides the limits for determining 3 categories. Delegation of authorities is done for sanctioning of items according to their values.

XYZ analysis is based on the value of inventory stored. X items are with high and Z are those whose inventory stocks are low. Y are those which have moderate inventory stocks. It helps identifying items for which huge amount is locked up in stock and hence can be reduced.

XYZ can be combined with ABC analysis.

VED analysis is popularly known as *vital*, *essential* and *desired* analysis for the control of spare parts. Vital items have extreme criticality, desirable items are not critical. Non availability of vital spare parts even for short period leads to stoppage of production and stockout costs are high.

FSN analysis. Rate of movement of material in store and consumption pattern forms the basis of this classification. Necessary to control obsolescence the demand for fast moving items is very high, so there shouldn't be shortage of items. Slow moving items are with low turnovers so these are not issued at frequent intervals. Items with nil consumption come under non moving such as obsolete inventory.

SDE analysis is done on the basis of problem faced in the procurement of the items. The three letters stand for *scarce*, *difficult* and *easy* to obtain. It is adopted by purchase department to determine the method of buying and to fix the responsibilities of the buyer.

The *stockkeeping unit (SKU)* is an inventory item at a particular geographic location. For example, a shirt in six colours and five sizes would represent 30 different SKUs. A product stocked at the plant and at six different distribution centres would represent seven SKUs.

The *identification* or *storage location* usually identifies the geographic place of storage to facilitate storage and retrieval of stock. This will generally refer to the layout in a warehouse and include identification of the warehouse, its different floors, and, for each floor, the coordinates: row (*x*-axis), shelf (*y*-axis), and level (*z*-axis).

Storage type describes the infrastructure available for physical storage: floor storage, refrigerated storage, storage in special tanks, silos, and so on.

Inventory organization must remain flexible. Rather than forming a constraint for logistics, it must ensue from the type of logistics chosen.

Exercise 20. Say whether the following statements are true or false. Correct the false ones.

1. Inventory management is a very important process that determines the health of the supply chain. 2. Inventory is not always dynamic. 3. Inventory management requires constant and careful evaluation of external and internal factors and control through planning and review. 4. The aim of inventory management is to maximize stock levels in order to minimize total operating cost while satisfying customer service requirements. 5. A good inventory management policy should take into account ten issues. 6. In order to achieve synchronization between use, on the one hand, and design and manufacturing, on the other, inventory has a buffer function. 7. A great number of inventory items consume a very large share of inventory consumption during the year. 8. In the case of HML analysis delegation of authorities is done for sanctioning of items according to their values. 9. XYZ analysis is based on the value of inventory stored. 10. Desirable items do not have extreme criticality. 11. Items with nil consumption come under non moving such as obsolete inventory. 12. SDE analysis is done on the basis of problem faced in the purchasing of the items. 13. The storage location usually identifies the geographic place of storage to facilitate storage and retrieval of stock. 14. Storage type describes the infrastructure available for physical storage.

Exercise 21. Give English equivalents.

Категорія; щорічний; оцінювання; замикати; динамічний; середня вартість товарної одиниці; огляд; частка; делегування повноважень; міркування; експлуатаційні витрати; санкціонувати; нестача; запчастини; у порядку зменшення; полиця; застарілий; зразок; нуль; надзвичайно важливий; одиниця обліку запасів; стримувальний фактор; моральне спрацьовування; товарообіг; обсяг реалізації; ярус; склад; зупинка виробництва; дефіцитний; схема розміщення; синхронізація; перекривати; видатки, пов'язані з дефіцитом; видатки на оформлення / виконання замовлення; профілактичне технічне обслуговування.

Exercise 22. Translate the following sentences into English:

1. У будь-якій організації всі функції тісно пов'язані та часто навіть частково співпадають. 2. Кожна організація намагається підтримувати оптимальний рівень запасів. 3. Окремий відділ чи робітник-планувальник запасів веде постійний моніторинг, контролює та перевіряє запаси. 4. Одним з найбільш важливих принципів контролю в управлінні запасами є вартість щорічного споживання товарних одиниць. 5. Класифікація у HML-аналізі базується на собівартості товарних одиниць із високою, середньою та низькою вартістю. 6. Аналіз VED використовується в закупівлі для класифікації товарних одиниць як життєво-важливих, суттєвих та бажаних для придбання. 7. Управління запасами має бути достатньо гнучким, аби не створювати обмежень для логістики.

Exercise 23. Change the following sentences into the Future Perfect.

<p><i>Model: I had translated the exercise by 10 o'clock. – I will have translated the exercise by 10 o'clock.</i></p>
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1. They had built the new warehouse by the first of September. 2. The inventory planner had monitored inventory and interface with all departments by that time. 3. We had taken into account the economic significance of different categories of products before the management meeting started. 4. A very large number of items had covered a very small share of annual inventory consumption by the end of the year. 5. This product had been stocked at the plant and at six different distribution centres by 10 o'clock. 6. Unfortunately this inventory organization had remained flexible for only one year. 7. XYZ analysis had been successfully combined with ABC analysis by that time.

Exercise 24. Make up dialogues on each of these situations, using words and word combinations in the brackets. Represent these dialogues with a partner.

1. Two logisticians are discussing the problems of holding inventories. (*good reasons for holding inventories; advantages and disadvantages; expenses; to measure the return on inventory; the costs of not holding inventories; functions provided by inventories; why inventory exists; in order to do business*)

2. Two students of the logistics faculty are speaking about their future seminar on the topic “Inventory”.

(types of inventories; to classify; inventory functions; stockpiling; stock-out risk; buffer; pipeline; capacity inventory)

3. A young specialist in logistics trying to get a job in the sphere of inventory management is having a talk with his prospective employer.

(to choose from among the applicants; to describe future duties: to ensure product availability, to monitor the age of the product; to receive information on salary; candidate's education, experience and skills; personal qualities: responsible, hard-working, with good memory and communication skills, able to solve problems, experienced in; to find out about the position; to apply for a position)

4. A very inquisitive student is speaking to the teacher of logistics about the new topic.

(pertinent question; to invest heavily in inventory; short supply; cycle inventories; to allow the organisation to; to achieve a steady supply; to provide insurance against; to need inventory; to be very interested in)

5. You are two scientists, arguing about the classification of inventories.

(to define the criteria; inventory is classified; concrete definition; inventory management in the logistics system framework; location and time; inventory function; the classification scheme)

6. A logistician and a historian are discussing the history of logistics and the importance of stock.

(military science; ancient French term; origin of the word; to hold the view; part of the supply chain process; storage of goods; types of warehousing; stock holding)

Exercise 25. Translate the following word combinations with the terms “inventory” and “stock” into Ukrainian. Use them in sentences of your own.

1. Ready-for issue inventory, theory of inventory, inventory control point, inventory closeout, actual inventory level, inventory in stock, inventory on hand, inventory investment, inventory management method, inventory number, inventory valuation, inventory plan, inventory item, inventory policy, inventory position, inventory operations, perpetual inventory, closing inventory, inventory flow,

preparatory inventory, manufacturing inventory, merchandise inventory, obsolete inventory, inventory ratio, residual inventory, unsellable inventory, excess inventory;

2. Speculative stock, target stock level, dead stock, final stock, transportation stock, surplus stock, working stock, fluctuation stock, stabilization stock, unneeded stock, stock holding.

Exercise 26. Suggest your solutions to the following problem situations.

1. A major provider of aviation oils focused efforts on lowering its inventory levels as even a small improvement in inventory levels in their high-volume product significantly impacts the bottom line. Problem: The logistics development department developed weekly forecasts for about 1,500 line items, often requiring their people to work 60 days straight without a day off trying to get the forecasts right.

2. The manager of inventory and procurement at a midsize manufacturer of commercial security systems reveals that he was hired to lead the reengineering efforts of the organization's inventory and purchasing operation. Problem: They faced a new level of the classic inventory management challenge, that of having parts for manufacturing products in stock while keeping inventory low, because customers now want in two or three days what they used to want in two to three weeks. Taking into account that the JIT approach is not an option because of the number of the division's suppliers and the specially engineered parts required.

Exercise 27. Match the definitions with proper logistics terms.

Definitions

Terms

1. The process of ensuring the availability of products through inventory administration activities such as planning, stock positioning, and monitoring the age of the product. The goal is to ensure product availability

2. A classification of items in an inventory according to importance defined in terms of criteria such as sales volume and purchase volume

3. The speed with which inventory "turns"; the faster the better

a) ABC analysis

b) cycle inventory

c) stockout

4. A quantity of goods or articles kept in storage to safeguard against unforeseen shortages or demands d) inventory turns
5. An inventory system where counts are performed continuously, often eliminating the need for an annual overall inventory. It is usually set up so that A items are counted regularly (i.e., every month), B items are counted semi-regularly (every quarter or six months), and C items are counted perhaps only once a year e) inventory velocity
6. The number of times inventory is sold during a period, generally measured in turns per year f) vendor managed inventory (VMI)
7. A customer service strategy used by suppliers to manage their customers inventory and reorder points to lower cost and improve service g) buffer stock
8. A situation in which the items a customer orders are currently unavailable. h) inventory management

Exercise 28. Translate into English using the Future Perfect tense.

1. Кожна складська операція буде обов'язково зареєстрована до того часу. 2. Реєстрація точних даних з інвентарного обліку товарно-матеріальних запасів стане можливою до дев'ятої ранку. 3. Операції будуть зареєстровані, коли товари вже надійдуть на склад. 4. Деякі позиції занеситимуться до відбірному списку автоматично лише до кінця наступного тижня. 5. Невеликі запаси деталей буде розміщено на виробництві до п'ятої години ранку. 6. Цю складську операцію буде виконано перед тим, як планувати наступну. 7. Інтерактивна перевірка даних гарантуватиме точність, коли служба управління запасами проведе тести на достовірність.

Exercise 29. Put questions to italicized parts of the sentences.

1. There are *several* reasons why a logistician may wish to *hold inventories* in some *facilities of the supply chain*. 2. *Freight transportation* is characterized by *economies of scale* because of *high fixed costs*. 3. *Inventories of finished goods* help *satisfy customer*

demand even if unexpected peaks of demand or delivery delays occur. 4. *Seasonal products* can be stored in warehouses at production time and sold in subsequent months. 5. *Inventories* may be used to overcome inefficiencies in managing the logistics system. 6. *An on-hand inventory* could be maintained as a buffer against unexpected changes in demand. 7. Other reasons for maintaining an unnecessarily large inventory include *buying* to take advantage of quantity discounts or *ordering more* in advance of an impending price increase. 8. *Warehousing costs* must be incurred, *whether the warehouse is privately owned, leased or public*.

Exercise 30. Fill in the blanks with the adjectives from the box.

desired, annual, moderate, vital, appropriate, inexpensive, controllable, larger, well-documented, traceable, accurate, numerous, exact, up-to-date, essential, administrative

1. An ... and ... book inventory recording system is the basis of all inventory management. 2. ... organizational measures must make it possible to record ..., ... information on book inventory, even with thousands of transactions per week and ... employees. 3. Book inventory should either equal physical inventory or deviate from it in a ... and ... manner. 4. It is important to keep the ... costs of putting into and issuing from stock low for ... parts. 5. A little ... number of inventory items covers a ... share of ... inventory consumption. 6. VED analysis is popularly known as ..., ... and ... analysis for the control of spare parts.

Exercise 31. Decipher the abbreviations using a dictionary.

WIP, FGI, VMI, MRO, EOQ, SKU, VED, HML, FSN, SDE.

Exercise 32. Speak on:

1. Main categories of inventory.
2. Types of inventories according to their function.
3. Inventory management.

Unit 9. PROCUREMENT AND PRODUCTION LOGISTICS

Exercise 1. Memorize the basic terminology to text 1.

procurement logistics – логістика закупівель

bid – 1) пропозиція ціни; пропозиція постачання за певну ціну;

заявка (*на торгах*); 2) пропонована ціна

to qualify – 1) навчати; готувати (спеціалістів); надавати кваліфікацію; 2) отримувати право на щось; 3) оцінювати, кваліфікувати
pre-qualifying – попередній відбір учасників торгів
strategic sourcing – стратегічний вибір джерела постачання
buyer managed inventory (BMI) – матеріально-виробничі запаси, керовані покупцем
co-managed inventory (CMI) – спільне керування матеріально-виробничими запасами
renowned – відомий, знаменитий
reconciliation – 1) вивіряння; 2) врегулювання, улагоджування, владнання
promotional plan – план стимулювання розвитку
depletion – вичерпування, вичерпання (*запасів*)

Exercise 2. Read and translate text 1.

Text 1. Procurement Logistics

The term procurement logistics describes in most cases the process from the purchase of goods to the transport of the material to further use. It stands for the systematic coordination of all aspects of the procurement process including bids, price negotiations, assuring proper quantities and specifications, shipping and delivery. The aim and objective of procurement is to carry out activities related to procurement in such a way that the goods and services procured are of the **right quality**, from the **right source**, are at the **right cost** and can be delivered in **the right quantities**, to the **right place**, and at the **right time**.

To fulfill the “Six Rights” logisticians shall succeed in the following objectives:

- buy quality materials, items and services economically from reliable sources;
- ensure timely delivery through the selection of capable and efficient suppliers;
- continuously locate, evaluate and develop economical and reliable supply sources;
- identify the most reliable sources of supply through either open tender, multi-stage tendering (pre-qualifying suppliers and retaining

only those that are capable of meeting the organization's requirements – strategic sourcing) and limited tendering;

- investigate the availability of new materials and monitor trends in market prices;
- buy in accordance with organizations policies;
- estimate, position and monitor appropriate levels of stocks based on estimated needs, operational policy, objectives and priorities, estimated time for replenishment and availability of funds; and
- participate in planning and coordinating purchasing needs across all central procurement teams in the field in order to reduce administration and make the best use of money spent.

It should be noted that the “Six Rights” are interrelated and may influence each other, but do not carry the same weight depending on the situation. For example, in an emergency situation it may be possible to obtain the right quantity, but not at the right price.

Three different types of procurement logistics are distinguished to organize efficient supply of goods and share the responsibility:

1. *Vendor Managed Inventory (VMI)* – the supplier has a major influence on the trader's inventory levels;
2. *Buyer Managed Inventory (BMI)* – the trader has the main influence over his own inventory levels;
3. *Co-Managed Inventory (CMI)* – the influence of orders is shared.

Vendor Managed Inventory (VMI) is a logistical means of improving the supply chain performance whereby the supplier has direct access to the stock level data and customer's demand data. When using VMI, the supplier adopts complete responsibility of its product inventory at customer level. In return, customers are often granted the full right of cancellation. Delivery costs are calculated on the basis of the consumption figures or the sales figures for example, which are either recorded regularly by the vendor or are electronically transmitted.

In recent years renowned companies in the retail trade, as well as the consumer goods and automobile industries have converted their procurement logistics to universal VMI processes. One of the benefits of VMI is that the vendor is responsible for supplying the customer when the items are needed. This removes the need for the customer to have significant safety stock. Lower inventories for the customer can lead to significant cost savings. The customer also can benefit from reduced purchasing costs. Because the vendor receives data and not purchase

orders, the purchasing department has to spend less time on calculating and producing purchase orders. In addition, the need for purchase order corrections and reconciliation is removed which further reduces purchasing costs. Cost saving can also be found in reduced warehouse costs. Lower inventories can reduce the need for warehouse space and warehouse resources. The manufacturers can gain some benefits from vendor managed inventory as they can gain access to a customer's point of sale (POS) data which makes their forecasting somewhat easier. Manufacturers can also work their customers promotional plans into forecasting models, which means enough stock will be available when their promotions are running. As the manufacturers have more visibility to their customers inventory levels, it is easier to ensure that stock-outs will not occur as they can see when items need to be produced.

In *Co-Managed Inventory (CMI)* arrangement is made to store a specific quantity of a consumable item at a customer's premises. Upon its consumption or depletion, the item is replaced by the seller with the consent and knowledge of the customer.

Buyer Managed Inventory (BMI) is the computer-based ordering of goods through the trader without any influence from the manufacturer.

The Buyer Managed Inventory technique represents a sub-form of the CRP (continuous replenishment process) technique of the Vendor Managed Inventory (VMI). However, in contrast to VMI and CMI, the trading company is exclusively responsible for its own ordering. At the most, the manufacturer can, if at all, have a limited advisory function. With BMI the trader has the support of a high performance EDP (electronic data processing) supported dispatching system, having recognized the strategic importance of order processing.

Strategic sourcing is an institutional procurement process that continuously improves and re-evaluates the purchasing activities of a company. In a production environment, it is often considered one of the supply chain management components. Strategic sourcing techniques are also applied to a non-traditional area such as services or capital.

Exercise 3. Answer the questions on text 1.

1. What does the term procurement logistics describe? 2. What are "Six Rights" of procurement and how are they achieved? 3. What types of procurement logistics should be applied to organize efficient supply of goods and share the responsibility? 4. What is Vendor Managed

Inventory? 5. What does Co-Managed Inventory mean? 6. What does Buyer Managed Inventory stand for?

Exercise 4. Find English equivalents in text 1.

Резервний запас; план стимулювання розвитку; матеріали високої якості; постачальник; обробка даних; попередній відбір учасників торгів; логістика закупівель; стратегічний вибір джерела постачання; виконувати замовлення на поставку (придбання); матеріально-виробничі запаси, керовані продавцем; постачальник; матеріально-виробничі запаси, керовані покупцем; відома компанія; вичерпування запасів; надзвичайна ситуація; логістичні засоби; принцип діяльності.

Exercise 5. Match the definitions with proper terms.

Definitions	Terms
1. A fee paid by the customer for the delivery of the purchased product	a) strategic sourcing
2. Goods, service or offer that can hold its own against other products because it offers an attractive price to buyers	b) pre-qualifying supplier
3. The system of sending goods or services somewhere for a particular purpose	c) vendor
4. The process of taking orders and sending products to customers	d) safety stock
5. Extra stock that is maintained to mitigate risk of shortfall in raw material or packaging due to uncertainties in supply and demand	e) stock-out
6. Item by item examination of two related sets of figures obtained from different sources	f) promotional plan
7. An outline of the marketing tools strategies and resources that a company intends to use to promote a product or service	g) depletion of resources
8. Systematic coordination of all aspects of the procurement process	h) e-sourcing

including bids, price, negotiations, assuring proper quantities and specifications, shipping and delivery

- 9. Exhaustion of raw materials within a region
 - i) delivery costs
- 10. A seller, especially a retail seller
 - j) dispatching system
- 11. When a demand or a requirement for an item cannot be fulfilled from the current inventory
 - k) order processing
- 12. Process of obtaining bids from different suppliers via a single online portal
 - l) competitive
- 13. Advanced selection of tender bidders
 - m) procurement logistics
- 14. Procurement process that continuously improves and re-evaluates the purchasing activities of a company.
 - n) reconciliation

Exercise 6. Fill in the blanks with the appropriate words given in the box.

timely delivery, demand data, depletion, safety stock, stock-out, pre-qualifying, supply chain performance, renowned, promotional plans

1. Logisticians must ensure ... through the selection of capable and efficient suppliers. 2. Vendor Managed Inventory (VMI) improves ... whereby the supplier has direct access to the stock level data and customer's ... 3. It is easier to ensure that ... will not occur as they can see when items need to be produced. 4. Tenders help a company to identify the most reliable supply source among ... vendors. 5. ... companies in the retail trade, as well as the consumer goods and automobile industries have converted their procurement logistics to universal VMI processes. 6. In VMI, the vendor is responsible for supplying the customer when the items are needed that removes the need for the customer to have significant ... 7. Manufacturers can also work their customers ... into forecasting models, which means enough stock will be available when their promotions are running. 8. Upon its consumption or ... the item is replaced by the seller with the consent and knowledge of the customer.

Exercise 7. Learn the definitions to the following logistics abbreviations.

MRP (Materials Requirements Planning): A decision-making methodology used to determine the timing and quantities of materials to purchase.

MRP II (Manufacturing Resource Planning): A method for the effective planning of all resources of a manufacturing company. Ideally, it addresses operational planning in units, financial planning in dollars, and has a simulation capability to answer what-if questions. It is made up of a variety of processes, each linked together: business planning, production planning (sales and operations planning), master production scheduling, material requirements planning, capacity requirements planning, and the execution support systems for capacity and material. Output from these systems is integrated with financial reports such as the business plan, purchase commitment report, shipping budget, and inventory projections in dollars. Manufacturing resource planning is a direct outgrowth and extension of closed-loop MRP.

Exercise 8. Put all types of questions to the sentences.

1. Procurement logistics describes in most cases the process from the purchase of goods to the transport of the material to further use.
2. Logisticians shall succeed in buying quality materials, items and services economically from reliable sources.
3. In an emergency situation it may be possible to obtain the right quantity, but not at the right price.
4. Customers are often granted the full right of cancellation.
5. The manufacturer working under the Vendor Managed Inventory system has more visibility to their customers inventory levels.
6. Implementing an electronic procurement system offers a company many benefits.

Exercise 9. Decipher the abbreviations using a dictionary.

BMI, EDP, VMI, CMI, CRP, POS, MRP, MRP II.

Exercise 10. Speak on:

1. "Six Rights" of procurement logistics.
2. Types of procurement logistics.

Exercise 11. Memorize the basic terminology to text 2.

field-office – регіональне відділення

clout – впливовість, вплив

bargaining power – здатність обстоювати власні інтереси (*на ринку, під час переговорів*)

duplication – дублювання, повторення

proximity – близькість

conductive – сприятливий; провідний

to warrant – виправдовувати; обґрунтовувати

inconsistent – 1) непослідовний, нелогічний; 2) неузгоджений

Exercise 12. Read and translate text 2.

Text 2. Procurement Strategies

The design parameters of procurement logistics basically consist of procurement strategy, procurement structure, supply, and delivery concepts. Procurement strategies applied in the industry today are primarily depending on the procurement market and the strategic positioning of the company.

All procurement strategies are frameworks by which an organization attains its objectives. There are two basic procurement strategies:

- Corporate Procurement Strategy is the relationship of specific procurement actions to the corporate strategy. An example would be centralized procurement.

- Project Procurement Strategy is the relationship of specific procurement actions to the operating environment of the project. For instance, the project manager is allowed to perform sole source procurement without involving the centralized procurement group, such as purchasing one ounce of a special chemical for the project being implemented.

Project procurement strategies can differ from corporate procurement strategies because of constraints, availability of critical resource, and specific customer requirements. Corporate strategies might promote purchasing small quantities from several qualified vendors, whereas project strategies may dictate sole source procurement.

Procurement structure can be viewed as a continuum with centralization on the one hand and decentralization on the other hand. While there are few firms that adopt a pure centralized or decentralized

structure, the benefits of each are worth a closer examination. The current trend is toward purchasing centralization for the vital materials where firms can take advantage of economies of scale and other benefits.

Centralized purchasing is where a single purchasing department, usually located at the firm's corporate office, makes all the purchasing decisions, including order quantity, pricing policy, contracting negotiations, and supplier selection and evaluation.

Decentralized purchasing is where an individual, a local purchasing department, such as at the plant or field-office level, make their own purchasing decisions. Both structures bring the following advantages and disadvantages.

Advantages of centralization

- **Centralized volume:** An obvious benefit is the concentration of purchase volume to create quantity discounts, less costly volume shipments, and other more favourable purchase terms. This is often referred to as leveraging purchase volume. The centralized system also provides the buying firm more clout and bargaining power. Suppliers generally are more willing to negotiate, give better terms, and share technology due to the higher volume.
- **Avoidance of duplication:** The centralized purchasing eliminates the duplication of job functions. A corporate buyer can research and issue a large purchase order to cover the same material requested by all units, thus eliminating duplication of activities. This also results in fewer buyers, reducing labour costs.
- **Specialization.** Centralization allows buyers to specialize in a particular group of items instead of being responsible for all purchased materials and services. It allows buyers to spend more time and resources to research materials for which they are responsible, thus becoming specialized buyers.
- **Lower transportation costs:** centralization allows larger shipments to be made to take advantage of truck load shipments, and yet smaller shipments still can be arranged for delivery directly from suppliers to the points of use.
- **No competition within units:** Under the decentralized system, when different units purchase the same materials, a situation may be created in which units are competing among themselves, especially

when scarce materials are purchased from the same supplier. Centralization minimizes this problem.

- Common supply base: A common supply base is used, thus making it easier to manage and to negotiate contracts.

Advantages of decentralization

- Closer knowledge of requirements: A buyer at the individual unit is more likely to know its exact needs better than a central buyer at the home office.

- Local sourcing: if the firm desires to support local businesses, it is more likely that a local buyer will know more about local suppliers. The proximity of local suppliers allows materials to be shipped more frequently in small lot sizes, and is conducive to the creation of closer supplier relationships.

- Less bureaucracy: decentralization allows quicker response, due to less bureaucracy, and close contact between the user and the buyer. Coordination and communication with operations and other divisions are more efficient.

Thus, while centralized purchasing may result in lower costs and better negotiating power, the centralized system may also be too rigid and even infeasible for large, multiunit organizations consisting of several unrelated business operations. For these reasons, a hybrid purchasing organization may be warranted. For example, large multi-unit organizations may use a decentralized-centralized purchasing structure to decentralize purchasing at the corporate level, but centralize the procurement function at the business unit level. Conversely, a firm may utilize a centralized-decentralized purchasing structure to negotiate national contracts at the corporate level, but decentralize buying at the business unit level. The hybrid purchasing organization allows the firm to exploit the advantage of both the centralized and decentralized systems.

As to the decentralized purchasing it appears costly and potentially inconsistent in processes.

Exercise 13. Answer the questions on text 2.

1. What are basic procurement strategies? 2. What do procurement strategies provide? 3. How do they differ? 4. How is procurement structure defined? 5. What is centralized and decentralized purchasing? 6. What advantages do they give? 7. What are their disadvantages?

Exercise 14. Find English equivalents in text 2.

Здатність обстоювати власні інтереси (*під час переговорів*); економія внаслідок розширення масштабів виробництва; регіональне відділення; досягати цілей; корпоративна стратегія закупівель; стратегія забезпечення проекту; обмеження; на рівні регіонального відділення; єдине джерело закупівель; максимально використовувати переваги значного обсягу закупівель; дублювання функцій; дефіцитні ресурси; організація, що складається з багатьох підрозділів; змішана (*організаційна структура*); непослідовний; виправдовувати, обґрунтовувати.

Exercise 15. Find in text 2 appropriate terms to the following definitions:

distribution of administrative functions or powers of a central authority among several local authorities; policy on timely supply of goods and services; the process by which the activities of an organization, particularly those regarding planning and decision-making, become concentrated within a particular location and/or group; suitable, able to change or be changed easily according to the situation; not regular or predictable; to make a particular activity necessary; the ability of a person or group to get what they want due to their influence, power, size or status, or through a combination of persuasion tactics; organization that mixes elements, value systems and action logics of various sectors of society, i.e. the public sector, the private sector and the voluntary sector; a purchase made to fill an immediate, unexpected need when there is insufficient time to procure competitive bidding.

Exercise 16. Find in text 2 synonyms for the following words:

purchase, key, provide, distribution, conditions (surroundings), stimulate, doubling, cut, expenditures, benefit, required, expensive, attractiveness on the market, make use of, concentration, fragmentation, rely on, power.

Exercise 17. Find in text 2 antonyms for the following words:

obstruct, keeping, give up, sell, permission, include, decentralized, complicated, common, shared, divide, definiteness, soft, democracy.

Exercise 18. Choose the correct words in the brackets.

1. (Procurement strategies / Strategic procurement) primarily depend on the procurement market and the strategic positioning of the company.

2. Corporate Procurement Strategy is the relationship of specific procurement (structures / actions) to the corporate strategy. 3. Project procurement strategies can differ from corporate procurement strategies (because of / in) constraints of available resources. 4. Centralized purchasing is where a single purchasing department makes all the (purchasing / supply) decisions. 5. The centralized purchasing (eliminates / promotes) the duplication of job functions. 6. (Centralization / Decentralization) allows buyers to specialize in a particular group of items instead of being responsible (for / to) all purchased materials and services. 7. Decentralized purchasing is where (an individual / group) makes purchasing decisions. 8. Centralised planning causes (delay / constraints) as plants may be situated in different places.

Exercise 19. Translate the following sentences into English:

1. Керівник проекту може купувати товар у одного постачальника, не залучаючи до цього процесу централізовану групу з питань закупівель. 2. Корпоративна стратегія допомагає купувати невелику кількість товару у декількох постачальників, тоді як стратегія забезпечення проекту стимулює закупівлю в одного постачальника. 3. Сьогодні існує тенденція до централізованої закупівлі основних матеріалів. 4. Завдяки централізованій системі закупівель закупівельна компанія отримує вплив на ринку і можливість обстоювати власні інтереси. 5. Близьке місцезнаходження постачальників пришвидшує відправлення невеликих партій товару. 6. Децентралізована система закупівель може призвести до конкуренції між різними компаніями, особливо, якщо вони співпрацюють з одним і тим самим постачальником і кількість товару обмежена.

Exercise 20. Draw up a table of advantages and disadvantages of the centralized and decentralized procurement systems. Share your opinion with a partner.

Exercise 21. Put questions to the italicized words.

1. *Procurement structure* is viewed as a *continuum* with centralization on the one hand and decentralization on the other hand.
2. A *single* purchasing department makes all the *purchasing decisions*.
3. *Smaller shipment* can be arranged for *delivery directly* from suppliers

to the points of use. 4. *The proximity of local suppliers* allows materials to be shipped *more frequently* in *small lot sizes*. 5. It is *really* very difficult to consolidate *the requirements* of all items.

Exercise 22. Rewrite the sentences using Present Perfect Continuous (have/has been doing) and Past Perfect Continuous (had been doing). Use appropriate adverbial modifiers of time.

Model: The company **developed** the cost-efficient program last year
– The company **has been developing** the cost-efficient program **since last year**.

The project manager **says** the company **has been developing** the cost-efficient program since the previous year – The project manager **said** the company **had been developing** the cost-efficient program **since the year before**.

1. Procurement strategies were applied in the industry to strengthen the company's strategic positioning on the market. 2. The project manager performs sole source procurement quarterly. 3. Suppliers are negotiating better terms for technology application. 4. A corporate buyer researches and issues a large purchase order to cover the same material requested by all units. 5. A firm has utilized a centralized-decentralized purchasing structure to negotiate national contracts at the corporate level.

Exercise 23. Go to the World Trade Organization's website and use the information to write a brief summary on: a) the WTO functions; b) the latest number of the WTO membership countries; c) its relationship with GATT; d) the number of countries that had originally signed the GATT by 1994; e) the last five countries that became members of the WTO; f) centralization / decentralization of WTO objectives.

Exercise 24. Memorize the basic terminology to text 3.

job / unit production – дрібносерійне виробництво

continuous production – неперервне виробництво

intermittent – 1) переривчастий; 2) періодичний;

intermittent production – 1) періодичне виробництво; 2) випуск продукції з перервами

mass / flow production – масове виробництво
process production – процесне виробництво
assembly line / assembly flow production – конвеєрне виробництво
jobbing production – виготовлення продукції на замовлення
batch production – 1) серійне виробництво; 2) виготовлення виробів партіями
lot of product – партія продукції
heterogeneous products – неоднорідна продукція
closed-loop circuit – замкнений цикл, система керування зі зворотним зв'язком
oil refinery – нафтоперегінний завод

Exercise 25. Read and translate text 3.

Text 3. Production Logistics

Production logistics can be defined as all logistics activities, such as information-, material- and value flow processes as well as transformation processes, taking place in manufacturing companies between procurement and distribution.

Broadly one can think of three *types of production systems*: continuous production; job or unit production; intermittent production.

Continuous production refers to the production of standardized products with a standard set of process and operation sequence in anticipation of demand. It is also known as mass flow production or assembly line production. This system ensures less work in process inventory and high product quality, but involves large investment in machinery and equipment. The system is suitable at the plants involving large volume and small variety of output, e.g. oil refineries, cement manufacturing etc.

Job or unit production involves production where each batch or order consists of a small lot of identical products and is different from other batches. The system requires comparatively smaller investment in machinery and equipment. It is flexible and can be adapted to changes in product design and order size without much inconvenience. This system is most suitable where heterogeneous products are produced against specific orders.

In the *intermittent production*, goods are produced partly for inventory and partly for customer's orders, e.g. components are made for

inventory, but they are combined differently for different customers. Automobile plants, printing presses, electrical appliances plant are examples of this type of manufacturing.

Selection of a production process is a strategic decision and should meet two basic objectives: specification of the final product and cost effectiveness. There are four *types of production process*: jobbing production; batch production; mass or flow production; process production.

In *jobbing production*, one or few units of the products are produced according to the customer's requirement and specification. Production is to meet the delivery schedule and costs are fixed prior to the contract.

In *batch production*, limited quantities of different types of products are manufactured on the same set of machines. Different products are produced separately one after the other.

In *mass or flow production*, products are made on a set of machines arranged according to the sequence of operations. A huge quantity of the same product is manufactured at a time and is stocked for sale. Different product will require different manufacturing lines. Since one line can produce only one type of product, this process is also called as line flow.

Process production involves a series of processes which raw materials go through. It is the production of goods that are typically produced in bulk quantities, as opposed to discrete and countable units. Process manufacturing industries include chemicals, food and beverage, gasoline, paint and pharmaceutical. The production of process goods usually requires inputs for thermal or chemical conversion, such as heat, time and pressure. The product typically cannot be disassembled to its constituent parts. For example, once it is produced, a soft drink cannot be broken down into its ingredients. The end result is a large quantity of finished product. Process production tends to be quite capital intensive (i.e. requiring significant investment in production machinery and facilities).

Before making a choice of manufacturing one should consider such crucial factors as effect of volume / variety, capacity of the plant, lead time, flexibility and efficiency.

The effect of volume / variety is one of the major considerations in selecting production process. When the volume is low and variety is high, intermittent process is most suitable and with increase in volume and reduction in variety continuous process becomes suitable.

The projected sales volume in terms of a plant's capacity is the key factor to make a choice between batch and line processes. In case of line process, fixed costs are substantially higher than variable costs.

Lead-time and a level of competition certainly influence the choice of production process as the continuous process normally yields faster deliveries compared to batch processes.

Finally, the manufacturing process needs to be flexible enough to adapt contemplated changes and volume of production should be large enough to lower costs.

To create goods and services the production system requires inputs from other subsystems of the organization, such as service inputs (e.g. maintenance, supervision, plant layout, design etc.) and control inputs (e.g. measurement, data processing, planning, control, order and sales information processing, forecasting etc.).

Three main factors may be said to determine the place of production planning and control in an organization.

1. The type of production, i.e. the quantities of finished products and the regularity of manufacture. 2. Size of the plant. 3. The type of industry, i.e. the field of specialization of the plant.

The main objectives of production planning are:

1. to determine capacity of all manufacturing departments and to plan systematically coordinated and related production activities within the scope of the enterprise to meet sales requirements;

2. to find ways and means through which product manufacturing requirements such as materials and their necessary constituents may be available in right quality and quantity at the right time;

3. to coordinate a number of different department groups so that fine balance of activities may be maintained;

4. to promote fuller utilization of plants;

5. to assist labour towards right and greater earnings;

6. to train staff in the effective performance of their duties.

The principles of production control are the same as of quality control, budgetary control, cost control and other managerial controls. The basic cycles in the control are Action, Feedback, Evaluation and Adjustment. Since these events are dynamically continuous, they take the form of a closed-loop circuit.

The keys to successful plan implementation are feedback and flexibility. The information received after the performance of an action and used as the basis for future performance is known as feedback.

Evaluation is carried out to compare a feedback from operations with the existing plans and objectives to adjust budgets and costs.

The production control adjustment is complicated because it often requires increasing or reducing quantities based on past operation and sales, i.e. to maintain product quality requirements within limits.

Exercise 26. Answer the questions on text 3.

1. How is production logistics defined? 2. Will you name types of production systems? Comment on each of them. 3. What is the purpose of selecting a production process? 4. What does jobbing production provide? 5. What is batch production? 6. Will you explain the difference between mass and process production? 7. What should be taken into account before making a choice of manufacturing? Why? 8. How is the place of production planning determined? 9. What are the main objectives of production planning? 10. What principles is production control based on? 11. What are the keys to successful plan implementation?

Exercise 27. Give Ukrainian equivalents.

Adjust; batch; maintain; feedback; train; job / unit production; in anticipation of; machinery; equipment; delivery schedule; heterogeneous products; supervision; layout; inventory; beverage; intermittent production; lead flow, assembly line production; lead time; mass flow production; closed-loop circuit; discrete; continuous production; jobbing production; batch production; feedback.

Exercise 28. Find in text 3 English equivalents to the following words and word combinations.

Конвеєрне виробництво; партія продукції; виробництво на замовлення; процесне виробництво; зворотний зв'язок; дрібносерійне виробництво; замкнений цикл; гнучкість; оцінювання; обробка даних; періодичне виробництво; масове виробництво; серійне виробництво; коригування (регулювання); неоднорідна продукція; час виконання замовлення; графік поставки; вимоги до якості продукції; готова продукція; неперервне виробництво.

Exercise 29. Choose the correct definition to each term and form sentences with them.

- | | |
|-----------------------------|--|
| 1. mass flow production | a) control system in which an operation, process, or mechanism is regulated by feedback |
| 2. job / unit production | b) the quantity produced at one operation |
| 3. intermittent production | c) evaluation |
| 4. heterogeneous | d) process of creating large numbers of similar products |
| 5. assembly line production | e) products made for a specific customer or a small batch of work in quantities usually less than those of mass-market products |
| 6. feedback | f) production cycle with intervals |
| 7. measurement | g) consisting of parts or things that are very different from each other |
| 8. batch | h) manufacturing that involves the combination of supplies or ingredients according to formulas or recipes rather than the assembly of discrete parts through mechanical processes |
| 9. closed-loop circuit | i) the return of part of the output of a machine, process, or system to another machine, process, or system as input for another phase |
| 10. process production | j) a linear method of manufacturing in which the object being produced passes through different work stations until it is complete. |

Exercise 30. Complete the sentences.

1. ... refers to the production where each batch or order consists of a small lot of identical products and is different from other batches. 2. ... refers to the production where goods are produced partly for inventory and partly for customer's orders. 3. ...refers to the production of standardized products with a standard set of process and operation sequence in anticipation of demand. 4. Limited quantities of different types of products are manufactured on the same set of machines in ... production. 5. Products are made on a set of machines arranged according to the sequence of operations in ... production. 6. Indefinite

manufacturing period is typical of ... production. 7. Lead-time and a level of competition influence the choice 8. To create goods and services the production system requires inputs

Exercise 31. Translate the sentences into Ukrainian and put all types of questions to them.

1. The system involves large investment in machinery and equipment. 2. A flexible system can be adapted to changes in product design. 3. Production planning coordinates a number of different department groups so that a fine balance of activities may be maintained. 4. The feedback information was used as the basis for future performance. 5. The production control adjustment is complicated because it often requires increasing or reducing quantities based on past operation and sales. 6. The production of process goods usually requires inputs for thermal or chemical conversion, such as heat, time and pressure.

Exercise 32. Match the words with appropriate prepositions.

- | | |
|--------------------|---------|
| 1) depend | a) to |
| 2) refer | b) of |
| 3) in anticipation | c) out |
| 4) investment | d) on |
| 5) increase | e) with |
| 6) be designed | f) in |
| 7) compare | g) for |
| 8) prior | h) into |
| 9) carry | |
| 10) be based | |
| 11) divide | |
| 12) consist | |
| 13) report | |

Exercise 33. Say whether the following statements are true or false. Correct the false ones.

1. Continuous production provides different batches of products. 2. Unit production makes standardized products with a standard set of process and operation sequence in anticipation of demand. 3. Batch production produces limited quantities of different types of products on the same set of machines. 4. Flow production makes products on a set of machines arranged according to the sequence of operations. 5. In line

process, fixed costs are significantly lower than variable costs. 6. Process production is similar to discrete production. 7. Feedback is company's attitude to the performed action.

Exercise 34. Find a solution to the problem:

Ms. Jane Smith, purchasing manager for British Airways, is negotiating a contract for 20,000 units of component parts from a supplier. Ms. Smith has done a preliminary cost analysis on manufacturing the part in-house and concluded that she would need to invest \$50,000 in capital equipment and incur a variable cost of \$25 per unit when manufacturing in-house. Assuming the total fixed cost to draft a contract with her supplier is \$1,000. What is the maximum purchase price that she should negotiate with? What other factors should she negotiate with the supplier to avoid losses?

Exercise 35. Speak on the production logistics process beginning your sentences with:

To begin with...; In the first place...; I suppose...; As far as I know...; As a rule...; Actually...; As a matter of fact...; In my opinion...; In conclusion...; Briefly speaking... .

Unit 10. LEAN AND SIX SIGMA LOGISTICS

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

lean, sigma, Japanese, automaker, perspective, venture, expenditure, steady, society, coin, overburden, implication, oversimplification, misconception, unevenness, workaround, waste, wasteful, target, manufacturing, eliminate, elimination, pure, ultimate, immediate, execution, utilize, impact, excess, folk, hassle, crucial, cyclical, driver.

Exercise 2. Read dialogue 1 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 1

A: What is lean?

B: Lean is a production practice that considers the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful, and thus a target for elimination.

A: How is "value" defined from the perspective of the customer who consumes a product or service?

B: Value is defined as any action or process that a customer would be willing to pay for. Essentially, lean is centered on preserving value with less work.

A: And what is lean manufacturing?

B: Lean manufacturing is a management philosophy derived mostly from the Toyota Production System (TPS) and identified as "lean" only in the 1990s.

A: What do lean principles come from?

B: The Japanese manufacturing industry. The steady growth of Toyota, from a small company to the world's largest automaker, has focused attention on how it has achieved this success.

A: Whom was the term coined by?

B: The term was first coined by John Krafcik in his 1988 article. Krafcik had been a quality engineer in the Toyota joint venture in California.

A: What is the main method of lean?

B: Toyota's view is that the main method of lean is not the tools, but the reduction of three types of waste: non-value-adding work, overburden, and unevenness, to expose problems systematically and to use the tools where the ideal cannot be achieved. From this perspective, the tools are workarounds adapted to different situations.

Notes

lean – 1) ошадливий, ошадний; 2) худий

sigma – сигма, грецька літера σ ; середньоквадратичне відхилення

expenditure – витрачання, використання

elimination – усунення, виключення; ліквідування, знищення

to preserve – берегти, охороняти, оберігати

steady – постійний, незмінний

automaker – виробник автомобілів

to coin – вигадувати; створювати

quality engineer – інженер відділу технічного контролю якості

joint venture – спільне підприємство

waste – 1) зайві витрати; 2) шкода, збиток, втрата; 3) відходи, брухт

wasteful – марнотратний

non-value-adding – економічно не вигідний / збитковий, неефективний

overburden – 1) надмірне навантаження; 2) перевантажувати
unevenness – нерівномірність
workaround – обхідний маневр

Exercise 3. Change the sentences from direct into indirect speech after the model.

Model: 1. What **is** the value for the end customer? – She/he asked him/her what the value for the end customer **was**.

2. Where **was** lean manufacturing **derived** from? – He asked where lean manufacturing **had been derived** from.

3. **Can** the ideal **be achieved**? – She asked **if** the ideal **could be achieved**.

1. What is lean? 2. What is lean manufacturing? 3. How is "value" defined from the perspective of the customer? 4. What do lean principles come from? 5. Whom was the term coined by? 6. What is the main method of lean? 7. What will be the main method of lean? 8. Can the main method of lean be the reduction of three types of waste? 9. Can workarounds be adapted to different situations?

Exercise 4. Memorize the basic terminology to text 1.

to eliminate – 1) усувати, виключати; 2) ліквідувати, знищувати

pure – чистий; безпосередній

oversimplification – надмірне спрощення

ultimate – кінцевий, остаточний

to support – 1) підтримувати; сприяти; 2) допомагати

immediate – 1) спішний, негайний, невідкладний; 2) безпосередній, прямий; 3) найближчий

to identify – розпізнавати, впізнавати

to utilize – використовувати, утилізувати

to generate – 1) створювати; генерувати; породжувати;

2) спричиняти, викликати

return – дохід, прибуток

impact – вплив, дія

misconception – 1) хибне уявлення; 2) непорозуміння

crucial – головний, вирішальний, ключовий; критичний

implication – 1) те, що мають на увазі (на думці); підтекст;

2) вплутування; втягання; 3) причетність 4) *pl.* наслідки

to embrace – 1) сприймати; осягати (розумом, оком); 2) містити в собі, включати
driver – чинник, рушій

Exercise 5. Read and translate text 1.

Text 1. Lean and the Logistician

Lean concepts are deeply rooted in the Toyota Production System. In its purest form, lean is about the elimination of waste and the increase of speed and flow. Although this is a high-level oversimplification, the ultimate objective of lean is to eliminate waste from all processes. According to lean theory, at the top of the list of known wastes is excess inventory. More simply, we need to eliminate any inventory that is not required to support operations and the immediate need of the customer. We identify excess inventory along with six other potential sources of waste in logistics: transportation, space and facilities, time, packaging, administration, and knowledge. Clearly, each of these resources – all necessary for logistics planning and execution – becomes waste when not utilized effectively to generate: the greatest possible value in the eyes of customers and healthy return for the company.

The impact of lean on the logistician is significant. A common misconception of the lean philosophy is that it only finds application in manufacturing settings. The goal of lean is to eliminate waste, decrease work-in-process inventories, and, in turn, decrease process and manufacturing lead times, ultimately increasing supply chain velocity and flow. Lean also has a vital cultural element to it that is crucial to the logistician, the concept of “total cost.” The lean practitioner does not focus on individual cost factors such as transportation or warehousing, but rather focuses on total cost. With inventory carrying costs representing 15 to 40 percent of total logistics costs for many industries, making decisions based on total cost has dramatic implications for the logistician.

Unfortunately though, many organizations never embrace the total cost concept fully, as poor decisions are made continually based on traditionally visible cost drivers like transportation, warehousing, and per-unit purchase prices.

Exercise 6. Answer the questions on text 1.

1. What are the roots of “lean” concepts? 2. What is lean about in its purest form? 3. What is the ultimate objective of lean? 4. What is at the top of the list of wastes according to lean theory? 5. What inventory do we need to eliminate? 6. What does each of resources generate when it is used effectively? 7. What is a misconception of the lean philosophy? 8. What does lean aim to decrease? 9. What cultural element is crucial to any logistician? 10. What should lean practitioner focus on? 11. What percent of total logistics costs do inventory carrying costs represent? 12. What cost drivers are traditionally considered to be visible?

Exercise 7. Give English equivalents.

Витрачання ресурсів; марнотратний; вирішальний; кінцевий; ошадливий; ошадливе виробництво; філософія ошадливого використання ресурсів; перспектива; стабільне зростання; в чистому вигляді; надмірне спрощення; надмірне навантаження; вплив; хибне уявлення; швидкість; хибне рішення; видимі цінові чинники; ціна на одиницю закупленого товару; загальна вартість; потенційне джерело; оберігати; обхідний маневр; вигадувати, створювати; нерівномірність; інженер відділу технічного контролю якості; зайві витрати.

Exercise 8. Read the following letter and fill in the blanks with the words and word combinations from the box. Answer the questions below.

<i>additional costs, pioneer, employees, growing recognition, reference model, capacity, originally developed, hassles, make progress, healthcare, lean, business model, replace, decade, superior performance, manufacturing</i>

Dear Lean Community Member

I am always surprised how many times top managers ask me “So what is ...?” This is depressing when they come from automotive or ... firms whose operations folks have been struggling with lean for a ... or more without their help or understanding. On the other hand it is encouraging when they come from ... or service organizations hungry to ... and ready to lead from the top.

For me lean is actually about a new ... that delivers far superior performance for customers, ..., shareholders and society at large.

Initially this ... is delivering exactly what customers want without any problems, delays, ..., errors and fire-fighting. Very quickly it is also freeing up the ... to deliver more value from existing resources with few ...

Over the next decade I have no doubt that this lean business model will ... the prevailing business model ... by Alfred Sloan at General Motors, analysed and described in many books by Peter Drucker. This power of lean is the ... by leading organizations in all kinds of sectors that Toyota, the lean ..., is the ... for our age.

Exercise 9. Answer the questions.

1. What question is asked many times by top managers? 2. Who has been struggling with lean in automotive or manufacturing firms? 3. What does the author of the letter consider to be encouraging? 4. What is lean actually about? 5. What and is meant by superior performance delivering? 6. What will replace the prevailing business model? 7. What is the reference model for our age? 8. Whom is this letter addressed to?

Exercise 10. Translate the following sentences into English:

1. Сутність ошадливого виробництва полягає у ліквідуванні втрат і нарощуванні швидкості операцій. 2. Згідно з теорією ошадливого виробництва, найбільш відомим видом втрат є надлишкові запаси. 3. Потенційні джерела втрат у логістиці: втрати під час транспортування, втрати, пов'язані зі складськими площами та обладнанням, втрати часу на пакування, адміністративне управління та втрати через неефективне використання знань. 4. Вплив принципів ошадливого виробництва на спеціаліста з логістики важко переоцінити. 5. Спеціалісти з ошадливого виробництва мають зосереджувати увагу не на окремих чинниках вартості, а на сукупних витратах. 6. Вміння приймати рішення на основі сукупних витрат має величезне значення для спеціалістів із логістики.

Exercise 11. Read dialogue 2 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 2

A: What is six sigma?

B: Six sigma is a business management strategy, originally developed by Motorola in 1986. Six sigma became well known after

Jack Welch made it a central focus of his business strategy at General Electric in 1995, and today it is widely used in many sectors of industry.

A: What does six sigma seek to do?

B: Six sigma seeks to improve the quality of process outputs by identifying and removing the causes of defects (errors) and minimizing variability in manufacturing and business processes.

A: What methods does it use?

B: It uses a set of quality management methods, including statistical methods, and creates a special infrastructure of people within the organization who are experts in these methods.

A: How are six sigma projects usually carried out?

B: Each six sigma project carried out within an organization follows a defined sequence of steps and has quantified financial targets (cost reduction or profit increase).

A: What did the term *six sigma* originate from?

B: The term originated from terminology associated with manufacturing. The maturity of a manufacturing process can be described by a sigma rating indicating the percentage of defect-free products it creates.

A: What is a six sigma process?

B: A six sigma process is one in which 99.99966 % of the products manufactured are statistically expected to be free of defects. Motorola set a goal of "six sigma" for all of its manufacturing operations, and this goal became a byword for the management and engineering practices used to achieve it.

Notes

to remove – усувати

defect – 1) дефект; недолік; 2) пошкодження

maturity – зрілість

rating – 1) положення; клас, розряд, ранг, рейтинг; 2) нормування

byword – 1) символ; 2) прислів'я, приказка

engineering – інжиніринг

Exercise 12. Change the sentences from direct into indirect speech.

1. A quality engineer in the Toyota joint venture said, "The term lean is coined in my 1988 article". 2. The man said, "I will be at our office at eight o'clock". 3. The manufacturer said, "Lean principles come from

the Japanese manufacturing industry”. 4. My friend said, “The impact of lean on me as a logistician is significant”. 5. She said, “I was reading about lean and the logistician”. 6. He said, “I was in California in 1990s”. 7. The lean practitioner said, “I don’t focus on individual cost factors such as transportation or warehousing but rather on total cost”.

Exercise 13. Memorize the basic terminology to text 2.

nonconformance – невідповідність

flawless – 1) без вад (дефектів); бездоганний; 2) досконалий

cyclical – циклічний

progression – 1) просування, поступ; рух уперед; 2) послідовність

measurement – вимірювання, визначення; нормування

benchmarking – раціоналізація господарської діяльності із застосуванням досвіду провідних компаній; впровадження найбільш передових методів роботи інших господарських суб'єктів

mainstream – головний напрямок; провідна домінуюча тенденція

perception – 1) сприйняття, відчуття; 2) розуміння, усвідомлення

mentioned – вищезазначений

fixture – постійний, неодмінно присутній елемент

to bear – носити, нести

acronym – акронім, звукова аббревіатура

to comprise – містити в собі, вмещувати, охоплювати

to complete – 1) закінчувати, завершувати; 2) комплектувати

boundary – межа, границя; кордон

map – 1) мапа, карта; 2) план

mapping – 1) креслення мап (карт); нанесення на мапу (на карту); картографія; 2) планування

shortfall – недовиконання (*завдання, плану тощо*); нестача, брак, дефіцит

survey – звіт про обстеження споживачів

gap – 1) пробіл, пропуск, прогалина; 2) значна розбіжність; розрив

prioritization – надання пріоритету

to prevent – 1) попереджати, відвертати; запобігати; 2) заважати, перешкоджати (*чомуś – from*)

documenting – документальне підтвердження

to regress – остаточний регресувати; рухатися назад

to verify – 1) перевіряти; 2) підтверджувати

bottom-line – результат; підсумок; кінцевий підсумок

empathy – емпатія, спів-переживання, співчуття
coaching – тренування, консультування, інструктування
follow-up – 1) контроль термінів виконання, календарний контроль;
2) нові матеріали, додаткові дані
holistic – холістичний, глобальний, єдиний, цілісний, цілий

Exercise 14. Read and translate text 2.

Text 2. Introduction to Six Sigma

What is Six Sigma? First, what it is not. It is not a secret society, a slogan or a cliché. Six sigma is a highly disciplined process that helps us focus on developing and delivering near-perfect products and services.

Why “Sigma”? The word is a statistical term that measures how far a given process deviates from perfection. The central idea behind six sigma is that if you can measure how many “defects” you have in a process, you can systematically figure out how to eliminate them and get as close to “zero defects” as possible. To achieve six sigma quality, a process must produce no more than 3.4 defects per million opportunities. An “opportunity” is defined as a chance for nonconformance, or not meeting the required specifications. This means we need to be nearly flawless in executing our key processes.

Six sigma is a cyclical process utilized to identify issues and opportunities within an organization. Each step in the cyclical process is required to ensure the best possible results. This process is a progression from beginning to end.

Six sigma was first used on a wide scale by Motorola in the 1980s to improve quality through statistical measurements and benchmarking. The process entered the mainstream of public perception in the 1990s when CEO Jack Welch embraced it at General Electric. Since then, six sigma has experienced its share of success stories, as noted by the aforementioned companies, as well as its share of failures. Along the way, it has become a fixture in many corporate cultures.

Six sigma projects follow two project methodologies. These methodologies bear the acronyms DMAIC and DMADV.

Define-Measure-Analyze-Improve-Control (DMAIC)¹ is used for projects aimed at improving an existing business process. It is

¹ DMAIC pronounced as "duh-'may-ick"

comprised of five steps. Each step involves a series of actions to be completed before moving on to the next step.

Define the customer, their critical issues and the core processes involved with these issues. Also, project boundaries including the start, mapping of the process flow and stop of the process must be defined.

Measure the performance of the core business process involved. This step involves data collection to determine defects in the processes. These results are then compared to results from customer surveys to determine shortfalls.

Analyze the data collected and process map to identify gaps between current performance and ideal performance. This step also involves the prioritization of issues and opportunities for improvement and reasons for observed variations.

Improve the target process by developing innovative solutions using technology and discipline to correct identified issues as well as prevent problems.

Control the improvements by developing, documenting and implementing an ongoing plan to monitor changes and prevent employees from regressing back to their old way of conducting themselves.

Define-Measure-Analyze-Design-Verify (DMADV)¹ is used for projects aimed at creating new product or process design. The DMADV project methodology is also known as DFSS – *design for six sigma* and also features five phases.

Six sigma is an integrated process from beginning to end. It would be virtually impossible to break it down and pick only aspects of this process to implement and expect meaningful results. To achieve maximum results, this process must be carried out from beginning to end.

Implementing the six sigma methodology can be a very successful approach to process improvement. Many companies that have implemented six sigma have seen their product quality improve, their costs decrease and their efficiency level increase, directly impacting bottom-line profitability.

While six sigma focuses on the technical identification and solving of issues, it often fails to sufficiently take into account the human factor. Management must invest in time, empathy, training, coaching and

¹ DMADV pronounced as "duh-'mad-vee"

follow-up. In return, it can enjoy many of the same financial and operating benefits by implementing a behavioral approach.

Clearly, 6s is a set of process tools that should only be part of a more holistic process improvement strategy. Attention must also be paid to people, innovation and customer relationships.

Exercise 15. Answer the questions on text 2.

1. What is the central idea behind six sigma? 2. Why is the term “sigma” used for a given process? 3. How to achieve six sigma quality? 4. What is six sigma utilized to do? 5. What process is a progression from beginning to end? 6. When was six sigma first used on a wide scale and by whom? 7. Since what time has six sigma experienced its share of success and that of failures? 8. What project methodologies do six sigma projects follow? 9. What projects is DMAIC used for? 10. What steps is DMAIC comprised of? 11. What projects is DMADV used for? 12. How many phases does DFSS feature? What are they? 13. Why is six sigma considered to be an integrated process? 14. What have many companies implementing six sigma seen? 15. What does six sigma focus on? 16. What does six sigma fail to take into account? 17. What must management invest in to enjoy financial and operating benefits?

Exercise 16. Find English equivalents in text 2.

Визначати можливості; циклічний процес; якомога кращий результат; підвищувати якість; статистичні вимірювання; раціоналізація господарської діяльності із застосуванням досвіду провідних компаній; вищезазначені компанії; низка дій; ключові (основні) процеси; нестача, дефіцит; ідеальна продуктивність; відхилення; цілісний процес; інноваційне рішення; контролювати зміни; підсумкова прибутковість (у підсумку); людський чинник; взаємини з клієнтом; акцентувати увагу; вкладати кошти; методологія шести сигм; збирати дані; звіт про обстеження споживачів; невдача.

Exercise 17. Match the definitions with proper logistics terms.

Definitions

Terms

1. A Greek letter used as a statistical term that measures how much a process varies from perfection, based on the number of defects per million units a) lean manufacturing

2. Any activity that does not add value to the good or service in the eyes of the consumer b) six sigma quality
3. A production practice that considers the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful, and thus a target for elimination c) sigma
4. A term used to indicate that a process is well controlled with tolerance of 3.4 defects per million events from the centerline in a control chart d) total costs
5. A management philosophy derived mostly from the Toyota Production System (TPS) and identified in the 1990s e) waste
6. The sum of a firm's final fixed and variable costs. f) lean

Exercise 18. Put the verbs in brackets into the correct form following the rules of the sequence of tenses.

1. He said six sigma (to be) a cyclical process utilized to identify issues and opportunities within an organization. 2. She wondered when six sigma (to be used) on a wide scale by Motorola. 3. The teacher said six sigma (to experience) its share of success stories as well as its share of failures since then. 4. They said each step (to involve) a series of actions to be completed before moving on to the next step. 5. It was mentioned that this process (to be carried out) from beginning to end. 6. They didn't know if management (to invest) in time, empathy, training, coaching and follow-up.

Exercise 19. Write a summary of text 2.

Exercise 20. Read dialogue 3 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 3

A: What is lean six sigma logistics?

B: This is when companies are embracing both lean and six sigma initiatives to support cost reduction and quality improvement.

A: But lean and six sigma programs were separate initiatives in most organizations initially. Don't they compete anymore?

B: Today's firms see that lean and six sigma rather complement each other and provide for dovetailing of continuous improvement activities.

A: But what does this have to do with logistics?

B: The quick answer is "everything"! Once grounded in lean and six sigma principles, the logistician will realize that logistics, lean and six sigma form a natural union.

A: What is the purpose of this union?

B: It is to create a cultural and operational model that will aid the logistician to solve age-old issues while improving operations and contributing to business success at all levels.

A: Where does one start when dealing with a topic as complex as lean six sigma logistics?

B: It is better to start learning and understanding of each focus area (logistics, lean, and six sigma) individually. Then we can see how they come together, allowing the whole to be greater than the sum of the parts.

Notes

six sigma logistics – логістика, що базується на методології шести сигм (за показниками якості 6 σ)

lean six sigma logistics – ошадлива логістика, що базується на методології «шість сигм»

to compete – 1) змагатися; 2) конкурувати

to complement – доповнювати; бути додатком

to dovetail – 1) узгоджувати, пов'язувати; 2) підганяти, приладнувати

to ground (in) – навчати основ (предмету)

union – об'єднання, союз; єдність, гармонія

to aid – допомагати; надавати допомогу; сприяти

Exercise 21. Match the synonyms.

1) impact

2) variability

3) reduction

4) defect

5) dovetail

6) coin

a) blemish

b) coordinate

c) devise

d) fluctuation

e) lessening

f) influence

Exercise 22. Memorize the basic terminology to text 3.

to attempt – пробувати, намагатися

utility – 1) корисність; вигідність; 2) корисна річ; 3) *pl.* комунальні послуги

reference – 1) показник, еталон, стандарт, зразок; 2) співвідношення
3) посилення, виноска (в рукописі); 4) рекомендація;
5) пригадування; натяк; 6) довідка

order-to-delivery cycle time – час циклу від замовлення до доставлення

nonconfidence – недовіра

variation reduction – скорочення відхилень

paramount – 1) першорядний; 2) верховний; найвищий

to state – 1) заявляти; повідомляти; 2) констатувати; формулювати;
викладати

variance – 1) зміна; коливання; 2) розбіжність

plainly – очевидно; прямо, відверто

to hedge – страхувати(ся) від можливих втрат

reliance – 1) довіра, впевненість (upon, on, in); 2) опора, надія

actuary – фахівець зі страхових розрахунків; статистик страхового товариства, актуарій

speeding ticket – талон попередження про перевищення швидкості

insurance rate – страхова премія

male – 1) чоловік; 2) чоловічий, чоловічої статі

to substitute for – 1) замінювати; заміщувати (*когось*); 2) підставляти

competence – 1) компетентність; 2) вміння, спроможність;
3) достаток, добрий матеріальний стан

to appreciate – 1) оцінювати; 2) (високо) цінувати; визнавати;
3) розуміти, усвідомлювати

to recall – 1) згадувати; викликати, воскрешати (*в пам'яті*);
2) виводити (*із замисленості*); 3) скасовувати (*наказ*);
4) відкликати (*урядову особу*); 5) брати назад (*свої слова*)

Exercise 23. Read and translate text 3.

Text 3. Lean Six Sigma Logistics

Six sigma is a management methodology that attempts to understand and eliminate the negative effects of variation in our processes. Based on an infrastructure of trained professionals, six sigma delivers a problem-solving

model armed with “voice of the customer” utilities and statistical process control tools. DMAIC is a map, or step-by-step approach, to understand and improve organizational challenges. Six sigma-trained employees will work on “projects” using the DMAIC model to reduce variation in processes and to attempt to achieve “six sigma quality,” a statistical reference to 3.4 defects per million opportunities.

At the heart of six sigma is the principle of variation reduction: if we can understand and reduce variation in our processes, then we can implement improvement initiatives that will center the process and ensure accuracy and reliability of the process around customer expectations. For example, an average order-to-delivery cycle time of five days may reflect a variation between two and eight days. It is this variation that leads to customer nonconfidence and the resultant inventory buildup and / or loss of sales.

The concept of variation reduction is paramount to the logistician. As stated above, logistics is about managing inventory, and managing inventory is about managing variance. If we look at the different types of inventory, we will plainly see why variation plays such a vital role in how we manage inventories throughout the business and the supply chain.

For example, safety or “buffer” stocks are inventories that we need to hedge against unknowns (i.e., the variations from the norm). That is, we maintain safety stocks because of variation in supplier quality, transportation reliability, manufacturing process capability, and customer demand patterns. In other words, if we can understand and control variation in our processes from supplier to customer, then we will be able to reduce our reliance on the buffers dramatically.

In this regard, logisticians need to think of themselves as actuaries, like those who develop rates for automobile insurance. Actuaries look at key variables – the age of drivers, gender of the drivers, types of vehicle driven, measures of past behavior (e.g., speeding tickets and accidents) – and then they determine insurance rates that reflect the variability in the data. This is precisely why the sixteen-year-old male who drives a sports car will have the highest insurance rates!

Logisticians are no different than the actuaries in this analogy. For demographics and sports cars, the logistician substitutes supplier competence, transportation reliability, and demand fluctuation. Then the logistician determines the “insurance rate,” using inventory as the unit of currency.

The three elements of Lean six sigma logistics are to be put together to appreciate fully how they dovetail and complement each other. Summarizing from the above, recall that: Logistics is about managing inventory. Lean is about speed, flow, and the elimination of waste. Six sigma is about understanding and reducing variation.

Therefore, lean six sigma logistics can be defined as the elimination of wastes through disciplined efforts to understand and reduce variation, while increasing speed and flow in the supply chain.

Exercise 24. Say whether the following statements are true or false. Correct the false ones.

1. The principle of variation is at the heart of six sigma.
2. DMAIC is not a map, not an approach but a system of improving an organizational structure.
3. The negative effects of variation in processes may be eliminated with the help of six sigma management methodology.
4. Logistics is about managing inventory.
5. A variation between two or eight days leads to customer confidence in an average order-to-delivery cycle time of five days.
6. If we can understand and control variation in our processes from supplier to customer, then we will be able to reduce our reliance on the buffers dramatically.
7. Actuaries who develop rates for automobile insurance need to think themselves as logisticians.
8. The logistician determines the “insurance rate”, using inventory as the unit of currency.
9. Lean is about speed, flow, and the elimination of waste.
10. Six sigma is about misunderstanding and increasing variation.

Exercise 25. Find English equivalents in text 3.

Час циклу від замовлення до доставки; недовіра; думка клієнта; службовці, навчені методології «шести сигм»; якість «шести сигм»; скорочення відхилень; накопичення запасів; управляти запасами; страхуватися від можливих втрат; фахівець зі страхових розрахунків; модель вирішення проблеми; ставка страхової премії; транспортний засіб; коливання попиту; ліквідація зайвих витрат; страхові запаси; компетентність постачальника; корисність; очікування; оцінювати; інфраструктура.

Exercise 26. Translate the following sentences into English:

1. «Шість сигм» – це методологія управління, орієнтована на виявлення та ліквідування негативних наслідків відхилень у

виробничій діяльності. 2. Метод «шість сигм» – це модель вирішення проблем, підсилена з допомогою прийому врахування «думки клієнта» та засобами контролю статистичних процесів. 3. Методологія DMAIC – це планування та поетапний підхід, спрямований на виявлення та успішне вирішення проблем, посталих перед компанією. 4. Якість «шести сигм» – це статистичний показник, який дорівнює 3,4 дефекту на мільйон можливих. 5. В основі методології «шести сигм» лежить принцип скорочення відхилень. 6. Якщо навчитися виявляти відхилення та керувати ними, це суттєво знизить залежність компанії від страхових запасів. 7. Логістик оперує такими поняттями, як компетентність постачальника, надійність транспортування та коливання попиту.

Exercise 27. Match the definitions with proper logistics terms.

Definitions

Terms

- | | |
|--|--------------------------|
| 1. The total time that elapses between an order's placement and its receipt. It includes the time required for order transmittal, order processing, order preparation, and transit | a) order picking |
| 2. The time spent and the activities performed from the time an order is received to the actual delivery of the order to a customer | b) source |
| 3. A type of request for goods or services | c) lead time |
| 4. Assembling a customer's order from items in storage | d) cash with order (CWO) |
| 5. The activities associated with filling customer orders | e) order cycle |
| 6. A specific location or enterprise from where goods will be obtained | f) order processing |
| 7. A method of payment for goods where cash is paid at the time of order, and the transaction becomes binding on both buyer and seller. | g) order |

Exercise 28. Decipher the abbreviations using a dictionary.

CWO, TPS, VMI, CEO, DMAIC, DMADV, SKU, DFSS, TEU, MRO, EOQ, EDP, BMI, CMI, MRP, DRP, CRP.

Exercise 29. Translate into English using the sequence of tenses rules.

1. Він каже, що його батько працює на спільному підприємстві.
2. Він сказав, що його батько працює на спільному підприємстві.
3. Він каже, що влітку застосує нову методологію управління.
4. Він сказав, що влітку застосує нову методологію управління.
5. Ми знаємо, що якість «шести сигм» – це орієнтування на статистичний показник 3,4 дефекту на мільйон можливостей.
6. Ми знали, що якість «шести сигм» – це орієнтування на статистичний показник 3,4 дефекту на мільйон можливостей.
7. Вони гадали, що ми утримуємо страхові запаси через відхилення у надійності перевезення.
8. Ми не знали, що в основі методології «шести сигм» лежить принцип скорочення відхилень.
9. Менеджер запитав, де живе статистик страхового товариства.
10. Студенти знали, що стратегія управління бізнесом «шість сигм» була розроблена у 1986 році.

Exercise 30. Speak on:

1. Lean and the logistician.
2. Six sigma methodology.
3. Lean six sigma logistics.

Unit 11. REVERSE LOGISTICS

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

reverse, recall, realm, recover, recovery, scrutiny, refurbishment, refurbishing, reconditioning, remanufacturing, dismantling, repairing, recycling, disposing, disposal, disposition, reclamation, expiration, expired, redistribution, surplus, defective, endeavour, damage, salvage, salvageable, hazardous, obsolete, awareness, sterilize, ascertainment, reimbursement.

Exercise 2. Read dialogue 1 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 1

A: What does the abbreviation *RL* stand for?

B: It stands for *reverse logistics* that is for all operations related to the reuse of products and materials.

A: What is the definition of reverse logistics?

B: Reverse logistics is the process of planning, implementing, and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal. Remanufacturing and refurbishing activities also may be included in the definition.

A: What does the reverse logistics process include?

B: It includes the management and the sale of surplus as well as returned equipment and machines from the hardware leasing business.

A: Normally, logistics deals with events that bring the product towards the customer. What happens in the case of reverse logistics?

B: The resource goes at least one step back in the supply chain. For instance, goods move from the customer to the distributor or to the manufacturer.

A: So, for example what if product A, produced by manufacturer, happened to be defective and the customer would return the product?

B: Any process or management after the sale of product A involves reverse logistics. The manufacturing firm would then have to organize shipping of the defective product, testing the product, dismantling, repairing, recycling or disposing the product. Product A will travel in reverse through the supply chain network in order to retain any use from the defective product.

A: I see. This is exactly what reverse logistics is about.

Notes

reverse – 1) протилежне, протилежність; зворотний бік;

2) обернений, зворотний, реверсивний; 3) міняти на протилежний; цілком змінювати

reverse logistics (RL) – реверсивна логістика, логістика обернених / зворотних потоків

reuse – повторне використання

to recapture – відновлювати; брати назад

to dispose – розташовувати, розміщувати, розставляти

disposal – 1) розміщення, розташування; 2) ліквідування (*списання та утилізація*); 3) передавання; продаж

to refurbish – оновлювати; здійснювати реконструкцію, реконструювати

surplus – 1) надлишок; 2) надлишковий, надмірний
to return – повертати; віддавати
hardware leasing business – роботи з поставки та монтажу орендованого обладнання
defective – пошкоджений, неякісний, дефектний; дефективний (товар)
to dismantle – розбирати, демонтувати (машину)
to repair – лагодити, ремонтувати; виправляти
to recycle – повторно використовувати, повторно переробляти
to retain – 1) утримувати; підтримувати; 2) зберігати
exactly – 1) точно; 2) якраз, саме

Exercise 3. Complete the sentences.

1. Reverse logistics is the process of 2. Normally, logistics deals with 3. The reverse logistics process includes the management and the sale of surplus as well as 4. Any process or management after the sale of product A involves 5. If product A, produced by manufacturer, happened to be defective the manufacturing firm would then have to 6. Product A will travel in reverse through the supply chain network in order to

Exercise 4. Write out of the dialogue 20 words that sound alike in English and Ukrainian. Compare their pronunciation and meanings in the two languages. Mind the “false friends” of a translator.

<i>Model: control – керування, а не контроль</i>
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Exercise 5. Memorize the basic terminology to text 1.

to encompass – містити
pollution – забруднення
realm – галузь, сфера, царина
backward – 1) назад, зворотно; 2) у зворотному напрямку
to process – піддавати технічному процесу; обробляти
damage – 1) пошкодження; збиток; втрата; шкода; 2) завдавати збитків; пошкоджувати
restock – 1) поповнення запасів; 2) поповнювати запаси
salvage – 1) врятування майна; 2) врятований вантаж; 3) брухт, металолом; 4) рятувати; 5) використовувати відходи виробництва

recall – 1) відкликання; 2) відкликати
hazardous – небезпечний, який є джерелом небезпеки; ризиковий; шкідливий
obsolete – що вийшов з ужитку; застарілий
disposition – 1) ліквідування (*списання та утилізація*);
2) розташування, розміщення
recovery – повернення (*втраченого*); відшкодування
awareness – усвідомлення, усвідомленість; обізнаність
to pique – 1) викликати (*цікавість*); 2) вражати (*самолюбство*)
previously – заздалегідь, раніше
to benchmark – визначати ефективність за еталоном
endeavour – 1) намагання; зусилля; 2) намагатися; докладати зусиль
leading-edge – передовий, провідний

Exercise 6. Read and translate text 1.

Text 1. The Concept of Reverse Logistics

The reverse logistics (RL) encompasses all of the logistics activities as they operate in reverse. Therefore, reverse logistics is *the process of planning, implementing, and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal.*

More precisely, reverse logistics is the process of moving goods from their typical final destination for the purpose of capturing value, or proper disposal. Remanufacturing and refurbishing activities also may be included in the definition of reverse logistics.

Reverse logistics is more than reusing containers and recycling packaging materials. Redesigning packaging to use less material, or reducing the energy and pollution from transportation are important activities, but they might be better placed in the realm of “green” logistics. If no goods or materials are being sent “backward,” the activity probably is not a reverse logistics activity. Reverse logistics also includes processing returned merchandise due to damage, seasonal inventory, restock, salvage, recalls, and excess inventory. It also includes recycling programs, hazardous material programs, obsolete equipment disposition, and asset recovery.

Awareness of the art and science of logistics continues to increase. Additionally, great interest in reverse logistics has been piqued. Many companies that previously did not devote much time or energy to the management and understanding of reverse logistics, have begun to pay attention. These firms are benchmarking return operations with best-in-class operators. Some firms are even becoming ISO certified on their return processes. Third parties specializing in returns have seen a great increase in the demand for their services. In addition to this research project, several other academic endeavours focusing on the reverse flow of product are in process. Leading-edge companies are recognizing the strategic value of having a reverse logistics management system in place to keep goods on the retail shelf and in the warehouse fresh and in demand.

Exercise 7. Answer the questions on text 1.

1. What activities does reverse logistics include? 2. How is reverse logistics defined? 3. What other activities may also be included in the RL definition? 4. In what case is the activity not considered to be a reverse logistics activity? 5. Why have many companies begun to pay attention to RL? 6. In what way do companies show their awareness of RL? 7. What are all leading-edge companies recognizing?

Exercise 8. Give English equivalents.

Забруднення; пошкодження; небезпечний; врятування майна; застарілий; відкликання; відновлення цінності; правильна утилізація; пошкоджений товар; повернення; усвідомлення; визначати ефективність за еталоном; передовий, провідний; викликати цікавість; містити в собі; повернене обладнання; демонтаж, розбирання; обернений, зворотний, реверсивний; оновлювати; ремонтувати; повторно використовувати; галузь, царина.

Exercise 9. Match the definitions with proper logistics terms.

Definitions

Terms

<p>1. A form generally required with a Warranty / Return, which helps the company identify the original product, and the reason for return; permission to return a product to a supplier</p>	<p>a) returns processing cost</p>
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2. The total cost to process repairs, refurbished, excess, obsolete, and end-of-life products including diagnosing problems, and replacing products
3. A specialized segment of logistics focusing on the movement and management of products and resources after the sale and after delivery to the customer. Includes product returns for repair and / or credit
4. The process of bringing products or packaging from the retail level through the distributor back to the supplier or manufacturer
5. The costs associated with managing return product authorizations (RPA)
6. Material that has been rejected by the customer or the buyer's inspection department and is awaiting shipment back to the supplier for repair or replacement.
- b) returns order management costs
- c) return to vendor (RTV)
- d) return material authorization (RMA)
- e) reverse logistics
- f) reverse distribution

Exercise 10. Translate the following sentences into English:

1. Реверсивна логістика – це процес планування, реалізації й контролю ефективного потоку сировини, запасів незавершеного виробництва, готової продукції та пов'язаної з ними інформації для відновлення їх цінності або правильної утилізації.
2. Реверсивна логістика – це більш ніж повторне використання контейнерів (тари) та переробка пакувальних матеріалів.
3. Реверсивна логістика включає обробку товару, поверненого через пошкодження, дефект, відкликання та надлишковий запас.
4. До логістики зворотних (обернених) потоків належать програми з переробки небезпечних матеріалів, утилізуванню застарілого обладнання та повернення активів.
5. Провідні компанії усвідомлюють стратегічне значення володіння системою управління реверсивною логістикою.

Exercise 11. Define the tense and voice of predicates in the following sentences. Translate the sentences into Ukrainian.

1. Logistics was defined by The Council of Logistics Management as the process of planning, implementing, and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods and related information from the point of origin to the point of consumption. 2. Remanufacturing and refurbishing activities will be included in the definition of reverse logistics. 3. Redesigning packaging to use less material, or reducing the energy and pollution from transportation might be better placed in the realm of “green” logistics. 4. If no goods or materials are being sent “backward,” the activity probably is not a reverse logistics activity. 5. Great interest in reverse logistics has been piqued. 6. Some firms are even becoming ISO certified on their return processes. 7. Awareness of the art and science of logistics continues to increase.

Exercise 12. Put questions to the italicized words.

1. I talk about reverse logistics all the time – *to family, to friends and to complete strangers sitting next to me on airplanes.* 2. Occasionally a *stranger* will be somewhat familiar with *the concept but not necessarily the term.* 3. *Reverse logistics* is the process of collecting, moving, and storing used, damaged, or outdated products and/or packaging from end users. 4. The instruments *used during a procedure* are returned *for a variety of reasons.* 5. The provider *sorts, cleans, tests, restores, repackages, applies new expiration date and then returns to them for future use.*

Exercise 13. Memorize the basic terminology to text 2.

reseller – оптовий, гуртовий торговий посередник (*звичайно закуповує продукцію у дистриб'юторів*)
refund – 1) повернення (*грошей*); відшкодування (*витрат*);
2) повертати, відшкодувати
reconditioning – приводити у товарний вигляд; відновлювальний ремонт; відновлення товарного вигляду речей (*перед продажем, які були у користуванні*)
remanufacturing – повна модернізація
refurbishment – косметичний ремонт, відновлення, оновлення
recycling – повторне використання, ресайклінг; утилізація (*використаних ресурсів*)
reclamation – 1) утилізування, використання відходів; 2) рекламація, висування претензій

in-house – внутрішній

legal implication – юридичний висновок; правова імплікація, положення, що припускається юридично

environmental – який стосується навколишнього середовища; екологічний

restriction – обмеження; застереження; перешкода

valuable – 1) цінний, коштовний, дорогий; 2) корисний, важливий; 3) що підлягає оцінюванню

to reclaim – 1) вимагати назад; 2) утилізувати, використовувати

remainder – залишок, решта; залишки

landfill – сміття з ґрунтовою засипкою; звалище; санітарне звалище

tote – 1) контейнер для перевезення; 2) вантаж; перевезення 3) нести; перевозити

pallet – піддон

Exercise 14. Read and translate text 2.

Text 2. Reverse Logistics Activities

Typical reverse logistics activities (Table 1) would be the processes a company uses to collect used, damaged, unwanted, or outdated products, as well as packaging and shipping materials from the end-user or the reseller.

Clearly, reverse logistics can include a wide variety of activities. These activities can be divided as follows: whether the goods in the reverse flow are coming from the end user or from another member of the distribution channel such as a retailer or distribution centre; and whether the material in the reverse flow is a product or a packaging material. These two factors help to provide a basic framework for characterizing reverse logistics activities, although other important classification factors exist.

Regardless of their final destination, all products in the reverse flow must be collected and sorted before being sent on to their next destinations. Where products are inserted into the reverse flow is a prime determinant in the resulting reverse logistics system.

Once a product has been returned to a company, the firm has many disposal options from which to choose. If the product can be returned to the supplier for a full refund, the firm may choose this option first. If the product has not been used, it may be resold to a different customer, or it may be sold through an outlet store. If it is not of sufficient quality to be

sold through either of these options, it may be sold to a salvage company that will export the product to a foreign market.

If the product cannot be sold “as is,” or if the firm can significantly increase the selling price by reconditioning, refurbishing or remanufacturing the product, the firm may perform these activities before selling the product. If the firm does not perform these activities in-house, a third party firm may be contracted, or the product can be sold outright to a reconditioning/remanufacturing/refurbishing firm.

Table 1

Typical RL activities

Material	Reverse Logistics Activities
Products	Return to Supplier Resell Sell via Outlet Salvage Recondition Refurbish Remanufacture Reclaim Materials Recycle Landfill
Packaging	Reuse Refurbish Reclaim Materials Recycle Salvage

After performing these activities, the product may be sold as a reconditioned or remanufactured product, but not as new. If the product cannot be reconditioned in any way, because of its poor condition, legal implications, or environmental restrictions, the firm will try to dispose of the product for the least cost. Any valuable materials that can be reclaimed will be reclaimed, and any other recyclable materials will be removed before the remainder is finally sent to a landfill.

Generally, packaging materials returned to a firm will be reused. Clearly, reusable totes and pallets will be used many times before disposal. Often, damaged totes and pallets can be refurbished and returned to use. This work may be done in-house, or using companies whose sole mission is to fix broken pallets and refurbish packaging.

Once repairs can no longer be made, the reusable transport packaging must be disposed of. However, before it is sent to a landfill, all salvageable materials will be reclaimed. European firms are required by law to take back transport packaging used for their products. To reduce costs, firms attempt to reuse as much of these materials as possible, and reclaim the materials when they can no longer be reused.

Exercise 15. Answer the questions on text 2.

1. What would the typical reverse logistics activities be? 2. What factors help to provide a basic framework for characterizing reverse logistics activities? 3. What is a prime determinant in the resulting reverse logistics system? 4. What options does a firm have once a product has been returned? 5. What if the product is not of sufficient quality? 6. What activities may a firm perform if the product cannot be sold “as is”? 7. What if a firm does not perform the activities in-house? 8. Due to what reasons cannot the product be reconditioned? 9. What can be done to any valuable materials and other recyclable materials? 10. What will be done to any packaging materials returned to a firm? 11. What will be done if repairs can no longer be made? 12. What do firms attempt to do in order to reduce costs?

Exercise 16. Find English equivalents in text 2.

Застарілі товари; кінцевий споживач; канал збуту; центр дистрибуції; зворотний / обернений потік; місце призначення; визначальний фактор; повне відшкодування витрат; торговельна точка; звалище сміття; компанія зі збору та утилізації брухту; повна модернізація; несправний стан продукту; контейнер повторного використання; поламані палети; оновлена упаковка.

Exercise 17. Fill in the gaps with the following words and word combinations from the box. Get ready to answer questions on this text.

<i>perspective, flow, determine, core, final destination, reused, activities, salvaged, efficiently, products</i>

There are such ... that are generally considered the ... of reverse logistics processes. Each of these activities gives rise to some interesting questions. However, from a logistics ..., the larger issue common to all of these activities is how the firm should effectively and ... get the ...

from where they are not wanted to where they can be processed, ..., and Also, the firm must ... the “disposition” of each product. That is, for each product, the firm must decide the ... for products inserted into the reverse logistics

Exercise 18. Answer the questions.

1. What is the larger issue common to all of the core activities of reverse logistics process?
2. What must the firm also determine?
3. What products must the firm decide the final destination for?

Exercise 19. Match the definitions with proper logistics terms.

Definitions	Terms
1. Using a product again for a purpose similar to the one for which it was designed	a) refurbishing
2. Centralized processing facilities for returns; term used widely in the grocery industry	b) remanufacturing
3. When a product is cleaned and repaired to return it to a "like new" state	c) re-returns
4. When a product is reduced to its basic elements, which are reused	d) reuse
5. Similar to reconditioning, except with perhaps more work involved in repairing the product	e) restocking fee
6. Similar to refurbishing, but requiring more extensive work; often requires completely disassembling the product	f) reclamation centres
7. When a customer tries to return for full price a product that was sold as a returned product	g) returnable tote
8. Transport packaging that can be used multiple times to move materials between or within facilities	h) reconditioning
9. A charge to the consumer for accepting their returned product	i) return abuse
10. When a customer tries to return a product at a chain other than where they bought it, or for a price higher than what they paid for it, or after the warranty period has expired.	j) recycle

Exercise 20. Translate the following sentences into English:

1. Компанія застосовує спеціальні процеси для збирання використаних, пошкоджених, непотрібних або застарілих товарів, що надходять від кінцевих споживачів. 2. Усі товари у зворотному / оберненому потоці мають бути відсортовані перед відправленням до їх наступного місця призначення. 3. Якщо товар не був використаний, він може бути перепроданий іншому клієнту. 4. Іноді товар може бути проданий як модернізований продукт або у відновленому товарному вигляді. 5. Контейнери повторного використання та палети використовуються багаторазово перед утилізацією. 6. Європейські фірми за законом мають повертати назад тару, яка використовується для транспортування їхніх товарів.

Exercise 21. Write out of text 2 all sentences in the Passive Voice. Define the tense forms of the verbs.

Exercise 22. Memorize the basic terminology to text 3.

overstock – 1) надмірний запас, надлишок (*товарів*); 2) робити

надто великий запас; затоварювати (*крамницю, ринок*)

cash – гроші; готівка; розрахунок готівкою

scrutiny – ретельна перевірка

improper – неналежний, недоречний, неправильний, невідповідний

sell-by-date – термін реалізації (*після якого продаж товару не дозволяється*); термін придатності

nonuniform – нерівномірно розподілений; неоднорідний

carton – картонна коробка

to recover – повертати собі, отримувати знову

reimbursement – компенсація; відшкодування

non-defective – бездефектний

Exercise 23. Read and translate text 3.

Text 3. Performing Reverse Logistics

Warehousing plays a key role in performing reverse logistics. Most of the physical work related to product recall, reclamation, and disposal of overstock and damaged inventory is performed in warehouses. Many firms are generating significant cash flow from refurbishment, recycling, and disposal of damaged and defective product. Reverse logistics is concerned with controlled and regular inventory.

Controlled inventory consists of hazardous materials and product recalls that have potential consumer health or environmental considerations. The reclamation of controlled inventory must be performed under strict operating scrutiny that prevents possible redistribution or improper disposal.

Less attention has traditionally focused on reclamation of regular inventory. The product involved in such reclamation is typically damaged or aged beyond the recommended sell-by-date. While some unsalable product results from warehouse damage, most is returned from retail or even from the consumer.

While reclamation is difficult for regular inventory, it is far more challenging for controlled inventory. In both return situations, product flow lacks the orderly process characteristic of outbound movement. Reverse movement typically consists of nonuniform individual packages and cartons as contrasted to outbound movement of cases and pallet loads. Packages are often broken, and product is not packaged correctly. Return products typically require significant manual sortation and inspection to determine appropriate disposal. However, the opportunity to recover cost by reimbursement and recycling is significant.

Exercise 24. Put key questions on text 3.

Exercise 25. Match the synonyms.

- | | |
|------------------|--------------------|
| 1) obsolete | a) backward |
| 2) reimbursement | b) expiration date |
| 3) reverse | c) effort |
| 4) sell-by-date | d) outdated |
| 5) hazardous | e) remuneration |
| 6) endeavour | f) dangerous |

Exercise 26. Translate the following sentences into English:

1. Багато фірм отримують значний потік готівки від косметичного ремонту, повторного використання та утилізуванню пошкоджених товарів. 2. Утилізуванню контрольованих запасів має здійснюватися за

умови суворої, ретельної перевірки. 3. Меншої уваги традиційно надають утилізуванню регулярних запасів. 4. Більшість неходових товарів повертається з роздрібною торгівлі та від споживача. 5. Зворотний рух товарів зазвичай є нерівномірно розподіленими окремими картонними пакуваннями. 6. Упаковки можуть бути поламаними, товари – неправильно запакованими.

Exercise 27. Change the following sentences into the Passive voice.

1. Warehousing plays a key role in performing reverse logistics. 2. Many firms are generating significant cash flow from refurbishment, recycling, and disposal of damaged product. 3. Return products typically require significant manual sortation and inspection to determine appropriate disposal. 4. Reverse logistics can include a wide variety of activities. 5. Third parties specializing in returns have seen a great increase in the demand for services. 6. Leading-edge companies are recognizing the strategic value of having a reverse logistics management system. 7. Reverse logistics encompasses all of these activities as they operate in reverse.

Exercise 28. Match the definitions with proper logistics terms.

Definitions

Terms

- | | |
|---|---|
| <p>1. Attempts to measure and minimize the ecological impact of logistics activities</p> <p>2. When customers return a product claiming it to be defective, when in fact, the problem is not with the product, but often with the customer's ability to properly operate the product</p> <p>3. A non-defective defective returned by a customer</p> <p>4. The principle that the manufacturer should pay for ensuring the recycling and proper disposal of product at end-of-life</p> <p>5. When a returned product may be sold again as new.</p> | <p>a) non-defective defectives</p> <p>b) non-defective returns</p> <p>c) producer pays</p> <p>d) resell</p> <p>e) green logistics</p> |
|---|---|

Exercise 29. Change the following sentences into the Active voice.

1. Reverse logistics issues were vividly discussed by many companies in summer because of environmental concerns. 2. Many logistics decisions will be impacted by environmental considerations next year. 3. Measuring the environmental impact of particular modes of transport, ISO certification, reducing energy usage of logistics activities, and reducing usage of materials are included by green logistics activities in this district. 4. Reverse logistics would be involved by designing a product to make use of reusable packaging. 5. Significant cash flow from refurbishment, recycling, and disposal of damaged and defective product is being generated by many firms. 6. Return operations were being benchmarked with best-in-class operators by these firms when the representative of our company were there. 7. All necessary efforts to move goods from their typical place of disposal in order to recapture value have been successfully made by reverse logistics department. 8. All necessary equipment had been repaired by that time.

Exercise 30. Read text 4 putting the verbs in brackets into the correct form using the Passive voice. Entitle the text.

Text 4

Reverse logistics software (use, install) and (implement) in an organization for the purpose of minimizing the levels of inventories and with an overall aim of maximizing customer satisfaction.

The complete process of planning, controlling and implementing the effective and efficient flow of raw materials, semi-finished goods, related information and finished goods from the point of consumption to the point of origin for the purpose of effective disposal (refer to) by reverse logistics. It also (use) to denote the complete process of returning reusable storage devices such as containers for the purpose of reuse.

Reverse logistics (contribute) by the following factors: recall of product by the organization itself; damages in the stage of shipping or delivery; faulty and tampered goods, etc.

Such stages as repair, refurbishment, remanufacturing (include) to the process of reverse logistics. These stages help with the addition of

value to satisfy the needs and requirements of the customer with regard to exchange or reuse of products.

Exercise 31. Match the definitions with proper logistics terms.

Definitions

Terms

- | | |
|--|---|
| 1. Designing products so that their return flow functions better; designing reverse logistics requirements into product and packaging | a) cannibalization of parts |
| 2. How a product is disposed of, e.g. sold at an outlet, sold to a broker, sent to a landfill, etc. | b) extended producer responsibility (EPR) |
| 3. Excess inventory; may be from ordering too much, order cancellations, or product's failure to sell | c) design for reverse logistics (DFRL) |
| 4. The classification and disposition of surplus, obsolete, scrap, waste and excess material products, and other assets, in a way that maximizes returns to the owner, while minimizing costs and liabilities associated with the dispositions | d) disposition |
| 5. When parts or components are taken off of one item and used to repair or rebuild another unit of the same product | e) overstock |
| 6. A requirement that the original producer of an item is responsible for ensuring its proper disposal | f) municipal solid waste (MSW) |
| 7. Garbage generated by residences and small businesses | g) asset recovery |

Exercise 32. Translate the sentences into English using the Passive voice.

1. Реверсивна логістика призначена для переміщення продукції з точки її споживання в точку її виробництва для відновлення її цінності. 2. Обернені матеріальні, інформаційні, фінансові, сервісні потоки є об'єктами дослідження реверсивної логістики. 3. Часто товари, які повертають, не можуть транспортуватися, зберігатися і оброблятися так само легко, як продукція, яку відправляють

спочатку. 4. Видалення і переробка відходів матеріалів, що виникають у процесах виробництва, дистрибуції або пакування передбачаються логістикою обернених потоків. 5. Оптимальне рішення щодо подальшого застосування використаних або повернутих товарів буде прийняте на початку поточного тижня. 6. Дані щодо місця, кількості виникнення та якості обернених матеріальних потоків надає відділ реверсивної логістики компанії.

Exercise 33. Give antonyms of the following words:

1) outlet, consumption, origin, understanding, abbreviation, success, use, excess, end, software;

2) complete, proper, reverse, responsible, particular, significant, necessary, correct, useful, continuous, personal, collectively, forward, clear, effective, best;

3) sell, maximize, reduce, send, include, satisfy, improve, assemble, damage, help, give.

Exercise 34. Decipher the abbreviations using a dictionary.

ISO, MSW, DFRL, RTV, TQM, RL, EPR, RMA.

Exercise 35. Speak on:

1. The concept of reverse logistics.

2. Reverse logistics activities.

3. Performing reverse logistics.

Unit 12. MATERIALS HANDLING

Exercise 1. Memorize the basic terminology to text 1.

scope – 1) поле діяльності; 2) діапазон, розмах; 3) межі, рамки

materials handling – 1) переміщення вантажів у межах підприємства

та між підприємствами; 2) транспортне оброблення матеріалів

tackle – спорядження; інструмент; обладнання

gadget – пристрій, технічна новинка

lever – важіль

indirect labour costs – непрямі видатки

ratio – 1) відношення; співвідношення; 2) коефіцієнт

in-process material – матеріал, що перебуває в процесі оброблення

foremost – першочерговий

floor space – площа приміщення

fatigue – втома, зношування

accident – нещасний випадок, аварія

backtracking – 1) скасування операцій; 2) відслідковування у зворотному напрямку

go out of business – ліквідувати підприємство

Exercise 2. Read and translate text 1.

Text 1. Scope of Materials Handling

Materials handling is defined as movement of materials of any form (raw, finished, packaged, solid, liquid, gas, light and heavy) from one location to another in a restricted path either by manual or mechanical means. The movement may be horizontal, vertical or a combination of both. To do it safely and economically, different types of tackles, gadgets and equipment are used when the materials handling is referred to a mechanical handling of materials.

Materials handling has a very old and vast history. This concept is thousands of years old. Since primitive men discovered the use of wheels and levers, they have been moving materials mechanically. Modernization of industries and civilizations need material handling equipment which can handle heavy loads with high speed, great reliability and safety.

During the past three to four decades it is attempted to show the amount of materials handling provided as a part of the total production process. The percentage of this aspect greatly varies from industry to industry. The importance of materials handling function is greater in the industries with a high ratio of handling cost to the processing cost than in those where this ratio is smaller.

Materials handling is not a production process and hence, does not add to the value of the product, but helps production. Materials handling does not involve only handling of materials, but also packaging and warehousing. The following statements will give some idea:

“Materials handling generates something like 80% of indirect labour costs in the plant”;

“Materials handling may be responsible for one-third to one-half of the total cost of production in some plant”;

“An uninterrupted flow of materials through a plant can increase the productivity of existing men and equipment by 15%”.

Thus, materials handling directly affects the outcome of the plant as it takes bulk of time of any activity.

The functional scope of materials handling within an industry covers the following:

- bulk materials and unit materials handling. Bulk handling is particularly relevant in the processing, mining and construction industries. Unit materials handling covers handling of formed materials in the initial, intermediate and final stages of manufacture;

- industrial packaging of in-process materials, semi-finished or finished goods, primarily from the point of view of ease and safety of handling, storage and transportation. However, consumer packaging is not directly related to materials handling;

- handling of materials for storage or warehousing from raw materials to finished product stage.

A good materials handling system should ensure efficient and safe movement of materials to the desired place; timely movement of the materials when needed; supply of materials at the desired rate; materials storage with minimum space and the lowest cost solution to the materials handling activities. The foremost importance of materials handling is that it helps productivity and thereby increases profitability of an industry. Many enterprises go out of business because of inefficient materials handling practices. Although competing industries are using same or similar production equipment, the one that uses the improved materials handling system stays ahead of their competitors.

A well designed materials handling system attempts to achieve the following:

- improve efficiency of a production system by ensuring the right quantity of materials delivered at the right place at the right time most economically;

- cut down indirect labour costs;

- reduce damage of materials during storage and movement;

- maximize space utilization by proper storage of materials and thereby reduce storage and handling cost;

- minimize accident during materials handling;

- reduce overall cost by improving materials handling;

- improve customer services by supplying materials in a manner convenient for handling;
- increase efficiency and saleability of plant and equipment with integral materials handling features.

Here are some of important advantages of the materials handling system: reduction in materials handling and indirect labour costs; improvement in productivity; better use of floor space and facilities; reduction in cost of transportation; less fatigue to the workers; improved work environment; greater flexibility; safety improvement and reduction in accidents; improved materials flow, i.e., less backtracking and reduction in inventory.

Despite the materials handling system offers so many advantages, there are few disadvantages: high initial cost of most equipment; skilled labour or an operator is required to operate almost all types of materials handling systems; if not operated well, there are concerns of horrible accidents and hazards; regular maintenance is required; inventory carrying cost is high in some cases; installation and operating cost is high.

Exercise 3. Answer the questions on text 1.

1. What is materials handling? 2. What does it originate from?
3. How does the importance of materials handling vary from industry to industry? 4. What is the functional scope of materials handling? 5. What should a good materials handling system ensure? 6. What are the advantages and disadvantages of materials handling?

Exercise 4. Find in text 1 the English equivalents to the following words:

висока початкова ціна; придатність для продажу; готова продукція; твердий продукт; рідина; важкий вантаж; вантажно-розвантажувальні роботи; продуктивність; матеріал, що перебуває в процесі обробки; скасування операцій; технічна новинка; спорядження; аварія; небезпека; вартість утримування товарно-матеріальних запасів; напівфабрикат; робоче середовище; використання корисної площі приміщення; рух матеріалів; ліквідувати підприємство.

Exercise 5. Match the definitions with proper terms and form sentences with them:

Definitions	Terms
1. A small device or machine with a particular purpose	a) materials handling
2. A bar or handle which moves around a fixed point, so that one end of it can be pushed or pulled in order to control the operation of a machine or move a heavy or stiff object	b) finished product
3. Movement, storage, control and protection of materials, goods and products throughout the process of manufacturing, distribution, consumption and disposal	c) packaged product
4. Goods that have completed the manufacturing process but have not yet been sold or distributed to the end user	d) gadget
5. Goods put in boxes or containers to be sold	e) lever
6. Canceling an operation	f) bulk material
7. Materials ordered, stored, issued and sold by weight (such as minerals), volume (such as cement or oil), or footage (such as lumber)	g) floor space
8. A cost involved in using a machine, piece of equipment, building	h) flexibility
9. Ability to bend or to be bent easily without breaking	i) hazard
10. The area of the floor of a building such as a store, office, or factory	j) backtrack
11. Dangerous and likely to cause damage.	k) inventory carrying cost

Exercise 6. Complete the sentences.

1. The movement of materials may be... . 2. ... need material handling equipment which can handle heavy loads with high speed, great reliability and safety. 3. The importance of materials handling function is greater in the industries ... than in those where this ratio is

smaller. 4. Materials handling ... the outcome of the plant. 5. The foremost importance of materials handling is that it helps ... and thereby increases ... of an industry. 6. Many enterprises go out of business because of

Exercise 7. Put questions to the following sentences. Pay attention to the meanings of the modal verbs.

1. The movement may be horizontal, vertical or combination of both
2. Modernization of industries and civilizations needs material handling equipment which can handle heavy loads with high speed, great reliability and safety.
3. A good materials handling system should ensure efficient and safe movement of materials to the desired place.
4. Although competing industries can use same or similar production equipment, the one that uses the improved materials handling system stays ahead of their competitors.

Exercise 8. Work in pairs and draw up a chart of do's and don'ts in materials handling. Exchange opinions.

Exercise 9. Memorize the basic terminology to text 2.

multiple operation – одночасне виконання кількох операцій
first-cost – собівартість, фабрична вартість
life-span – термін роботи (обладнання)
volumetric – об'ємний
capacity of rate – потенційне навантаження
to exceed – 1) перевищувати; перевершувати; 2) виходити за межі
undue wear – надмірне зношування
to violate – порушувати, ламати
micromotion – мікрорух
wastage – втрати; нераціональне використання ресурсів;
зношування

Exercise 10. Read and translate text 2.

Text 2. Basic Materials Handling Principles

While materials handling practices vary from industry to industry, the basic principles remain the same and they are the following:

Least handling is best handling. It is best to keep the handling cost to the minimum because handling does not add value to the product or material.

Standardization of equipment. Materials handling equipment should be selected to afford flexibility and be capable of performing multiple operations, but standardized. This will result in reduction of cost of operations, maintenance and repair, as well as costs of storage.

Specialized equipment kept to a minimum. It may be desirable to have specialized equipment, but the first-cost, cost of operation, maintenance and repair are generally higher than those of standardized equipment. Present worth and life-span value should be evaluated.

Volume dictates the method. Volumetric consideration determines the method of handling, regardless of size, shape and value. Therefore, the most important criterion is the volume.

Planning ahead. Simultaneously with other planning activities, selection and procurement of materials handling equipment should be conducted in advance to take care of all aspects of handling and storage, particularly of standardized equipment and combining methods.

Length and number of moves. Movement must be studied in detail to reduce backtracking of materials. The extent of movement must also be studied so as to afford better utilization of men and equipment.

Equipment capacity. The capacity of rates should be carefully examined and never exceeded, as overloading causes undue wear, entails excessive maintenance and repair cost. It also creates potential accident hazards, violating the safety first principles in materials handling.

Analysis of operations. To determine combination of handling activities, all operations must be analyzed. This will result in simplification and possibly, reduction in handling and cost.

Payload. The selection of equipment must be made after careful consideration of the cost of moving, and economics can be measured by studying the cost of operation involved in handling in each move. The physical state of material is a determining factor in the selection process.

Straight flow line. The shortest distance between the two given points line provides a guideline for the path to follow.

Standardization of methods. The line, method of picking, carrying and settling down of material vary. This does not call for an analysis like micromotion analysis, but calls for forming a basis for materials

handling in the minimum length with the available equipment. When the method is standardized, the time could be fixed and wastage in time, labour and equipment could be eliminated.

Exercise 11. Answer the questions on text 2.

1. Why is it best to keep the handling cost to the minimum? 2. What is the material handling equipment selected for and what will it result in? 3. Why is it not often possible to install specialized equipment? 4. How does volume influence handling? 5. Why is it reasonable for logisticians to plan ahead materials handling processes? 6. What is the role of movement in studying materials handling? 7. Why shouldn't the capacity rate be exceeded? 8. When is it desirable to make the selection of equipment? Why? 9. How can the wastage in time, labour and equipment be eliminated?

Exercise 12. Guess the terms through the definitions.

The sum of the initial expenditures involved in capitalizing a property (transportation, installation, preparation for service, and other related costs); the average or maximum length of time an organism, material, or object can be expected to survive or last; acquisition of goods and services; excessive deterioration of equipment; the statement determining the course of action; keeping something in proper conditions.

Exercise 13. Translate into Ukrainian.

least handling, to afford flexibility, to perform multiple operations, first-cost, standardized equipment, life-span value, economics, to evaluate, shape, undue wear, repair cost, to eliminate, wastage in time.

Exercise 14. Say whether the following statements are true or false. Correct the false ones.

1. Keeping the handling cost to the minimum adds value to the product or material. 2. Standardization of equipment increases cost of operations, maintenance, repair and costs of storage. 3. It is reasonable to evaluate present worth and life-span value of equipment. 4. Selection and procurement of materials handling equipment should be conducted in advance to take care of all aspects of handling and storage. 5. The study of length and number of moves ensures better utilization of men

and equipment. 6. The capacity of rates should be carefully examined to avoid undue wear, excessive maintenance, repair cost and potential accident hazards. 7. The selection of equipment must be made after careful consideration of maintenance cost.

Exercise 15. Fill in the blanks with an appropriate modal verb (may, should, can, could, must). Explain their usage.

1. Materials handling equipment ... be selected in such a manner as to afford flexibility and be capable of performing multiple operations, but standardized.
2. It ... be desirable to have specialized equipment.
3. We ... evaluate worth and life-span value of the handling equipment.
4. Movement ... be studied in detail to reduce backtracking of materials.
5. The capacity of rates ... be carefully examined and never exceeded.
6. Economics ... be measured by studying the cost of operation involved in handling in each move.
7. When the method is standardized, the time ... be fixed and wastage in time, labour and equipment ... be eliminated.
8. To determine combination of handling activities, all operations ... be analyzed.

Exercise 16. Translate the following sentences into English:

1. Необхідно уважно вивчити потенційне навантаження, аби уникнути його перевищення і тим самим надмірного зношування обладнання, значних витрат на обслуговування та ремонт.
2. Собівартість, вартість експлуатації, технічного обслуговування і ремонту спеціалізованого обладнання зазвичай вища, ніж стандартного устаткування.
3. Дослідження обсягу руху сприяє кращому використанню людських ресурсів і обладнання.
4. Стандартизований метод регламентує час і усуває витрати часу, робочої сили та зношування обладнання.
5. Найкоротша відстань між двома заданими точками лінії є траєкторією руху.

Exercise 17. Sum up what the text says about the basic principles of materials handling.

Exercise 18. Memorize the basic terminology to text 3.

hoisting equipment – підймальне обладнання
conveying equipment – конвеєрне обладнання
lifting gear – підйомний / підймальний механізм

overhead equipment – підвісне обладнання
loading dock – вантажна (товарна) платформа
positioning – 1) розташування у певному положенні;
2) регулювання положення
tilt table – відкидний столик
turn table – поворотний, роторний стіл
dock leveler – вирівнювальна платформа
air film device – пристрій типу «повітряна подушка»
skid – 1) напрямна рейка; полоз; 2) підставка; підпірка
slip sheet – прокладний лист (*використовується замість піддона*)
tote pan – сталевий ящик для зберігання і перенесення деталей
self-restraining – 1) самообмежувальний; 2) самогальмівний
mezzanine – антресоль
radio frequency tag – маркувальний знак радіочастоти
machine vision – відеосистема верстата
overhead traveling crane – мостовий кран
stacker crane – штабелювальний кран
jib crane – стріловий кран
load carrier – вантажний транспортний засіб

Exercise 19. Read, translate and give the gist of text 3.

Text 3. Materials Handling Equipment

Materials handling emphasizes upon the need of installing efficient and safe methods and equipment for material handling. It has been found that 35 to 40 % of the accidents at a plant are the result of poor methods of materials handling.

The main groups of materials handling equipment are classified by design features, nature and type of work, a working area, and by movement or motion.

By the design feature we define **hoisting equipment** (a group of machines with lifting gear intended to move loads mainly in batches), **conveying equipment** (a group of machines which may have no lifting gear and which move loads in a continuous flow), **surface and overhead equipment** (a group of machines which also may not be provided with lifting gear and which usually handle loads in batches). The difference in the design of these groups depends on the nature of

the load they handle, the direction of working movement and the nature of the handling process.

As to the nature and type of work the materials handling equipment can be classified into five major categories:

1. **Transport equipment** (conveyers, cranes, industrial trucks) is used to move material from one location to another (e.g. between workplaces, a loading dock, a storage area, etc.). Materials can also be transported manually without any equipment.

2. **Positioning equipment** (manual, lift / tilt / turn table, dock leveler, hoist, industrial robot, air film device, etc) is used to handle materials at a single location so that it is in the correct position for subsequent handling, machining, transport or storage. Unlike transport equipment, positioning equipment is usually used for handling at a single workplace. Materials can also be positioned manually without application of any equipment.

3. **Unit Load Formation Equipment** (pallets, skids, slip sheets, tote pans, bins / baskets / racks, cartons, etc) is used to restrict materials so that they maintain their integrity when handled as a single load during transportation and for storage. If materials are self-restraining (e.g., a single part or interlocking parts), then they can be formed into a unit load with no equipment.

4. **Storage Equipment** (shelves / bins / drawers, storage carousels, drive-through rack, drive-in rack, push-back rack, mezzanine, automated storage / retrieval) is used for holding or buffering materials over a period of time.

5. **Identification and Control Equipment** (bar codes, radio frequency tag, magnetic stripe, machine vision, electronic data interchange / internet, etc) is used to collect and communicate the information in order to coordinate the flow of materials within a facility and between a facility, its suppliers and customers. The identification of materials and control can be performed manually with no specialized equipment.

According to a working area equipment is classified into unrestricted, area restricted, line restricted, position restricted and auxiliary equipment.

The *unrestricted equipment* can move in any direction. Here we distinguish all types of trucks, tractors and carts.

The *area restricted equipment* work in the restricted area, i.e., their work area is constant. These include overhead traveling cranes, gantry cranes and stacker cranes.

The *line restricted equipment* stands for a continuous transportation device traveling on a specified path. These include almost all types of conveyors, railways, lifts and elevators and automatically guided vehicles, etc.

The *position restricted equipment* is a fixed unit working in a specified area from its position. This includes jib cranes and other industrial robots.

The *auxiliary equipment* helps in improving efficiency of handling. Here we distinguish load carriers, warehouses, goods reception and dispatch equipment, assembling and securing equipment.

By the movement or motion we define vertical motion (lifting and lowering devices), horizontal motion (transportation device) and combination motion (lifting and lowering plus transportation).

Selection of materials handling equipment depends on a plant layout, a product / process, building construction, a type of organization or industry, equipment factors and money factors. Therefore, one selects the material handling equipment according to their need and here the role of management starts.

Exercise 20. Answer the questions on text 3.

1. How is materials handling equipment classified? 2. What equipment do we distinguish by the design feature? 3. What does the difference in the design of these groups depend on? 4. What categories is the materials handling equipment classified into by the nature and type of work? 5. What are the working areas of equipment? 6. Does motion influence types of handling equipment? How? 7. What does the selection of materials handling equipment depend on?

Exercise 21. Give English equivalents.

Вантажопідіймальне обладнання; роторний стіл; конвеєрне обладнання; напрямна рейка; безперервний потік; обладнання для регулювання положення матеріалів; відкидний столик; вирівнювальна платформа; пристрій типу «повітряна подушка»; прокладний лист; вантажна (товарна) платформа; само-обмежувальний; підвісне обладнання; відеосистема верстата;

мостовий кран; підйомний / підйимальний механізм; порталний (козловий) кран; сталевий ящик для зберігання і перенесення деталей; штабелювальний кран; стріловий кран; вантажний транспортний засіб; маркувальний знак радіочастоти; необмежене використання обладнання; обмежене сферою діяльності обладнання; комбінований рух.

Exercise 22. Give definitions to the following terms:

hoisting equipment, conveying equipment, surface equipment, overhead equipment, storage equipment, transport equipment, positioning equipment, identification equipment, control equipment, unit load formation equipment.

Exercise 23. Fill in the blanks with the appropriate words given in the box.

self-restraining, transport equipment, line restricted equipment, auxiliary equipment, poor methods, lifting gear, fixed unit, constant

1. It has been found that 35 to 40% of the accidents at a plant are the result of ... of materials handling. 2. Hoisting equipment is a group of machines with ... intended to move loads mainly in batches. 3. ... is used to move material from one location to another. 4. The work of the area restricted equipment is 5. The ... includes all types of conveyors, railways, lifts and elevators and automatically guided vehicles. 6. The position restricted equipment is a ... working in a specified area from its position. 7. Load carriers, warehouses, goods reception and dispatch equipment, assembling and securing equipment belong to the 8. If materials are ..., then they can be formed into a unit load with no equipment.

Exercise 24. Complete the sentences (1-7) with appropriate endings (a-g).

1. The main groups of materials handling equipment are
a) vertical motion, horizontal motion and combination motion.

2. Conveying equipment is a group of machines which
b) may have no lifting gear and which move loads in a continuous flow.

3. Positioning equipment is used to handle materials at a single location

4. Storage equipment is used for

5. Identification and control equipment is used to

6. By the movement or motion we define

7. Selection of materials handling equipment depends on

c) a plant layout, a product/process, building construction, a type of organization or industry, equipment factors and money factors.

d) classified by design features, nature and type of work, a working area, and by movement or motion.

e) for subsequent handling, machining, transport or storage.

f) holding or buffering materials over a period of time.

g) collect and communicate the information in order to coordinate the flow of materials within a facility and between a facility, its suppliers and customers.

Exercise 25. Put questions (general, special, subject-question, alternative and disjunctive) to the sentences.

1. Materials handling emphasizes upon the need of installing efficient and safe methods and equipment for material handling. 2. The difference in the design of these groups depends on the nature of the load they handle, the direction of working movement and the nature of the handling process. 3. Self-restraining materials can be formed into a unit load with no equipment. 4. One selects the material handling equipment according to their need.

Exercise 26. Work in pairs and discuss the classification of materials handling equipment.

Exercise 27. Choose the correct word in the brackets.

1. Materials handling, movement and storage operations are (costly / inexpensive) in the utilization of resources. 2. Movement and physical distribution costs are a natural part of product costs that need (quarterly / constant) review for future action. 3. Synergy means an economic effect in which different parts of a system are (combined / facilitated) to contribute to a better performance of a firm. 4. It has been estimated that about 20 – 50% of the labour cost and 40 – 60% of the distribution cost

are associated with (handling and storage / picking and packaging).
5. The plant facilities should (unite / foster) the production processes in a well-coordinated rhythm so as to operate quickly and efficiently.
6. The system should reflect the dynamics of production processes keeping an eye on the objective of (smooth / sound) flow of materials at a low total cost.

Exercise 28. Define the tense and voice form of the verbs in the following sentences and put questions to the italicized words.

1. *Researchers* have discovered that many *companies* do not know what their *materials handling costs* are. 2. *In the short term*, *better use of resources* can be achieved by developing efficient re-organization programs *to fully utilize modern materials handling technology*. 3. Synergy means an *economic effect* in which different parts of a system are combined to contribute to a *unique source of heightened value* to the firm. 4. Synergy *in materials handling* may be measured by estimating the *economics in costs* for a given level of investment or by estimating the incremental value in *net revenue* for a given level of investment. 5. *Combinations of materials handling equipment* are extensively used since every operation involves *picking up, moving, lowering and sorting of materials*.

Exercise 29. Speak on:

1. Materials handling as a concept.
2. Materials handling principles.
3. Materials handling equipment.

Unit 13. WAREHOUSE LOGISTICS

Exercise 1. Practice the pronunciation of the following words and word combinations repeating after the teacher:

market pressure, proliferation of products, receipts of materials, approximately, pallet rack, bun shelving, bind, reusable container, stackable, cycle time.

Exercise 2. Memorize the basic terminology to text 1.

market pressure – важіль ринкового впливу
small shipment – малотоннажна партія товару
rapid proliferation – швидке розповсюдження (*продукції*)
bin – 1) ящик; 2) мішок, кошик; 3) бункер

put away – прибирати на місце
order picking – комплектування замовлення
receipt – надходження (*матеріалів*)
storage mode – режим зберігання
restocking – поповнення товарних запасів
pallet – піддон, палета
rack – 1) стелаж; полиця; стійка; рама; стенд; 2) зубчаста рейка;
3) переміщувати (пересувати з допомогою зубчастої рейки)
carton flow rack – гравітаційний стелаж для картонних коробок
active carton – завантажена картонна коробка
shelving – складування на полицях
bin shelving – складування на полицях із поділом місць зберігання
unit load – великогабаритний вантаж
small load – малогабаритний вантаж
block stacking – 1) штабелювання; 2) укладання вантажу блоками
rack storage – зберігання на стелажах
tote pan – сталевий ящик для зберігання та перенесення деталей
storage location – місце складування
to retrieve from storage – отримання товару зі складу
accumulate – накопичувати, складувати
outbound carrier – відправник вантажу (дистриб'ютор)
pallet load – вантаж на піддоні
inner pack – внутрішнє пакування
in-process handling – міжопераційні транспортно-навантажувальні роботи
stackable – придатний для штабелювання
pick – 1) вибирання; 2) вибирати, забирати; підбирати; сортувати; збирати
case – ящик; коробка
broken-case pick – комплектування розрізаних товарів
bulk storage – зберігання насипного вантажу в бункері, резервуарі
cycle time – тривалість вантажно-розвантажувальних робіт
labour-intensive – трудомісткий
operating costs – експлуатаційні витрати; видатки
downstream customer service – подальше обслуговування клієнтів
picker-to-stock system – система індивідуального відбирання товару з місць його розташування на складі
stock-to-picker system – система механізованого доставлення контейнерів або палетів до оператора для відбирання товарів

pick-to-light technology – система безпаперового відбирання замовлень, призначена для підвищення ефективності системи управління складом в усіх типах складських комплексів і дистрибутивних центрів

picker – комплектувальник, укладальник

vertical lift module – модуль вертикального підйому

miniload automated storage and retrieval system – автоматизована транспортно-складська система для невеликих вантажів

Exercise 3. Read and translate text 1. Entitle the text.

Text 1

Warehouse logistics is an essential component of the effective organization of working processes involving big quantity of material values.

The mission of a warehouse is to meet the customer demand for higher service quality with lower costs. Thus, understanding the customer demand is the first step to be taken for the proper design and/or operating of the order picking system.

In modern business environments, warehousing functions are becoming important more than ever. Yet, market pressures such as smaller shipments, faster delivery and rapid proliferation of products make warehouse management difficult for meeting the demand for high service quality with low costs.

The following illustration (Fig.1) outlines typical warehouse flows.

As you see materials in a usual warehouse flow through the following functions: receiving; put-away; storage; order picking; shipping.

Receiving is the function involved in receipts of materials coming into the warehouse. *Put-away* is the act of moving and placing materials in storage.

The important decision in put-away is to determine where and how much to store materials as there may be several storage modes or systems in the warehouses. By *storage mode* (Fig. 2), we mean a region of storage area or a piece of storage equipment where the costs of picking from and restocking any location are all approximately equal. For instance, the storage modes include a pallet rack used for pallet storage, a carton flow rack (a) is typically used for storing active cartons, and a bin shelving (b) is typically used for storing slower, small loads.

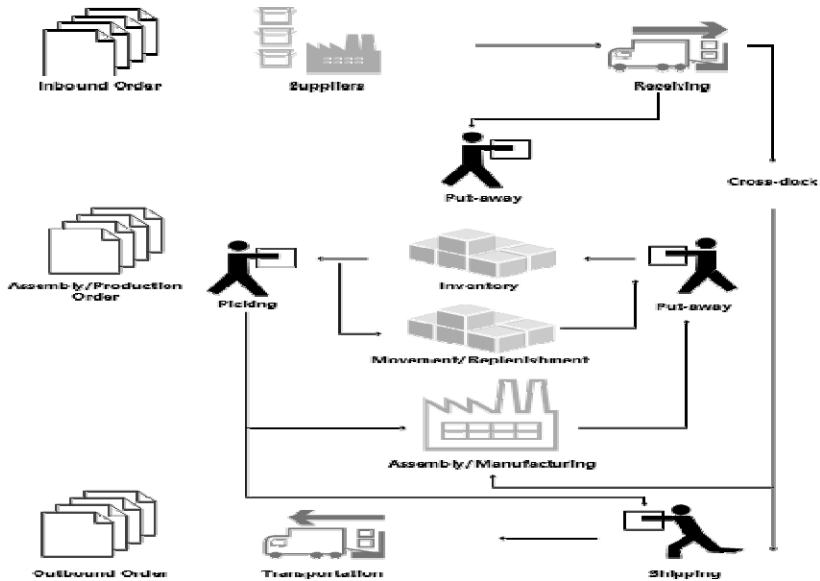


Fig. 1. Typical warehouse flows

Storage is to physically house material until requested. Storage systems can be classified into two types: unit load systems and small load systems. *Unit load storage systems (ULS)* are used for housing large loads such as full pallets, large boxes, and / or large rolls of material. Their applications include housing inventory prior to full unit load shipping, housing reserve storage for replenishment of forward picking areas, and / or housing inventory for partial unit load picking.



a



b

Fig. 2. Types of storage modes: *a* – carton flow rack; *b* – bin shelving

Block stacking or rack storage is a typical storage system used. *Small load storage systems* house small loads such as tote pans or small boxes, where the maximum capacity per storage location is typically less than 500 lbs. Usual order picking is involved in picking from small load storage systems.

Order picking is the process of retrieving items from storage to meet a specific customer order. Order picking function may include packaging of individual items or assortments. When an order consists of more than one item, it may be required to sort and / or accumulate items into individual orders depending on the picking strategy involved.

Shipping is involved in the activity of packing and accumulating orders by outbound carrier for loading.

Material within a warehouse may be handled in pallet loads (Fig. 3), in cases or cartons, in tote pans or binds, in inner packs, or even in individual pieces. Cases, cartons, tote pans and bins are all containers that are used for holding items. A *case* is a container that is specially designed to hold or protect items. A *carton* refers to a rectangular cardboard box in use for storing items. A *bin* is a generic term referring to a container typically made of plastic, though metal binds are available. A *tote pan* (Fig. 4) in general refers to more standardized, reusable containers, typically used for in-process handling and stackable on top of one another. Both metal and plastic tote pans are available.



Fig.3. Pallet load



Fig. 4. Tote pans

Depending on the types of retrieval units, types of picks can be classified into pallet pick, case pick and broken-case pick. It is called a *pallet pick* when the picking quantity is a multiple of a full pallet load.

We call it a *case pick* when the picking quantity is a multiple of case quantity, but less than a full pallet load. A *broken-case pick*, sometimes called a *piece pick*, is termed to represent an order pick where the picking quantity is less than a full case or in pieces.

A pallet pick is typically done in unit load storage systems. Case pick can be done from pallet storage, bulk storage, or such case storage systems as carton flow racks. Usual broken-case pick is done from small load storage systems where items are commonly housed in cartons or bins. General characteristics of broken-case picks include a large number of item types, small quantities per pick and a short cycle time. Accordingly, broken-case picks are most costly and difficult to manage. Typically, order picking is involved in broken-case picks or case picks.

Order picking is known to be the most labour-intensive and costly function among all the warehouse functions, accounting for 55% of warehouse operating costs. Order picking is also important as it has a critical impact on downstream customer service. Customers expect quick and accurate processes of their orders, which is directly dependent on the efficiency of order picking operations. Order picking systems can be classified largely into two types: a *picker-to-stock systems (PTS)* and a *stock-to-picker system (STP)*. In the *picker-to-stock system (PTS)*, the picker travels by walking or riding to storage locations to retrieve items. In such systems, pick-to-light technology can be employed to reduce the amount of time an operator spends searching for the next pick or for increasing accuracy. The PTS contains two subsystems: a storage subsystem and a retrieval subsystem. The *storage subsystem* may employ bin storage shelving, modular storage cabinets, gravity flow racks, carousels, space saving systems (maximize cub usage of foot print), e.g. mezzanines, mobile storage systems. The retrieval subsystem may employ carts, totes or cartons, man-up systems, etc.

In the *stock-to-picker systems (STP)*, the container or the storage location housing requested item is mechanically brought to the picker for retrieval. Examples include carousels, vertical lift modules (VLM), and miniload automated storage and retrieval systems (AS / RS). The vertical lift modules are state-of-the-art automated storage and retrieval systems. They can consist of one or multiple units, referred to as modules, depending on the volume of product to store and the application (Fig. 5).

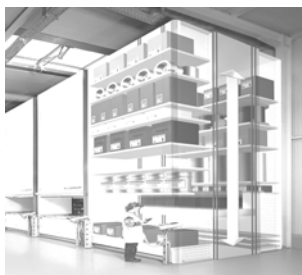


Fig. 5. Vertical lift modules

Automated storage and retrieval systems are computer controlled systems for storing and retrieving products in a warehouse or distribution center. AS / RS Systems require virtually no manual labor and are engineered to be completely automated.

Exercise 4. Answer the questions on text 1.

1. What is a warehouse mission? How do you understand it? 2. What are warehouse functions? Differentiate them. 3. What are two types of the storage system and what do they involve? 4. Will you describe the material handling process within a warehouse? 5. How are picks sorted out? 6. What is the order picking system and its classification?

Exercise 5. Find in text 1 English equivalents of the following words and word combinations.

Комплектування замовлення; режим зберігання; картонна коробка; гравітаційний стелаж для картонних коробок; малотонажна партія товару; сталевий ящик для зберігання та перенесення деталей; внутрішнє пакування; поповнення товарних запасів; експлуатаційні витрати; трудомісткий; штабелювання; надходження (матеріалів); подальше обслуговування клієнтів; мішок, кошик; комплектування розрізаних товарів; відправник вантажу; накопичувати, складати; міжопераційні транспортно-навантажувальні роботи; придатний для штабелювання; великогабаритний вантаж.

Exercise 6. Find in text 1 Ukrainian equivalents of the following words and word combinations.

Put away; picker; picker-to-stock system; storage location; rack storage; bulk storage; pallet load; small load; active carton; case; pallet;

rack; shelving; bin shelving; pick; retrieve from storage; stock-to-picker system; cycle time; vertical lift module; market pressure; pick-to-light technology; miniload automated storage and retrieval system; rapid proliferation.

Exercise 7. Find internationalisms in text 1. Mind the differences in their pronunciation and meanings in English and Ukrainian.

Exercise 8. Match the definitions with proper logistics terms.

Definitions	Terms
1. A frame or shelf in or on which objects (e.g. letters, plates, luggage etc) are put until they are wanted or needed	a) order picking
2. When the picking quantity is a multiple of a full pallet load	b) pallet
3. A single or multi-level structural storage system that is utilized to support high stacking of single items or palletized loads	c) inner pack
4. A storage device designed to hold small discrete parts	d) restocking
5. A container made from cardboard or coated paper	f) rack
6. Withdrawing items from inventory to fulfill an order	g) pallet pick
7. A sub-package within a master package	h) tote pan
8. Replenishment of stores and supplies	i) bin shelving
9. A platform made of wood or composite materials where cartons are stacked on and then used for shipment or movement as a group	j) case pick
10. Paperless order picking	k) pallet rack
11. A storage rack that utilizes shelves (metal) equipped with rollers or wheels	l) bin
12. A traditional steel shelving unit with plastic bins included or metal shelving preconfigured with drawers or metal dividers	m) carton
13. Housing large loads such as full pallets, large boxes, and / or large rolls of material	n) flow rack
14. An automated storage and retrieval	o) block stacking

system (ASRS) designed to maximize vertical storage capacity

15. A steel storage and manufacturing container that is usually small in size, easily moved by hand or other lifting devices and is used for order picking and shipping of items p) broken-case pick

16. A form of palletized storage that does not require any type of storage equipment, and instead loaded pallets are placed directly on the floor and built up in stacks to a maximum stable storage height q) vertical lift module

17. Gathering of full cartons or boxes of product. often done on a pallet r) unit load storage system

18. Picking of individual items. s) pick-to-light technology

Exercise 9. Give definitions to the following terms.

Restocking; picker-to-stock system; bulk storage; case; operating costs; stock-to-picket system; retrieve; rack storage; active carton; market pressure; storage mode; cycle time; pallet load.

Exercise 10. Translate the sentences into Ukrainian and put 4 types of questions to each of them.

1. The important decision in put-away is determining where and how much of materials to store. 2. A tote pan in general refers to more standardized, reusable containers. 3. Customers expect quick and accurate processing of their orders.

Exercise 11. Say whether the following statements are true or false. Correct the false ones.

1. Depending on the types of retrieval units, types of picks can be classified into pick pallet and picker-to-stock system. 2. The case pick means a multiple of pallet quantity. 3. A broken-case pick represents an order pick where the picking quantity is less than a full case or in pieces. 4. In a picker-to-stock strategy, the materials being picked are transported to the operator. 5. In a stock-to-picker strategy, an operator visits fixed locations to make a pick. 6. A vertical lift module is a state-of-the-art order picking system. 7. A tote pan is a standardized container used for shipment of goods.

Exercise 12. Choose the correct word in the brackets.

1. In the (*picker-to-stock / stock-to-picker*) system, the picker travels by walking or riding to storage locations to retrieve items. 2. (*Unit load storage / Small load storage*) systems house small loads such as tote pans or small boxes. 3. (*Shipping / Storage*) is the activity of packing and accumulating orders by outbound carrier for loading. 4. The storage mode includes a (*pallet rack / case pick*), a (*carton flow rack / broken-case pick*) and a (*bin shelving / piece pick*). 5. Automated storage and retrieval systems are computer controlled systems for (*storing / handling*) in a (*warehouse / maintenance facility*) that usually require (*manual labour / automated operations*).

Exercise 13. Decipher the abbreviations using text 1.

STP, PTS, VLM, AS / RS, ULS.

Exercise 14. Speak on:

1. The functions of material flow in a warehouse based on the illustration given above.
2. Material handling within a warehouse.

Exercise 15. Practice the pronunciation of the following words repeating after the teacher:

counter, balance, aisle, haul, throttle, steer, cushion, tire, turret, height, width, stationary, convert.

Exercise 16. Memorize the basic terminology to text 2.

lift capacity – вантажопідйомність
powered pallet truck – самохідний палетний навантажувач
counter-balance forklift truck – вилковий навантажувач із противагою
reach truck – навантажувач із висувними вилами
narrow aisle truck – вузькопрохідний штабелеукладач
hand pallet truck – ручний гідравлічний візок
turret truck – навантажувач із обертовою платформою
jack – підймальний пристрій; домкрат
to haul pallet – перевозити палети (піддони)
throttle – дросель
to steer – керувати (автомобілем)

to swing – повертати, вертїти
dead man – підпір, опора
dead man's switch – аварійний вимикач (розмикач); аварійне блокування; аварійна педаль; аварійне гальмо
brake – гальмо
outrigger – виносна опора
solid cushion tire – пневматична, суцільноліта шина
swing mast truck – навантажувач із висувним обертовим вантажопідйомником
side shift – бокове зміщення (вил)
curtain-sided trailer – шторно-бортовий причіп
clamp – затискач; затискувач
handling – вантажно-розвантажувальні роботи
slip sheet – прокладний лист (що використовується замість піддону)
fork carriage blade – каретка вил
push-pull – двотактний, пушпульний
crane attachment – стріла автовантажувача

Exercise 17. Read and translate test 2.

Text 2. Warehouse Handling Equipment

Warehouse equipment ranges from those used to move the products, such as mechanical handling equipment (MHE) like fork-lift trucks, pallets, and equipment used for storage of products, such as racking and shelving. The correct choice of equipment for a specific unique operation is an important decision to ensure effective and efficient operations.

The forklift truck is the “work horse” of most stores and warehouses. They are available in enormous variety, beyond their lift capacity and lift heights. In the warehouses with large-scale operations, they use specialized equipment (Fig. 6), for instance, powered pallet (*a*), counter-balance (*b*), reach (*c*) and narrow aisle trucks (*d*). In smaller operations, a hand pallet (*e*) or a counter-balance truck is perhaps the only option.

A powered pallet truck or a powered pallet jack allows lifting and moving heavier and stacked pallets. These generally contain a platform for the user to stand while hauling pallets around a warehouse or loading/unloading trucks. The powered pallet truck is generally moved by a throttle on the handle to move forward or in reverse and steered by

swinging the handle in the intended direction. Some contain a type of dead man's switch rather than a brake to stop the machine quickly or leave the machine while it is in use, but it is mostly used in emergencies. The pallet truck can be used for horizontal pallet transportation, loading/unloading and order picking applications. They are productive and efficient with a focus on safety and ease of use.



a



b



c



d



e

Fig. 6. Warehouse specialized equipment: *a* – powered pallet truck; *b* – counter-balance truck (CBT); *c* – reach truck (RT); *d* – narrow aisle truck (NAT); *e* – hand pallet truck

Counter-balance trucks (CBTs) are the most common type of forklift truck and are available with any of the fuel options. They need wide aisle widths as load is carried in front of the forklift truck on the fork blades.

Reach trucks (RTs) operate in narrower aisles and were specifically designed for pallet racking. They consist of out-riggers at the front with telescoping “reaching” fork blades. The reach truck is a loading device that is used for arrangement of supplies and finished goods on pallets inserted into tall shelving structures. The truck provides safe and easy retrieval of the loaded pallets that are not required for immediate use. Reach trucks are only available with battery power and are fitted with solid cushion tires for indoor operation on level surfaces.

Narrow aisle trucks (NATs) operate in very narrow aisles using battery power and are of two basic types (Fig. 7):



Fig. 7. Basic types of narrow aisle trucks:
a – swing mast truck; *b* – turret truck

Swing mast trucks (*a*) are like a standard reach truck but have a mast that swings through 90 degrees in one direction only, while the truck remains stationary.

Turret trucks (*b*) have an additional mast that turns through 90 degree in either direction.

In addition to these base types of forklift truck, a wide range of attachments and optional equipment can also be fitted. For example:

- Side shifts allow the fork carriage blades to slide left or right enabling two pallets to be lifted / moved at the same time. They are widely used, for example, with high-frequency unloading / loading of pallets using CBTs from ground level access to the side of curtain-sided trailers.

- Clamps of various types such as carton clamps, paper roll clamps, drum clamps. They “clamp round” the product enabling a more secure, easier and faster handling.
- Slip sheet attachments where a slip sheet (a sheet of cardboard or plastic) is used instead of a more expensive pallet. The attachment has a push-pull mechanism fixed onto the slip sheet and pulls the load on the blade platform. The procedure is reversed for unloading. Slip sheets are very useful for closed circuit operations.
- Crane attachments (Fig. 8) convert a CBT into a crane.



Fig. 8. Crane attachment

Exercise 18. Answer the questions on text 2.

1. How does warehouse equipment range?
2. Why is a correct choice of warehouse equipment important?
3. What forklifts are used in warehouses with large-scale operations?
4. What forklifts are suitable for smaller operations?
5. What is a powered pallet truck designed for?
6. Will you describe its structure?
7. Where can a counter-balance truck operate? Why?
8. What does a reach truck consist of?
9. What is it fit for?
10. What are basic types of a narrow aisle truck? Provide details.
11. Will you name attachments to and optional equipment for a forklift and what is their intended purpose?

Exercise 19. Find in text 2 English equivalents of the following terms.

Навантажувач із висувними вилами; навантажувач вилковий із противагою; вилковий автовантажувач; вантажопідйомність; керувати (автомобілем); самохідний палетний навантажувач; висота підйому; вузькопрохідний штабелеукладач; перевозити

палети (піддони); дросель; ручний гідравлічний візок; повертати; виносна опора; аварійний вимикач (розмикач); упор; гальмо; пневматична, суцільнолита шина; горизонтальна поверхня; навантажувач із висувним обертовим вантажопідійомником; навантажувач із обертовою платформою; шторно-бортовий причіп; бокове зміщення вил; затискач; стріла автовантажувача; прокладний лист, що використовується замість піддону.

Exercise 20. Give Ukrainian equivalents of the following words and words combinations.

To steer; clamp; throttle; crane attachment; slip sheet; side shift; brake; solid cushion tire; dead man's switch; outrigger; hand pallet truck; counter-balance forklift truck; narrow aisle truck; reach truck; powered pallet truck; swing mast truck ; turret truck; curtain-sided trailer.

Exercise 21. Match the definitions with proper terms.

Definitions	Terms
1. A small industrial vehicle with a power-operated pronged platform that can be raised and lowered for insertion under a load to be lifted and moved	a) narrow aisle truck
2. Safety feature that turns off a machine if the operator experiences a problem	b) reach truck
3. A forklift capable of picking in very narrow aisles	c) throttle
4. A forklift operating in narrower aisles and was specifically designed for pallet racking	d) swing mast truck
5. A device that controls the quantity of fuel or fuel and air mixture entering an engine	e) dead man's switch
6. A lift truck with the mast that swings through 90 degrees in one direction only, while the truck remains stationary	f) counter-balance forklift
7. A very narrow aisle truck with the forks mounted on an additional mast that turns through 90 degree in either direction	g) pallet jack

8. A thick rubber ring, often filled with air around the outer edge of the wheel of a vehicle allowing the vehicle to stick to the smooth solid surfaces
9. A forklift which is generally used to transport heavy objects
10. A tool used to lift and move pallets
11. A projecting frame extending laterally beyond the main structure of a vehicle or a machine, or an aircraft to stabilize the structure or support an extending part.
- h) forklift truck
- i) outrigger
- j) tire
- k) turret truck

Exercise 22. Write out of text 2 the words that can function both as nouns and verbs. Translate them.

Model: work – робота; працювати

Exercise 23. Fill in the blanks with the appropriate words given in the box. You may use one word more than once.

powered pallet, fuel, warehouse equipment, slide, slip sheet, turret, horizontal, side shifts, fork blades, mast, hand pallet, forklift truck, fork carriage, throttle, out-riggers, counter-balance, reach

1. The ... is the “work horse” of most stores and warehouses. 2. ... is classified into mechanical handling, racking and shelving equipment. 3. Large warehouses operate ... , ... and ... trucks. 4. A ... truck is fit for smaller operations. 5. The ... truck is generally moved by a ... on the handle to move forward in the intended direction, and is used for ... pallet transportation. 6. Counter-balance trucks are available with any ... option and carry load on the 7. A ... consists of ... at the front with telescoping “reaching” 8. A ... truck has an additional ... that turns through 90 degrees in either direction. 9. A ... attachment is used instead of a more expensive pallet. 10.... allow the ... blades to ... left or right.

Exercise 24. Match the beginnings (1-8) with the endings (a-h) to complete the sentences.

1. The forklift trucks are available in enormous variety beyond... a) on pallets inserted into tall shelving structure.

- | | |
|---|--|
| 2. A powered pallet truck allows... | b) high-frequency unloading / loading of pallets |
| 3. A dead man's switch ... | c) solid cushion tires for indoor operation on level surfaces. |
| 4. Side shifts are used with... | d) a more secure, easier and faster handling of products |
| 5. Narrow aisle trucks operate... | e) their lift capacity and lift heights. |
| 6. Clamps enable ... | f) is mostly used in emergencies. |
| 7. Reach trucks arrange supplies and finished goods ... | g) lifting and moving heavier and stacked pallets. |
| 8. Reach trucks are fitted with ... | h) in very narrow aisles using battery power. |

Exercise 25. Memorize the basic terminology to text 3.

block stacking – складування блоками, вкладання блоками

keg – невелика бочка

robust product – небитка, міцна продукція

throughput – пропускна здатність (спроможність)

double-deep racking – стелаж подвійної глибини

pallet flow rack – гравітаційний стелаж

live – 1) діючий; 2) швидкий

occupancy – завантаженість; зайнятість

charge end – бік завантаження

single-lane – однорядний

push-back rack – фронтальний глибинний гравітаційний стелаж

drive-in rack – прохідний стелаж

drive-thru rack – в'їздний, під'їздний стелаж

cost-effective – прибутковий, рентабельний, із найменшими витратами; ощадливий; економний

cantilever rack – консольний стелаж

Exercise 26. Read and translate text 3.

Text 3. Storage Equipment

The storage-system design or concept determines the type of storage equipment to be used. In turn, the choice of pallet racks, shelving and storage machines add a new consideration to calculating the height of the building.

When the warehouse height is reasonably low and budgets are tight, block stacking is the most common method of storing large quantities of stock-keeping units (SKU). The goods are packed in unit loads and stacked on the floor to their maximum safe height. This method is also used when products cannot be palletized or pallet racked. Typical products stored in this way include white goods, such as washing machines and refrigerators, kegs, cans and bottles. Block stacking is a cheap way to store robust products with a large number of units per SKU.

However, the block stacking method experiences a number of disadvantages. These include:

Access. Sufficient space needs to be allocated for forklift trucks to access each stack.

Damage. The items at the bottom can be crushed by the weight of the items above.

Stock rotation. Unless the product can be accessed at both ends of the stack, items can only be dispatched on a LIFO (last in, first out) basis.

Poor space utilization as stock does not move quickly through the warehouse.

Wide aisle pallet racking is the most widely used system for storing palletized unit loads. Here each pallet is individually supported and independently accessible. Pallet racking arranged in a wide aisle pattern, a minimum of 2.5 metres wide aisles, requires no specialized handling equipment. A standard counter balance truck can be used in aisles 3.5 to four metres wide. Reach trucks can work in aisles only 2.5 metres wide. Racking arranged in this way gives high quality storage but may only utilize 40% of the available floor space, the rest being aisles. Fast throughput and easy loading and unloading make this type of storage extremely popular.

Double-deep racking (Fig. 9) stores products up to four pallets deep, allowing for rapid dispatch of large single-SKU orders.

The pallets remain accessible from the same aisle. The system does not require special extendable forklifts, but wider aisles. Speed of access is slower.



Fig. 9. Double-deep racking

The advantage of the double-deep racking is that fewer aisles are needed that results in a more efficient use of floor space.

Pallet flow rack (Fig. 10) is a high-density live storage system. Unit loads are placed on a conveyor or wheel track at the charge end of a sloping lane and are gravity fed toward the retrieval end. Typically, the pallet flow rack is supported by a modified pallet rack system in single-lane wide bays. Lanes vary from 2 to over 20 pallets deep. The pallet live storage offers the following advantages:

- Each vertical and horizontal storage lane stores a different SKU.
- Occupancy level is as high as 85%-90%.
- Minimal number of aisles, aisle width, and travel within the warehouse.
- Unlimited storage heights when storage and retrieval (S/R) machines are used.
- Product and equipment damage is virtually eliminated.
- Improved security.
- Guaranteed first-in/first-out (FIFO).

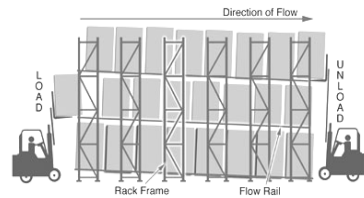


Fig.10. Pallet flow / live storage

The push-back racking system (Fig. 11) works by placing pallet loads on a series of nesting carts fed forwards by gravity on rigid structural steel rails.

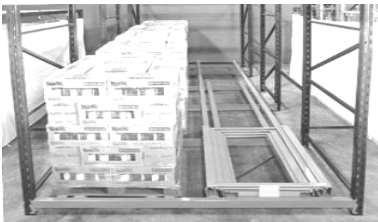


Fig. 11. Push-back racking

The advantage of the push-back racking is that each level in the “block stack” can be accessed individually. The pick-back racking is typically constructed between three and five pallets deep. It applies the LIFO principle. The goods are loaded and removed on one side only.

The drive-in / thru rack system (Fig. 12) is a cost-effective solution to high-density storage. The system has rails running the depth of the rack for pallet placement. The Drive-In Rack loads and retrieves from the same side creating Last-In-First-Out (LIFO) inventory retrieval organization. Drive-Thru Rack loads from one side and retrieves from the other thus creating First-In-First-Out inventory retrieval (FIFO); forklifts can enter from either aisle.

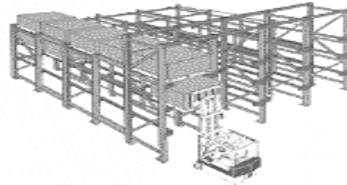


Fig. 12. Drive-In / Thru Racking

Cantilever racks (Fig. 13) are generally designed for the safe and organized storage of long and heavy loads like piping and lumber. Compared to standard pallet racks, cantilever racks are:



Fig. 13. Cantilever rack

- Easier to use: With no front column in the way, cantilever racks are faster to load and unload, lowering handling time and costs.

- More flexible: Loads may be placed anywhere along the entire length of a row on a cantilever rack.

- More selective: Any load or storage slot is immediately accessible.

- More economical: Both reduced handling times and increased space utilization make cantilever racks more cost-efficient. Additionally, cantilever racks become more economical as load length increases, while standard pallet racks increase in costs.

- More adaptable: Cantilever racks can store nearly any type of load. They are especially useful for storing long, bulky or oddly-shaped loads.

Exercise 27. Answer the questions on text 3.

1. What does the storage-system concept determine?
2. What storage system is best suited for low height warehouses?
3. What does it provide?
4. Will you name its weaknesses?
5. What does wide aisle pallet racking offer?
6. How are products stored under the double-deep

racking system? 7. What are its advantages? 8. Why is the pallet flow rack considered a high-density storage system? 9. What advantages does it have? 10. What is push-back racking system based on? 11. What does the drive-in/thru rack system stand for? 12. Will you compare standard pallet racks to cantilever racks?

Exercise 28. Find in text 3 English equivalents of the following terms.

Стелаж подвійної глибини; фронтальний глибинний гравітаційний стелаж; місце, ділянка; асортиментна позиція; пропускна здатність; в'їзний стелаж; гравітаційний стелаж; складування блоками; небитка продукція; вантажно-розвантажувальні роботи; невелика бочка; сторона завантаження; консольний стелаж; однорядний.

Exercise 29. Give Ukrainian equivalents of the following words and word combinations.

Shelving; to palletize; stock rotation; to dispatch; wide aisle pallet racking; extendable forklift; sloping lane; gravity fed; bay; to stage load; piping; lumber, cost-efficient; oddly-shaped load.

Exercise 30. Match the definitions with proper terms.

Definitions	Terms
1. Identification, usually alphanumeric, of a particular product that allows it to be tracked for inventory purposes	a) robust product
2. The racking system that stores products up to four pallets deep, allowing for rapid dispatch of large SKU orders	b) pallet flow racking
3. Load placement on a series of nesting carts fed forwards by gravity on rigid structural steel rails	c) wide aisle pallet racking
4. Load storage on warehouse floor in lanes or blocks	d) stock-keeping unit
5. Coordination and integration of loading / unloading operations and movement of materials or goods over short distances	e) double-deep racking
6. A thing that doesn't break easily	f) drive-in / thru racking

- | | |
|--|-----------------------|
| 7. Productivity of a machine, procedure, process or system over a unit period, such as output per hour, number of orders shipped, etc. | g) push-back racking |
| 8. A road both directions when vehicles meet one must pull off the road to let the other pass | h) block stacking |
| 9. The racking system where each pallet is individually supported and independently accessible | i) cantilever racking |
| 10. The racking system where load is stored at one end and retrieved at the other | j) handling |
| 11. A steel storage rack with long arms extending from a metal framework designed to store long or bulky items | k) throughput |
| 12. Rack system moves full pallets with heavy-duty skate wheels and gravity. | l) single-lane |

Exercise 31. Say whether the following statements are true or false.

Correct the false ones.

1. The load in block stacking is stored up to four pallets deep.
2. Double-deep racking needs wide aisles.
3. Wide aisle pallet racking slows down loading and unloading operations.
4. Pallet flow racking is based on the FIFO principle.
5. The occupancy level in pallet flow racking is lower than in block stacking.
6. Under the drive-in / thru rack system load is placed and retrieved from one side only.
7. Cantilever racks become more economical as load length increases, while standard pallet racks increase in costs.
8. In the cantilever racking, load may be placed anywhere along the entire length of a row.

Exercise 32. Find in text 3 synonyms for the following words:

computation, altitude, storehouse, funds, assemblage, pile, frame, barrel, reachable, use, passage, lengthened, compactness, trolley, timber, fetch, economical.

Exercise 33. Decipher the abbreviations using texts 2 and 3.

CBT, SKU, RT, LIFO, NAT, S/R, MHE, FIFO.

*Exercise 34. Translate the sentences with modal verbs **shall, should, ought to, will, would, may, need**. Explain the meaning of the modal verbs using the clues in the box.*

advice, recommendation; prediction; obligation; instant decision; necessity; strong obligation; future possibility; asking permission

1. Among a wide variety of operations we shall consider an advanced shipping notice, documents of title. 2. The warehouse receipt need not be in any particular form, but must contain the information about the location of the warehouse and the place where the goods are stored, etc. 3. Order-picking function may include packaging of individual items or assortments. 4. The goods received will be delivered to the consignee or to any other specified person. 5. The consignee should only present identification to claim the goods. 6. Would the shipper's order be bought, sold or traded while goods are in transit? 7. The receipt should produce an OS&D report that stands for over, short and damages. 8. The warehouse receipt ought to show transfer of ownership for immediate delivery or for delivery at a future date.

Exercise 35. Work in pairs. Discuss the following situations and find an optimal solution to the problems.

Situation 1: The production control manager at a major manufacturer of communications equipment explains that the organization remains focused on developing wireless technology. It also operates a world-class manufacturing facility.

Problem: With over 2.5 million square feet of manufacturing and warehousing space, there is a mobility challenge. The people who are walking or driving around the warehouse selecting material have been relying on batched information that was at least 24 hours old.

Situation 2: A glass manufacturer supplying the automotive industry ships to repair and installation facilities from a central warehouse that contains hundreds of different sizes, colours, and shapes of windows, windshields, and automotive glass in inventory.

Problem: They were losing customers because their distribution centre could not meet delivery requirements on time. With hundreds of glass parts to choose from, workers found it difficult to pick the right type of glass when required. The situation was complicated when they hired temporary works during peak demand seasons.

Exercise 36. Speak on:

1. Mechanical handling equipment.
2. Storage equipment.
3. Handling operations.

Unit 14. TRANSPORTATION LOGISTICS

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

Percent, diary, beverages, consumer, enable, versatile, requirement, ratio, cruising, congestion, appreciable, coastal, accessibility, tremendously, navigable.

Exercise 2. Memorize the basic terminology to text 1.

motor carrier – автотранспортна компанія

manufactured goods – промислові товари

pickup – 1) завантаження, взяття на борт (*вантаж*); 2) вивезення (*вантаж*)

truckload (TL) – партія вантажу для перевезення вантажівками

haul – перевезення; рейс

versatile – 1) різнобічний; 2) універсальний

metropolitan – столичний; що стосується столиці або великого центру

track facilities – залізничні колії / рейки

rail siding – залізнична гілка; запасна колія

damage ratio – коефіцієнт пошкодження

emergency service – аварійна служба

time-in-transit – час транспортування

cruising speed – крейсерська швидкість; економічна швидкість

Exercise 3. Read and translate text 1.

Text 1. Carrier Characteristics and Services

Air. Although increasing numbers of shippers are using air freight for regular service, most view air transport as a premium, emergency service because of its higher cost. But when an item must be delivered to a distant location quickly, air freight offers the quickest time-in-transit of any transport mode.

Modern aircraft have cruising speeds of 500 to 600 miles per hour and are able to travel internationally. The average length of haul domestically is more than 800 miles, although international movements may be thousands of miles.

To a great extent, domestic air freight competes directly with motor carriers, and to a much lesser degree with rail carriers. Where countries are separated by large expanses of water, the major competitor for international air freight is water carriage.

Air carriers generally handle high-value products. Customer service considerations may influence the choice of transport, but only if service issues are more important than cost issues.

Air transport provides frequent and reliable service and rapid time-in-transit, but terminal and delivery delays and congestion may appreciably reduce some of this advantage. On a point-to-point basis over short distances, motor transport often matches or outperforms the total transit time of air freight. It is the *total* transit time that is important to the shipper rather than the transit time from terminal to terminal.

Despite the limitations of air carriers, the volume of air freight has grown over the years and it shows continuing growth even in the face of higher rates. Undoubtedly, as customers demand higher levels of service and as international shipments increase, air freight will have a potentially greater role in the distribution plans of many firms.

Motor. Motor carriers transport over 75 percent of the tonnage of agricultural products and consumer goods (fresh and frozen meat, dairy products, bakery products, confectionery items, beverages), manufactured products (amusement, sporting, and athletic goods; toys; farm machinery; television sets; carpets; clothing; drugs; office equipment; furniture). Motor carriage offers fast, reliable service with little damage or loss in transit. Many motor carriers, particularly those involved in just-in-time programs, operate on a scheduled timetable. This results in very short and reliable transit times.

Domestically, motor carriers compete with air for small shipments and rail for large shipments. Efficient motor carriers can realize greater efficiencies in terminal, pickup, and delivery operations, which enables them to compete with air carriers on **point-to-point service** for any size shipment if the distance involved is 500 miles or less. Motor carriers compete directly with railroads for truckload (TL) shipments. However,

rail is the dominant mode when shipment sizes exceed 100,000 pounds. Motor carriers dominate the market for smaller shipments.

Motor carriers are very flexible and versatile. Their flexibility is made possible by a network of roads, thus enabling them to offer point-to-point service between almost any origin-destination combination. This gives motor carriers the widest market coverage of any mode. Motor carriers are versatile because they can transport products of varying sizes and weights over any distance.

Motor carriage has become an important part of the logistics networks of most firms because the characteristics of the motor carrier industry are more compatible than other transport modes with the service requirements of the firms' customers. As long as it can provide fast, efficient service at rates between those offered by rail and air, the motor carrier industry will continue to prosper.

Rail. In countries such as Austria, the People's Republic of China, and the former republics of the Soviet Union and Yugoslavia, rail is the dominant mode of transport. In the United States, most of the freight (in dollar terms) once shipped by rail has been shifted to motor carriers.

A ton-mile is one ton of freight moving a distance of one mile. Railroads have an average length of haul of approximately 763 miles. While rail service is available in almost every major metropolitan centre in the world and in many smaller communities, the rail network is not nearly as extensive as the highway network.

Rail transport lacks the versatility and flexibility of motor carriers because it is limited to fixed track facilities. As a result, railroads – like air, water, and pipeline transport – provide terminal-to-terminal service rather than point-to-point service unless companies have a rail siding at their facility, in which case service would be point to point.

Rail transport generally costs less (on a weight basis) than air and motor carriage. For many shipments, rail does not compare favourably with other modes on loss and damage ratios. Compared to motor carriers, it has disadvantages in terms of transit time and frequency of service.

Many trains travel on timetable schedules, but depart less frequently than motor carriers. If a shipper has strict arrival and departure requirements, motor carriers usually have a competitive advantage over railroads.

Exercise 4. Answer the questions on text 1.

1. Where is air transport a major competitor? 2. What makes air transport less convenient? 3. What types of goods do motor carriers transport? 4. Due to what reasons can motor carriers propose short transit times? 5. In what services are motor carriers more effective? 6. What is the average length of haul for motor carriers? 7. What causes the flexibility of motor carriers? 8. Why are motor carriers versatile? 9. What is a ton-mile? 10. How is rail transport limited? 11. What services does rail transport provide? 12. What are disadvantages of using rail transport?

Exercise 5. Give English equivalents.

Сільськогосподарські продукти; промислові товари; споживчі товари; надійне обслуговування; пошкодження; вантажовідправлення; автотранспортна компанія; завантаження; конкурувати; домінувати на ринку; перевезення; універсальний; столичний; магістраль; залізничні колії; залізнична гілка; коефіцієнт пошкодження; аварійна служба; економічна швидкість; конкурентна перевага; всередині країни; перевезення від пункту відправлення до пункту призначення; працювати за розкладом.

Exercise 6. Say whether the following statements are true or false. Correct the false ones.

1. Motor carriers compete with air for large shipments and rail for small shipments. 2. Motor carriers compete directly with railroads for truckload shipments transported up to 500 miles. 3. Compared to motor carriers, rail transport has disadvantages in terms of transit time and frequency of service. 4. On a point-to-point basis over short distances, water transport often matches or outperforms the total transit time of air freight. 5. Generally, air is the dominant mode in international shipping.

*Exercise 7. Translate the following sentences paying attention to verbs **must**, **be** and **have** in the modal meaning.*

1. American motor carriers are to offer a lot after developing the network of highways. 2. The government had to develop plans for better transportation services. 3. It is obvious that CIS countries will have to face up to a great challenge – construction of new gas pipelines within the next decade. 4. The fact that motor carriers have to use other routes

is having a major effect on us. 5. The certification centre is to inspect what they are doing in the near future. 6. The real problem is to ensure the most reliable means of transport for manufactured goods. 7. High-value commodities are to be transported by air due to service issues. 8. The buyer's warehouses were situated in the same country, so inland waterway had to be used for delivery. 9. Pipelines are to transport only a limited number of products. 10. It must be a mistake of shipping company not to deliver slurry products in containers. 11. All documents needed for truck transportation are to be prepared beforehand. 12. The shipment must have been sent to the wrong destination.

Exercise 8. Translate the following sentences into English.

1. Автотранспортні перевізники перевозять сільськогосподарську продукцію, промислові та споживчі товари. 2. У середині країни автотранспортні перевізники конкурують із авіаперевізниками за невеликі партії вантажів та із залізничними перевізниками – за великі партії. 3. Автотранспортні перевізники надають гнучкі та універсальні послуги з перевезень товарів різних розмірів та ваги на будь-які відстані. 4. Залізничні перевізники обмежені стаціонарними залізничними коліями. 5. Порівняно з автоперевезеннями, залізничні перевезення мають такі недоліки, як довший час транспортування і частотність перевезень. 6. Повітряний транспорт забезпечує надійні послуги і швидке транспортування, але перевантаження аеропортів та затримка доставки можуть зменшити цю перевагу.

Exercise 9. Match the definitions with proper terms.

Definitions	Terms
1. The receiver of goods, i.e. a freight shipment, usually the buyer	a) consolidation
2. Goods shipped to an overseas agent when an actual purchase has not been made, but when the consignee agrees to sell the goods	b) consolidator's bill of lading
3. The shipper of goods, or shipper of a transportation movement	c) consignment
4. Collecting smaller shipments to form a larger quantity in order to realize lower transportation rates	d) consolidator
5. The location where consolidation takes place	e) consignee

6. An enterprise that provides services to group shipments, orders, and/or goods to facilitate movement f) transit time
7. A bill of lading issued by a consolidator as a receipt for merchandise that will be grouped with cargo obtained from other shippers g) consolidation point
8. The total time that elapses between a shipment's delivery and its pickup. h) consignor

Exercise 10. Memorize the basic terminology to text 2.

intermodal – інтермодальний (пов'язаний із використанням різних видів транспорту)

trailer – автопричіп, трейлер

flatcar – вагон-платформа

trailer-on-flatcar (TOFC) – трейлер на залізничній платформі, контрейлер

container-on-flatcar (COFC) – контейнер на залізничній платформі

penalty – штраф, стягнення

truck trailer – вантажівка з причіпом

flatbed railcar – залізничний вагон із безбортовою платформою

to stack – складати в штабель

double stacked – розташований один над одним

single railcar – одинарний вагон

sorting yard – сортувальний майданчик

idle – невикористаний, незайнятий

unit train – спеціальний потяг для перевезення продукції одного перевізника

to lease – 1) здавати в оренду; 2) орендувати, винаймати

to recapture – взяти назад

deregulation – дерегуляція

piggyback service – контрейлерне обслуговування

axle – вісь

long-haul – далекомагістральний

roadtrailer – трейлер, пристосований до пересування по шосе і залізницею (має два набори коліс)

trailer train – потяг тракторних причепів

rubber truck tire – шина вантажного автомобіля

to retract – втягувати(ся), забирати(ся)

switching time – час заміни

fuel efficiency – ефективна витрата пального

to outweigh – переважати, бути більш значним, значнішим

to slash – скорочувати

roadbed – полотно дороги

through-train – потяг прямого сполучення; транзитний потяг

INCOTERMS (International Commercial Terms) – Міжнародна торговельна термінологія, міжнародні комерційні (торговельні) умови

Exercise 11. Read and translate text 2.

Text 2. Intermodal Services

In addition to the five basic modes of transport, a number of intermodal combinations are available to the shipper. The more popular combinations are trailer-on-flatcar (TOFC) and container-on-flatcar (COFC), which offer the economy of rail or water movements combined with the flexibility of trucking. TOFC and COFC eliminate much of the inventory penalty associated with rail transportation.

Truck trailers or containers are delivered to the rail terminals, where they are loaded on flatbed railcars. Containers may be single or double stacked; that is, one or two containers on a single railcar. At the destination terminal, they are off-loaded and delivered to the consignee.

Railroads suffer in comparison to motor carriers in equipment availability. Railroads use their own as well as each other's railcars, and at times this equipment may not be located where it is most needed. Railcars may be unavailable because they are being loaded, unloaded, moved within railroad sorting yards, or undergoing repair. Other cars may be standing idle or lost within the vast rail network.

A number of developments in the rail industry have helped to overcome some of these utilization problems. Advances have included computer routing and scheduling; the upgrading of equipment, roadbeds, and terminals; improvements in railcar identification systems; railcars owned or leased by the shipper; and the use of unit trains or dedicated through-train service between major metropolitan areas (i.e., nonstop shipments of one or a few shippers' products).

Railroads own most of their car fleet, with the remainder leased or owned by shippers. Shippers that own or lease cars are typically heavy

users of rail transport and are especially sensitive to railcar shortages that occur because of unique market or competitive conditions.

During the late 1980s, railroads recaptured some of the traffic previously lost to trucks, pipelines, and water carriers. The relative energy-efficiency advantage of railroads over motor carriers, deregulation of the rail industry, and the continuing trend toward consolidation through mergers and acquisitions hold promise for a brighter future for this transport mode.

Intermodal movements combine the cost and/or service advantages of two or more modes in a single product movement. Most logistics executives refer to TOFC and COFC as piggyback service (Fig. 1).

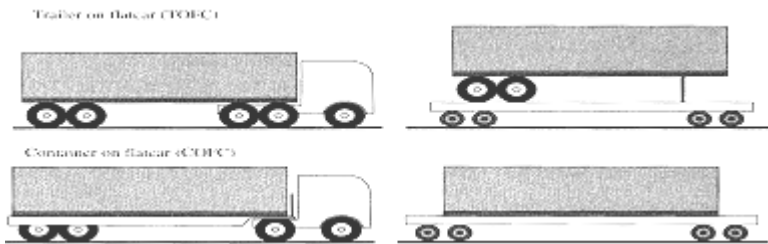


Fig. 1. Piggyback service

In piggyback service, a motor carrier trailer or a container is placed on a rail flatcar and transported from one terminal to another. Axles can be placed under the containers, so they can be delivered by a truck. At the terminal facilities, motor carriers perform the pickup and delivery functions. Piggyback service thus combines the low cost of long-haul rail movement with the flexibility and convenience of truck movement.

An innovative intermodal concept was introduced in the late 1970s. Roadrailers, or trailer trains as they are sometimes called, combine motor and rail transport in a single piece of equipment (Fig.2).



Fig. 2. Roadrailer

The roadrailer resembles a conventional motor carrier (truck) trailer. However, the trailer has both rubber truck tires and steel rail wheels. Over highways, tractor power units transport the trailers in the normal way, but

instead of placing the trailer on a flatcar for rail movement, the wheels of the trailer are retracted and the trailer rides directly on the rail tracks.

The advantages of this intermodal form of transport are that rail flatcars are not required and that the switching time to change wheels on the trailer is less than loading and unloading the trailer from the flatcar. The major disadvantages of roadtrailers are the added weight of the rail wheels, which reduces fuel efficiency and results in higher movement costs in addition to the higher cost of the equipment. The disadvantages have tended to outweigh the advantages, resulting in very low usage of this intermodal option. If technology improvements can reduce the cost of this transport option, usage is likely to increase.

Many other intermodal combinations are possible. In international commerce, for example, the dominant modes of transportation are air and water. Both include intermodal movements through the use of containers and truck trailers. Combinations of air-sea, air-rail, truck-sea, and rail-sea are used globally.

As an example: By shipping cargo by ocean from Japan to Seattle, then transferring it to a direct flight to Europe from Seattle-Tacoma Airport, Asian exporters reap substantial benefits. They can cut their transit times from 30 days for all-water service to about 14 days, and slash freight costs by up to 50 percent compared with all-air service.

Exercise 12. Answer the questions on text 2.

1. What are the most common intermodal combinations? 2. How are truck trailers and containers handled? 3. Why does equipment availability problem exist? 4. What advances helped to overcome railroad transportation problems? 5. What resulted in recapturing of the traffic by railroads during the late 1980? 6. What are the advantages and disadvantages of piggyback service? 7. What is a roadtrailer? 8. What are the dominant modes of transportation in international commerce?

Exercise 13. Give English equivalents.

Автопричіп; контрейлер; контейнер на залізничній платформі; вантажівка з причіпом; залізничний вагон із безбортовою платформою; одинарний вагон; сортувальний майданчик; поглинання; придбання; контрейлерне обслуговування; вісь; далекомагістральний; трейлер, пристосований до пересування по шосе і залізницею; вагон-платформа; потяг тракторних причепів; шина вантажного автомобіля; потяг

прямого сполучення; здавати в оренду; повертати у свою власність; розташовувати один над одним; ефективна витрата пального.

Exercise 14. Say whether the following statements are true or false. Correct the false ones.

1. Containers may be single or double stacked. 2. Motor carriers suffer in comparison to railroads in equipment availability. 3. Railcars may be unavailable because they are being loaded, unloaded, moved within railroad sorting yards, or undergoing repair. 4. Railroads lease their car fleet from shippers. 5. Heavy users of rail transport are not sensitive to railcar shortages that occur because of unique market or competitive conditions. 6. In piggyback service, a motor carrier trailer or a container is placed on a flatbed railcar and transported from one terminal to another. 7. The trailer train resembles a conventional motor carrier (truck) trailer.

Exercise 15. Match the definitions with proper terms.

Definitions	Terms
1. Two or more motor carriers working together to haul the shipment to a destination	a) INCOTERMS
2. Transporting freight by using two or more transportation modes	b) intermodal transport unit (ITU)
3. Container, swap body or semi-trailer/goods road motor vehicle suitable for intermodal transport	c) trunk lines
4. International terms of sale developed by the International Chamber of Commerce to define sellers' and buyers' responsibilities	d) transportation mode
5. A facility where cargo is transferred from one mode of transportation to another, usually from ship or truck to rail	e) intermodal transportation
6. Terminology used to describe a truck trailer being transported on a railroad flatcar	f) intermodal container transfer facility
7. The method of transportation: land, sea, or air shipment	g) interline
8. Oil pipelines that are used for the long-distance movement of crude oil, refined oil, or other liquid products.	h) piggyback

Exercise 16. Translate the following sentences into English.

1. Крім п'яти основних видів перевезень існують перевезення з використанням різних видів транспорту. 2. Найпопулярнішими комбінаціями є контрейлери та контейнери на залізничній платформі, які роблять значно економічнішими залізничні перевезення у поєднанні з гнучкістю автоперевезень. 3. Трейлер або контейнер доставляються до залізничного терміналу, де вони завантажуються на вагон-платформу. 4. Одинарні та подвійні контейнери можуть розташовуватися один над іншим на одній платформі. 5. Часто залізничне обладнання може бути недоступним, оскільки вагони в цей час завантажуються чи розвантажуються на сортувальних майданчиках або ремонтуються. 6. Із розвитком залізничних перевезень поліпшувалося обладнання, полотно дороги, термінали; було введено маршрутування за допомогою комп'ютерів, використання потягів прямого сполучення між головними зонами, тобто беззупинкова доставка вантажів. 7. При контрейлерному обслуговуванні автопричіп або контейнер розміщується на вагоні-платформі і перевозиться від одного терміналу до іншого.

Exercise 17. Memorize the basic terminology to text 3.

title of goods – право власності (*на товар*)

quotation – ціна; котирування, курс

to revise – переглядати, переробляти

double-billing – подвійна бухгалтерія

ship's rail – під'їзний залізничний шлях до причалу

CFR (Cost and Freight) – ціна і фрахт

CIF (Cost Insurance Freight) – ВСФ (вартість, страхування і фрахт)

CIP (Carriage and Insurance Paid To) – перевезення і страхування, сплачені до (ПСО)

CTP (Carriage Paid To) – перевезення, сплачене до

DAF (Delivered at Frontier) – доставка товарів до кордону (ДАФ)

DAP (Delivered at Place) – поставка в місці призначення

DAT (Delivered at Terminal) – поставка на терміналі

DDP (Delivered Duty Paid) – поставлено в ... (зазначити місце призначення) зі сплатою мита

DDU (Delivered duty unpaidd) – доставлено без сплати мита (ДСМ)

DEQ (Delivered ex-Quay) – поставлено на причал в ...

DES (Delivered ex-Ship) – поставлено на борт судна в ...
EEI (Electronic Export Information) – електронна інформація про експорт
EXW (Ex-Works) – франко-завод
FAS (Free Alongside Ship) – вільно вздовж борту судна
FCA (Free Carrier) – франко-перевізник
FOB (Free On Board) – ФОб (вільно на борту)
demurrage – простій, затримка відправлення (*судна, вагона*)
detention – затримання, арешт
importer of record – відповідальний / офіційний імпортер

Exercise 18. Read and translate text 3.

Text 3. Incoterms

International Commercial Terms, known as “Incoterms”, are internationally accepted terms defining the responsibilities of exporters and importers in the arrangement of shipments and the transfer of liability involved at various stages of the transaction.

Incoterms *do not* cover ownership or the transfer of title of goods. It is crucial to agree on an Incoterm at the start of a negotiation/quotation of a sale, as it will affect the costs and responsibilities involved in shipping, insurance and tariffs. The new Incoterms 2010 rules were revised by the International Chamber of Commerce and became effective January 1, 2011. Four terms were eliminated (DAF, DEQ, DES, DDU) and two were added: Delivered at Place (DAP) and Delivered at Terminal (DAT).

The modifications affect obligations, risk transfer, and cost sharing for the seller and buyer, resulting in better clarification and application of the eleven (11) Incoterms, and consistent with the way global trade is actually conducted since the last update in 2000.

In any sales transaction, it is important for the seller and buyer to agree on the terms of sale and know precisely what is included in the sale price. Exporters should choose the Incoterm that works best for their company, but also be prepared to quote on other terms.

The 11 Incoterms consist of two groups and are listed below in order of increasing risk/liability to the exporter. Under the revised terms, buyers and sellers are being urged to contract precisely where delivery

is made and what charges are covered. This should avoid double-billing of terminal handling charges at the port of discharge. References to “ship’s rail” were taken out to clarify that delivery means “on-board” the vessel. Insurance, electronic documentation, and supply chain security are addressed in more detail, and gender-neutral language is now used.

Rules for Sea and Inland Waterway Transport:

FAS – Free Alongside Ship: Risk passes to buyer, including payment of all transportation and insurance costs, once delivered alongside the ship (realistically at named port terminal) by the seller. The export clearance obligation rests with the seller.

FOB – Free On Board: Risk passes to buyer, including payment of all transportation and insurance costs, once delivered on board the ship by the seller. A step further than FAS.

CFR – Cost and Freight: Seller delivers goods and risk passes to buyer when on board the vessel. Seller arranges and pays cost and freight to the named destination port. A step further than FOB.

CIF – Cost, Insurance and Freight: Risk passes to buyer when delivered on board the ship. Seller arranges and pays cost, freight and insurance to destination port. Adds insurance costs to CFR.

Rules for Any Mode or Modes of Transportation:

EXW – Ex Works: Seller delivers (without loading) the goods at disposal of buyer at seller’s premises. Long held as the most preferable term for those new-to-export because it represents the minimum liability to the seller. On these routed transactions, the buyer has limited obligation to provide export information to the seller.

FCA – Free Carrier: Seller delivers the goods to the carrier and may be responsible for clearing the goods for export (filing the EEI). More realistic than EXW because it includes loading at pick-up, which is commonly expected, and sellers are more concerned about export violations.

CPT – Carriage Paid To: Seller delivers goods to the carrier at an agreed place, shifting risk to the buyer, but seller must pay cost of carriage to the named place of destination.

CIP – Carriage and Insurance Paid To: Seller delivers goods to the carrier at an agreed place, shifting risk to the buyer, but seller pays carriage and insurance to the named place of destination.

DAT – Delivered at Terminal: Seller bears cost, risk and responsibility until goods are unloaded (delivered) at named quay, warehouse, yard, or terminal at destination. Demurrage or detention charges may apply to seller. Seller clears goods for export, not import. DAT replaces DEQ, DES.

DAP – Delivered at Place: Seller bears cost, risk and responsibility for goods until made available to buyer at named place of destination. Seller clears goods for export, not import. DAP replaces DAF, DDU.

DDP – Delivered Duty Paid: Seller bears cost, risk and responsibility for cleared goods at named place of destination at buyers disposal. Buyer is responsible for unloading. Seller is responsible for import clearance, duties and taxes so buyer is not “importer of record”.

INCOTERMS DO NOT...

determine ownership or transfer title to the goods, nor evoke payment terms; apply to service contracts, nor define contractual rights or obligations (except for delivery) or breach of contract remedies; protect parties from their own risk or loss, nor cover the goods before or after delivery; specify details of the transfer, transport, and delivery of the goods. Container loading is NOT considered packaging, and must be addressed in the sales contract. Incoterms are not law and there is NO default Incoterm!

Exercise 19. Answer the questions on text 5.

1. What does the EXW Incoterm mean? 2. What must sellers do under CIF? 3. What must buyers do under CFR? 4. What is the difference between CIF and CFR? 5. What must sellers do under FAS? 6. What must buyers do under FOB? 7. What does FCA mean? 8. What is the difference between CPT and CIP? 9. What is the seller responsible for under CIP? 10. What is the seller responsible for under CPT? 11. What is the buyer responsible for under CPT? 12. What is the buyer liable for under CIP?

Exercise 20. Match the terms with proper definitions.

Definitions

Terms

- | | |
|--|------------------|
| 1. Permission for an aircraft to take off or land at an airport | a) waterway |
| 2. Physical harm that impairs the value, usefulness, or normal function of something | b) free on board |

3. A river, canal, or other route for travel by water c) premise
4. A place for the storage of large quantities of equipment, food, or goods d) cost
5. Direct from the factory or place of manufacture e) clearance
6. Including or assuming delivery without charge to the buyer's named destination f) free alongside ship
7. Responsibility of the seller for arranging and paying for delivering goods to a carrier g) handling
8. An amount that has to be paid or spent to buy or obtain something h) depot
9. A previous statement or proposition from which another is inferred or follows as a conclusion i) ex-works
10. The packaging and labeling of something to be shipped. j) damage

Exercise 21. Complete the following sentences.

1. Under CIF the buyer is responsible for 2. Under CFR the buyer becomes 3. Under FAS seller must 4. Under FOB seller is responsible for 5. Under FCA seller must 6. EXW means the buyer 7. By Incoterms we mean 8. Under DDP the seller must 9. Under CIP buyers are liable for

Exercise 22. Match the terms with proper definitions.

Definitions	Terms
1. A permit from an authority to own or use something, do a particular thing, or carry on a trade	a) quay
2. A change or slight difference in condition, amount, or level, typically within certain limits	b) duty
3. A stone or metal platform lying alongside or projecting into water for loading and unloading ships	c) licence
4. A possibility of harm or damage against which something is insured	d) frontier
5. A line or border separating two countries	e) road
6. A payment levied on the import, export, manufacture, or sale of goods	f) ship

- | | |
|--|--------------|
| 7. A wide way leading from one place to another, especially one with a specially prepared surface which vehicles can use | g) risk |
| 8. A commodity, article, or service brought in from abroad for sale | h) clarify |
| 9. Make (a statement or situation) less confused and more comprehensible | i) import |
| 10. A large boat for transporting people or goods by sea. | j) variation |

Exercise 23. Say whether the following sentences are TRUE or FALSE according to the information in text 5. Correct the false statements.

1. CFR – as the seller you must arrange to clear the goods for export and are not then responsible for the goods only until they pass a ship's rail in the port of shipment. 2. CIF – the seller is responsible for the goods and all associated risks once they have been delivered over a ship's rail at the port of shipment. 3. Under the FAS Incoterm, as the seller you must complete all import documentation, arrange and be responsible for the carriage of goods to bring them alongside a ship at a named port of shipment. 4. FOB – as the buyer, the costs and risks associated with the goods only become your responsibility when the goods pass across a ship's rail. 5. All Incoterms beginning with 'F' – FCA, FAS and FOB – mean that the buyer is responsible for arranging and paying for delivering the goods to a carrier. 6. EXW means the seller minimizes their risk by making the goods available at the buyer's premises. 7. Incoterms are standard trade terms that set out buyer, seller and producer's responsibilities. 8. Both the Carriage Paid To (CPT) and Carriage and Insurance Paid To (CIP) Incoterms mean that the buyer is responsible for arranging and paying for delivery to a named place of destination. 9. Under CPT, as the seller you are responsible for choosing a warehouse and delivering the goods to them. 10. Under CIP the buyers are liable for the costs associated with the goods once they are delivered to the carrier. 11. Under DDP the seller must deliver the goods to a named destination and unload them.

*Exercise 24. Fill in the blanks with the prepositions: **about; at; before; by; for; under; until; with.***

1. They aim to avoid misunderstanding and are principally used in agreements ... the delivery of goods. 2. ... using Incoterms, consider the country of the buyer. 3. The Incoterm Ex-Works (EXW) means the seller minimizes their risk ... making the goods available ... their own premises. 4. The buyer is responsible ... the goods, and anything that happens to them having taken delivery of them. 5. The seller is responsible for the goods ... they reach a named place and enter the carrier's possession. 6. The arrangements ... the carrier can then be organized ... the buyer or seller on the buyer's behalf. 7. ... the FOB Incoterm, as the seller you are responsible ... delivering the goods to a carrier chosen ... the buyer.

Exercise 25. Translate into English.

1. Incoterms — це комплект міжнародних правил з тлумаченням найпоширеніших торговельних термінів у сфері зовнішньої торгівлі. 2. Ці міжнародні правила торгівлі є стандартними умовами договорів купівлі-продажу, які регламентують момент передачі права власності на товар і всіх пов'язаних із цим ризиків. 3. Інкотермс встановлюють правила, які регулюють питання, пов'язані з доставленням товарів від продавця до покупця. 4. Це передбачає власне перевезення та відповідальність за експортне й імпортне очищення товарів. 5. Ці правила визначають відповідального за сплату доставлення, митного оформлення та страхування ризиків на шляху транспортування товарів залежно від зазначених стандартних умов поставки. 6. Франко-перевізнак означає, що продавець доставить вантаж, що пройшов митне очищення, зазначеному покупцем перевізнику до названого місця. 7. Франко-завод означає, що продавець вважається таким, що виконав свої зобов'язання з постачання, коли він надасть товар у розпорядження покупцеві на своєму підприємстві чи в іншому зазначеному місці (наприклад, на заводі, фабриці, складі тощо). 8. Франко уздовж борту судна означає, що продавець виконав постачання, коли товар розміщений уздовж борту судна на причалі чи на ліхтерах у зазначеному порту відвантаження. 9. Продавець зобов'язаний оплатити витрати і фрахт, необхідні для доставлення товару в зазначений порт призначення, але ризик втрати чи ушкодження товару, як і будь-які додаткові витрати, що виникають після відвантаження товару, переходять від продавця до покупця.

Exercise 26. Match the definitions with proper terms.

Definitions	Terms
1. It is a user-defined unit containing goods (single or multiple units) and requires transportation from one location to another; it is complete when it arrives at the consignee's destination	a) shipping instructions
2. The through transport service from consignor to port of importation	b) shipment point
3. The date the shipment will be available for transportation	c) shipment
4. A specific location from where goods will depart for movement	d) door to door
5. An enterprise that fulfills the request for goods or services	e) shipper
6. A document detailing the cargo and the requirements of its physical movement	f) door to port
7. The through-transport of goods from consignor to consignee.	g) shipment available date

Exercise 27. Decipher the following Incoterms:

DAP, CPT, DAT, FAS, EXW, FCA, FOB, CFR, CIP, DDP, CIF.

Exercise 28. Match definitions with proper terms.

Definitions	Terms
1. The act of obtaining permission to import merchandise from another country into the importing nation	a) break bulk cargo
2. Same as Full Container Load, but in reference to motor carriage instead of containers	b) transshipment
3. Cargo that is shipped as a unit or package (for example: palletized cargo, boxed cargo, large machinery, trucks) but is not containerized	c) full truck load (FTL)
4. A vessel designed to handle break bulk cargo	d) tracking

5. The separation of a consolidated bulk load into smaller individual shipments for delivery to the ultimate consignee. The freight may be moved intact inside the trailer, or it may be interchanged and rehandled to connecting carriers e) customs clearance
6. The shipment of merchandise to the point of destination in another country on more than one vessel or vehicle. The liability may pass from one carrier to the next, or it may be covered by Through Bills of Lading issued by the first carrier f) break bulk vessel
7. Determining a shipment location during the course of a move g) full container load (FCL)
8. A carrier's system of recording movement intervals of shipments from origins to destinations h) break-bulk
9. A term used when goods occupy a whole container. i) tracing

Exercise 29. Speak on:

1. Modes of transportation and their characteristics.
2. Intermodal services.
3. Incoterms.

Unit 15. TRANSPORT DOCUMENTATION

Exercise 1. Memorize the basic terminology to text 1.

- bill of lading – коносамент
- bearer bill of lading – накладна на пред'явника
- combined transport bill of lading – коносамент на змішане (мультимодальне) перевезення
- house bill of lading – коносамент експедитора, внутрішній коносамент
- non-negotiable bill of lading – необоротний коносамент (*який не може передаватися іншій особі*)
- order bill of lading – ордерний коносамент
- received for shipment bill of lading – коносамент на вантаж, прийнятий для завантаження

shipped on board bill of lading – бортовий коносамент
short form bill of lading – коротка / скорочена вантажна накладна
straight bill of lading – іменний коносамент
blank – пропуск (незаповнене місце)
waybill – накладна
air waybill (AWB) – авіавантажна накладна
master air waybill (MAWB) – головна (консолідована) авіанакладна
house air waybill (HAWB) – експедиторська авіанакладна,
внутрішня авіанакладна
sea waybill – морська накладна
sample – зразок
freight forwarder – експедитор, експедиційне агентство
booking form – лист бронювання
invoice – рахунок-фактура
commercial invoice – комерційна фактура
certificate of origin (C/O) – сертифікат походження товару
insurance certificate – страховий сертифікат, свідоцтво про
страхування
packing list – пакувальний реєстр
negotiable instrument – оборотний інструмент (*інструмент, що
перебуває у вільному обігу*)
document of title – товаророзпорядчий документ
to consign – 1) передавати; 2) відправляти на консигнацію
equity – 1) власний капітал; 2) акціонерний капітал; 3) звичайна
акція
explicitly – точно, ясно
endorsement – індосамент, передавальний напис (*на векселі, чеку*)
to imply – 1) значити, означати; 2) розуміти; припускати
receipt – квитанція
dock receipt – докова квитанція
warehouse receipt – складська квитанція, розписка
issuer – емітент, особа яка випускає (*боргові зобов'язання*)
en route – дорогою; в дорозі; на маршруті
groupage shipment – комплектування окремих партій вантажу в
єдиний вантаж
railway consignment note – залізнична накладна
road consignment note – автодорожна накладна
CMR (Convention on the Contract for the International

Carriage of Goods by Road) note – товарно-транспортна накладна
mainland – континент
predominantly – переважно, зокрема
tracking number – номер відслідковування
consignor – вантажовідправник, адресант вантажу; консигнант
consigne – отримувач вантажу
consistent (with) – що узгоджується (з)
consolidated cargo – об'єднаний; консолідований вантаж
letter of credit (L/C) – акредитив
to itemize – 1) перераховувати по пунктах; 2) розбивати по позиціях
crate – ящик, тара для пакування
drum – циліндричний ящик або коробка
stationer – торговець канцелярськими товарами
port of embarkation – порт завантаження

Exercise 2. Read and translate text 1.

Text 1. Transport and Commercial Documentation

Transport documents include bills of lading, airway bills, insurance details and export booking forms while commercial documents include the documents you need to get paid and the invoices you produce.

The documents required for all commercial shipments, irrespective of value or mode of transportation, are: a commercial invoice, a certificate of origin, an airway bill, an airlines company certificate, an insurance certificate (if goods are insured by the exporter) and a packing list. Depending on the nature of goods being shipped, or upon certain requests from the importer specific additional documents may also be required.

Bill of Lading. Bills of lading are transport documents that, in general, cover movement by sea or where the major portion of the total distance covered is by sea. The standard bill of lading is evidence of the contract of carriage of goods between the owner of the goods and the carrier and it serves a number of purposes: it is evidence that a valid contract of carriage exists; it is a receipt signed by the carrier confirming whether goods matching the contract description have been received in good condition; and it is also a document of transfer, and a negotiable instrument, i.e. it governs all the legal aspects of physical carriage.

In most national and international systems, a bill of lading is not a document of title and does not identify an individual's right to possession at the time when delivery is to be made.

There are three main types of a bill of lading: straight bill of lading, order bill of lading, and bearer bill of lading. *Straight bill of lading* states that the goods are consigned to a specified person and it is not negotiable free from existing equities. It is also known as non-negotiable bill of lading. *Order bill of lading* states that delivery is to be made to the further order of the consignee. It is also known as a negotiable bill of lading. *Bearer bill of lading* states that delivery shall be made to whoever holds the bill. Such bill may be created explicitly or it is an order bill that fails to nominate the consignee whether in its original form or through an endorsement in blank. A bearer bill can be negotiated by physical delivery.

Marine or ocean bills of lading are, as the name implies, bills covering shipment by sea. Marine Bills of Lading can be issued by the shipping company (carriers), the captain or master of the vessel, or a party acting as agents for the carrier.

A *received for shipment bill of lading* is one that merely evidences receipt of the goods by the issuer. It does not, therefore, evidence that the goods are en route. The date of the document is the date on which the issuer accepts responsibility for the goods.

Shipped on board bills of lading are bills that evidence, either in the wording of the document itself or by means of a signed and dated annotation to the document, the date on which the goods were loaded on board the vessel. By their nature these are accepted as evidence that the goods are actually en route.

Most bills of lading will show the full terms and conditions of carriage on the reverse of the document. A bill of lading that only makes reference to the terms and conditions of carriage by referring the holder to another document or set of conditions is known as a 'short form bill of lading'.

Where not all of the journey on which the goods are being taken by the carrier is by one mode of transportation, the carrier will usually issue a *combined transport bill of lading*. Combined transport bills of lading are extensively used in connection with container shipments and are,

consequently, the most common forms of bills of lading that the average exporter is likely to see.

House bills of lading are bills of lading issued by a freight forwarder and not the actual carrier. The freight forwarder will have possession of the bill of lading issued by the carriers and will then issue his own bills of lading to cover the various goods that make up the total 'groupage shipment' made up by them.

Air waybill (AWB). Air freight shipments are handled by air waybills, which can never be made in negotiable form. The AWB is non-negotiable. The AWB has a tracking number which can be used to check the status of delivery, and current position of the shipment.

Air Waybills make sure that goods have been received for shipment by air. A typical air waybill sample consists of three originals and nine copies. The first original is for the carrier and is signed by an export agent; the second original, the consignee's copy, is signed by an export agent; the third original is signed by the carrier and is handed to the export agent as a receipt for the goods. The first three copies are classified as originals.

The principal requirements for an air waybill are: the proper shipper and consignee must be mentioned; the airport of departure and destination must be mentioned; the goods description must be consistent with that shown in other documents; any weight, measure or shipping marks must agree with those shown in other documents; it must be signed and dated by the actual carrier or by the named agent of a named carrier; it must mention whether freight has been paid or will be paid at the destination point.

International AWBs that contain consolidated cargo are called master air waybills (MAWB). MAWBs have additional papers called house air waybills (HAWB). Each HAWB contains information of each individual shipment (consignee, contents, etc.) within the consolidation. International AWBs that are not consolidated (only one shipment in one bill) are called simple AWBs. A house air waybill can also be created by a freight forwarder. When the shipment is booked, the airline issues a MAWB to the forwarder, who in turn issues their own house air waybill to the customer.

A **Sea Waybill** covers the transport of goods by sea but, unlike a bill of lading, it is not a 'document of title' and is merely evidence that the carrier has taken over the goods for transportation. It is, in effect, a

receipt for the goods, showing the details of the agreed shipping arrangement, i.e. the route, vessel, goods description etc.

Road Consignment Notes evidence transport by road. They are, usually used for goods that are destined for mainland Europe and the near Middle East. As with all other types of transport document, except bills of lading, they are evidence of receipt of the goods by the carrier. The most widely seen Road Consignment Note is the '**CMR Note**'. "CMR" is an abbreviation of the French title of the **CMR** convention, *Convention relative au contrat de transport international de marchandises par route*.

The **CMR convention** (full title **Convention on the Contract for the International Carriage of Goods by Road**) is a United Nations convention signed in Geneva on 19 May 1956. It relates to various legal issues concerning transportation of cargo, predominantly by lorries, by road. It has been ratified by the majority of European states.

Railway Consignment Note. As the name suggests it covers shipment by rail. It is rarely used in Europe, with regard to international transactions, as most of the traffic taken by rail to the continent is loaded upon lorries anyway. These documents are more likely to be used on transcontinental shipments.

Packing List includes names and addresses of consignor and consignee, description and value of the exported goods, net and total weight, number of packages and their contents, number of containers and contents, numbers of seals, and number of letters of credit (L/C). Export Packing List is considerably more detailed and informative than a standard domestic packing list. It itemizes the material in each individual package and indicates the type of package, such as a box, crate, drum, or carton. Both commercial stationers and freight forwarders carry packing list forms.

Import Licenses are the responsibility of the importer. Including a copy with the rest of documentation, however, they can sometimes help avoid problems with customs in the destination country.

Dock Receipt and Warehouse Receipt are used to transfer accountability when the export item is moved by the domestic carrier to the port of embarkation and left with the ship line for export.

Exercise 3. Answer the questions on text 1.

1. What do transport documents include? 2. What distinguishes bill of lading from other transport documents? 3. Who can the bills of lading be issued by? 4. Why do bills of lading need to be kept secure and forwarded by a secure method? 5. What is the difference between sea waybill and marine bill of lading? 6. What are the main features of house bill of lading? 7. How are bills of lading classified according to modes of transport? 8. What do we mean by 'straight consigned' bill of lading? 9. What do bills of lading require to be negotiable? 10. What will air waybill show? 11. What is the difference between an air waybill and bill of lading? 12. How many air waybill copies are made? What are their purposes? 13. What are the principal requirements for an air waybill? 14. What does a sea waybill evidence? 15. What is CMR? 16. What should a packing list include? 17. What additional information does an export packing list include? 18. What do import licenses help? 19. What are dock receipt and warehouse receipt used for?

Exercise 4. Give English equivalents.

Іменний коносамент; пропуск; товарно-транспортна накладна; коносамент на змішане (мультимодальне) перевезення; акредитив; товаророзпорядчий документ; індосамент; доказ; комплектування окремих партій вантажу в єдиний вантаж; обіговий; розпорядження; залізнична вантажна накладна; коносамент на вантаж; відмовлятися на чиюсь користь; автодорожна накладна; авіавантажна накладна; бортовий коносамент; коротка вантажна накладна; сертифікат походження товару; страховий сертифікат; рахунок-фактура; пакувальний реєстр; накладна на пред'явника; індосамент; квитанція; експедитор; коносамент експедитора; експедиторська авіанакладна; отримувач вантажу; відправник вантажу; лист бронювання; головна (консолідована) авіанакладна.

Exercise 5. Complete the following sentences.

1. Bill of lading is 2. Blank endorsement means 3. Shipped on board bills of lading are 4. House bill of lading is 5. Road consignment note is 6. Sea waybill covers 7. Combined transport bill of lading covers 8. The AWB must indicate 9. The principal requirements for an air waybill are 10. Packing list includes

Exercise 6. Say whether the following statements are true or false. Correct the false ones.

1. Bills of Lading are issued in “sets” of numbered originals and can be made up of any number of originals but 2 or 4 are the most usual. 2. Bills of Lading that are consigned to a named party are known as “straight consigned”. 3. A Received for Shipment Bill of Lading evidences that the goods are en route. 4. Shipped on Board Bills of Lading are bills that evidence the date on which the goods were unloaded from the vessel. 5. A Sea Waybill covers the transport of goods by sea and like a Bill of Lading is a ‘document of title. 6. House Bills of Lading are Bills of Lading issued by a freight forwarder and not an actual carrier. 7. Air Waybills are evidence of receipt of the goods by the carrier and are evidence of title to the goods. 8. Road consignment notes evidence transport by road. 9. AWBs that are not consolidated (only one shipment in one bill) are called master AWBs.

Exercise 7. Match the definitions with proper terms.

Definitions	Terms
1. Evidence that goods have been received for shipment by air	a) shipper
2. Able to be transferred or assigned to the legal ownership of another person	b) route
3. A network of tracks with the trains, organization, and personnel required for its working	c) sea
4. The expanse of salt water that covers most of the earth's surface and surrounds its land masses	d) traffic
5. A person or company that transports or receives goods by sea, land, or air	e) air waybill
6. A batch of goods destined for or delivered to someone	f) railway
7. The movement of ships, trains, or aircraft between one place and another	g) container
8. A letter issued by a bank to another bank (especially one in a different country) to serve as a guarantee for payments made to a specified person under specified conditions	h) negotiable
9. A way or course taken in getting from a starting point to a destination	i) consignment

10. A large metal box of a standard design and size used for the transport of goods by road, rail, sea, or air. j) letter of credit

Exercise 8. Give definitions to the following terms:

sea waybill; road consignment note; air waybill; combined transport bill of lading; shipped on board bill of lading; house bills of lading; railway consignment note; received for shipment bills of lading; straight consigned' bill of lading; marine bills of lading; warehouse receipt.

Exercise 9. Fill in the blanks with the words in brackets:

(container shipments; freight forwarder; short form bill of lading; documents of title; master air waybill; road consignment notes; air waybills; marine bills of lading; endorsement).

1. ... are usually used for goods that are destined for mainland Europe and the near Middle East. 2. In order for the Bills of Lading be "negotiable", they require signed ... by the party to whom they were made out 'to the order of'. 3. ... are, as the name implies, bills covering shipment by sea. 4. A Bill of Lading that only makes reference to the terms and conditions of carriage by referring the holder to another document or set of conditions is known as a 5. Combined Transport Bills of Lading are extensively used in connection with 6. ... are evidence of receipt of the goods by the carrier/forwarding agent and are not evidence of title to the goods. 7. Unlike other transport documents Bills of Lading are 8. International AWB that contains consolidated cargo is called 9. A house air waybill can also be created by a

Exercise 10. Translate the following sentences into English:

1. Єдиним прийнятним документом, який може надавати продавець відповідно до термінів CFR і CIF, традиційно є бортовий коносамент. 2. Коносамент виконує три важливі функції: є доказом поставки товару на борт судна; доказом укладення договору перевезення та засобом передачі прав на товар іншій стороні шляхом надання їй паперового документу. 3. Інші транспортні документи, крім коносамента, не надаватимуть можливості покупцеві продати товар дорогою шляхом передачі документів. 4. Володіння коносаментом є необхідним для отримання товарів від перевізника в місці призначення. 5. Попри особливу юридичну

природу коносаменту, в найближчому майбутньому очікується його заміщення електронними засобами. 6. Авіаційна вантажна накладна – це документ, який свідчить про укладення договору про перевезення товарів та інших предметів авіаційним транспортом, умови перевезення, а також прийняття товарів та інших предметів до перевезення. 7. Авіаційна вантажна накладна складається з трьох оригінальних примірників та надається у від шести до одинадцяти примірниках (копіях). 8. На звороті трьох примірників оригіналу англійською мовою зазначаються умови обмеження відповідальності авіаперевізника за втрату, недостачу, пошкодження та затримку перевезення вантажу.

Exercise 11. Respond to the questions using the given prompts after model.

Model: Question: - How does a shipper protect himself?

Prompt: - *make special arrangements*

Response: To protect himself a shipper must make special arrangements.

1. How do you make a firm order? *send a fax or a letter*
2. How do we get insurance cover? *fill out an insurance certificate*
3. How could the captain save the ship? *jettison cargo*
4. How did they cover delicate goods? *take out an All Risks policy*
5. How will the government solve the financial crisis?
devalue the currency
6. How did we meet the delivery date? *send the goods by air*
7. How does this broker get more business? *offer lower rates*
8. How could he have avoided a loss? *buy forward exchange*

Exercise 12. Memorize the basic terminology to text 2.

rent – оренда, винаймання, прокат

duration – встановлений термін; тривалість; термін погашення

invoicing – виставлення рахунку-фактури, інвойсування

proforma invoice – орієнтувальний рахунок; рахунок-проформа

self-billing invoice – самофактурований рахунок

to owe – заборгувати, бути винним (про борг)

value-added tax (VAT) – податок на додану вартість (ПДВ)

exemption – виключення; вилучення; звільнення

accounts receivable – рахунки до отримання; дебіторська заборгованість
accounts payable – рахунки до сплати; кредиторська заборгованість
customs declaration form – митна декларація
sight draft – тратта з оплатою за пред'явленням
credit memo – кредитне авізо
debit memo – дебетне авізо
to refund – компенсувати; відшкодувати
short-pay – 1) недоплата; 2) недоплачувати
evaluated receipt settlement (ERS) – процедура автоматичного здійснення розрахунків за отримані товари
payee – отримувач платежу
packing slip – пакувальний лист
timesheet – акт обліку часу стоянки, таймшит
remittance – переказ (*грошей, чеків*)
advance shipping notice (ASN) – попереднє повідомлення про відвантаження

Exercise 13. Read and translate text 2.

Text 2. Types of Invoices

An **invoice** is a commercial document issued by a seller to the buyer, indicating the products, quantities, and agreed prices for products or services the seller has provided the buyer. An invoice indicates the buyer must pay the seller, according to the payment terms. The buyer has a maximum amount of days to pay these goods and is sometimes offered a discount if paid before. In the rental industry, an invoice must include a specific reference to the duration of the time being billed, so rather than quantity, price and discount the invoicing amount is based on quantity, price, discount and duration. Generally speaking each line of a rental invoice will refer to the actual hours, days, weeks, months etc. being billed.

From the point of view of a seller, an invoice is a *sales invoice*. From the point of view of a buyer, an invoice is a *purchase invoice*. The document indicates the buyer and seller, but the term *invoice* indicates money is owed or owing. In English, the context of the term *invoice* is usually used to clarify its meaning, such as "We sent them an invoice"

(they owe us money) or "We received an invoice from them" (we owe them money).

The US Defense Logistics Agency requires an employer identification number on invoices. The European Union requires a VAT (value-added tax) identification number on invoices between entities registered for VAT. If seller and buyer belong to two different EU countries, both VAT identification numbers must be on the invoice in order to claim VAT exemption. In the UK, if the issuing entity is not registered for VAT, the invoice must state that it is "not a VAT invoice".

There are different types of invoices:

Proforma invoice. In foreign trade, a pro forma invoice is a document that states a commitment from the seller to provide specified goods to the buyer at specific prices. It is often used to declare value for customs. It is not a true invoice, because the seller does not record a proforma invoice as an accounts receivable and the buyer does not record a proforma invoice as an accounts payable. A proforma invoice is not issued by the seller until the seller and buyer have agreed to the terms of the order. In few cases, proforma invoice is issued for obtaining advance payments from buyer, either for start of production or for security of the goods produced.

Commercial invoice is a customs declaration form used in international trade that describes the parties involved in the shipping transaction, the goods being transported, and the value of the goods. It is the primary document used by customs, and must meet specific customs requirements. It is used to calculate tariffs.

Commercial invoices are often used by governments to determine the true value of goods when assessing customs duties.

The invoice contains, first of all the names and addresses of the seller and the buyer (or consignor and consignee); next, a full description (trademarks, quantity) of the goods dispatched, including the net and gross weight and numbers and marks of all the packages, and the date of flight, airport of loading and airport of discharge; thirdly, the price per unit and the total cost of the consignment. It also states the port of shipment and the date, the terms of sale, and the terms of payment, such as by sight draft or a letter of credit (L/C), contents of each package and container, currency, number of L/C and freight, and insurance. Finally, it must be signed by an authorized employee of the seller.

Consular invoice is required in some countries. It describes the shipment of goods and shows information such as the consignor, consignee, and value of the shipment. It is a declaration made at the consulate of the importing country. They confirm the ex-works cost of a consignment. One copy is sent to the importing customs, another accompanies documents presented through a bank.

Self-billing invoice. A self-billing invoice is when the buyer issues the invoice to himself (e.g. according to the consumption levels he is taking out of a vendor-managed inventory stock).

If the buyer returns the product, the seller usually issues a *credit memo* for the same or lower amount than the invoice, and then refunds the money to the buyer, or the buyer can apply that credit memo to another invoice. When a company fails to pay or short-pays an invoice, it is common practice to issue a *debit memo* for the balance and any late fees owed. In function debit memos are identical to invoices.

Evaluated receipt settlement (ERS) is a process of paying for goods and services from a packing slip rather than from a separate invoice document. The payee uses data in the packing slip to apply the payments.

ERS is a business process between trading partners that conduct commerce without invoices. In an ERS transaction, the supplier ships goods based upon an advance shipping notice (ASN), and the purchaser, upon receipt, confirms the existence of a corresponding purchase order or contract, verifies the identity and quantity of the goods, and then pays the supplier.

Invoices for hourly services such as by lawyers and consultants are called *timesheets*. A **Timesheet invoice** may also be generated by Operated equipment rental companies where the invoice will be a combination of timesheet based charges and equipment rental charges.

Electronic invoices. Some invoices are no longer paper-based, but rather transmitted electronically over the Internet. It is still common for electronic remittance or invoicing to be printed in order to maintain paper records. Standards for electronic invoices vary widely from country to country.

Exercise 14. Answer the questions on text 2.

1. What do we mean by invoice? 2. What does a basic invoice contain? 3. What are the differences in requirements of US Defense

Logistics Agency and European Union to invoice content? 4. What types of invoices do you know? 5. What is a proforma invoice? Where is it used? 6. What must commercial invoice contain? 7. What does consular invoice describe? 8. What is a self-billing invoice? 9. When are credit memo and debit memo issued? 10. What is ERS? 11. How are invoices for hourly services called? 12. What are electronic invoices?

Exercise 15. Give English equivalents.

вилучення; виставлення рахунку-фактури; встановлений термін; дебетне авізо; рахунки до отримання; заборгувати; запаси, що регулюються постачальником; комерційний рахунок-фактура; компенсувати; кредитне авізо; рахунки до сплати; податок на додану вартість; податок на товари та послуги; попереднє повідомлення про відвантаження; передавання на розгляд; посилення; самофактурований рахунок; спільне виставлення рахунку-фактури; відомість; узгоджена система опису та кодувань предметів вжитку; одеримувач платежу; рахунок-проформа.

Exercise 16. Say whether the following statements are true or false. Correct the false ones.

1. An invoice indicates the seller must pay the buyer, according to the payment terms. 2. In the rental industry, an invoice must include a specific reference to the destination. 3. The US Defense Logistics Agency requires a VAT identification number on invoices. 4. Pro forma invoice is a true invoice, because the seller records a pro forma invoice as an accounts receivable and the buyer records it as an accounts payable. 5. Commercial invoice is the primary document used by customs, and must meet specific manufacturer's requirements. 6. Consular Invoice is required in all countries. 7. In an ERS transaction, the purchaser ships goods based upon an advance shipping notice. 8. Standards for electronic invoices differ from country to country.

Exercise 17. Match the definitions with proper terms.

Definitions	Terms
1. Money owed by a company to its creditors	a) invoice
2. Money owed to a company by its debtors	b) timesheet
3. A document that lists goods that have been supplied or services that have been done, and says how much money you owe for them	c) accounts receivable

- | | |
|---|---------------------|
| 4. The action of freeing or state of being free from an obligation or liability imposed on others | d) VAT |
| 5. A piece of paper for recording the number of hours worked | e) credit |
| 6. The money lent or borrowed under a credit arrangement | f) inventory |
| 7. An entry recording a sum owed, listed on the left-hand side or column of an account, the opposite of credit | g) exemption |
| 8. A written or printed statement acknowledging that something has been paid for or that goods have been received | h) accounts payable |
| 9. A tax that is added to the price of goods or services | i) receipt |
| 10. The entire stock of a business, including materials, components, work in progress, and finished product. | j) debit |

Exercise 18. Fill in the blanks with the terms in brackets:

(credit memo; customer statement; recurring invoice; buyer; debit memo; collective invoicing; unique reference number).

1. The ... has a maximum amount of days to pay goods and is sometimes offered a discount if paid before. 2. A typical invoice contains a ... (in case of correspondence about the invoice). 3. If the buyer returns the product, the seller usually issues a ... for the same or lower amount than the invoice. 4. When a company fails to pay or short-pays an invoice, it is common practice to issue a ... for the balance. 5. A periodic ... includes opening balance, invoices, payments, credit memos, debit memos, and ending balance for the customer's account during a specified period. 6. A ... is one generated on a cyclical basis during the lifetime of a rental contract.

Exercise 19. Complete the following sentences.

1. Pro-forma invoice is issued for 2. An invoice or bill is a commercial document issued by 3. If seller and buyer belong to two different EU countries 4. A self billing invoice is 5. Evaluated receipt settlement is a process of 6. The term invoicing is also used to 7. In an ERS transaction, the supplier ships

Exercise 20. Give definitions to the following terms:

invoicing; progress billing; pro-forma invoice; collective invoicing; timesheet; self-billing invoice; credit memo; debit memo; commercial invoice; evaluated receipt settlement; bill; statement.

Exercise 21. Translate the following sentences into English.

1. Рахунок-фактура є типовим платіжним документом, що виписує постачальник на кожну партію відвантаженої або проданої продукції, а також за виконані роботи та послуги. 2. У податковому законодавстві ставляться підвищені вимоги до заповнення рахунків-фактур, які є одним із головних фінансових документів контролю за оподатковуваним обігом і відповідно за обчисленням ПДВ. 3. Рахунок-фактура має містити відомості про товар і ціну продажу, найменування та адресу продавця і покупця, пункт доставлення або відвантаження товару, дату здійснення операції та умови оплати. 4. Підготуйте шість примірників (один оригінал та п'ять копій) комерційного або звичайного рахунку-фактури залежно від того, який із них застосовується. Інформацію, подану нижче і праворуч, необхідно надати англійською. 5. Рахунок-фактуру оформлюють впродовж п'яти днів від дати відвантаження товарів у двох примірниках: перший примірник передається покупцеві, другий залишають в бухгалтерії підприємства.

Exercise 22. Analyse different forms of infinitives and their functions. Translate the following sentences.

1. **To produce** such a system requires extensive correlation and analyses. 2. **To be** of value operating information must arrive on time. 3. He asked **to be shown** the document. 4. This firm claims **to have made** a big advance in servicing its customers. 5. He refused **to be bothered** with details. 6. You must define the task **to be done**. 7. We are going **to be working** together so we ought **to get** everything straight between us.

Exercise 23. Memorize the basic terminology to text 3.
anti-dumping taxes – антидемпінгові податки
to attest – свідчити, засвідчувати; підтверджувати

preferential certificate of origin – преференційний сертифікат походження
bilateral – двосторонній
multilateral – багатосторонній
free trade agreement (FTA) – безмитна торговельна угода
preferential – 1) пільговий, преференційний (*про ввізне мито*); 2) що користується перевагою; найкращий
to originate – брати початок, походити, виникати
to split – ділити на частини
to confer – надавати; присуджувати
to sign – підписувати(ся)
fee – гонорар; комісія; збір
to imply – 1) мати на думці (на увазі); натякати; 2) містити в собі; означати, мати значення
endorsement – підтвердження, схвалення
to notarize – завірити (засвідчити) нотаріально
to validate – надавати юридично законної сили; визнавати чинним
stipulation – 1) умова, обумовлення, застереження; 2) зумовленість
Chamber of Commerce – торгова палата
import quota – імпортна квота, квота на імпорт
health regulations – санітарні норми
trading bloc – торговий блок
wording – формулювання, редакція, редагування (*документу*)
letterhead – фірмовий бланк
seal – 1) знак, відбиток; 2) печатка
treatment – 1) ставлення (*до чогось*); 2) трактування, підхід

Exercise 24. Read and translate text 3.

Text 3. Certificate of Origin

A certificate of origin (C/O) is a document attesting that goods in a particular shipment are of a certain origin.

This certificate must be issued by the manufacturer (or the exporting firm). In addition to the name of the airlines and the date of flight, name, nationality, and full address of the street of the manufacturer of all items to be shipped to importer's country, and components thereof¹, must be

¹ thereof – 1) цього, того; 2) з цього, з того

declared. Furthermore, the origin of each item or component must be specified. A signed statement to the effect that ¹ the document is true and correct must be given. If the merchandise to be shipped to importer's country is not solely and exclusively originated in the exporter's country, then a notarized "appended declaration to certificate of origin", must be attached to the certificate of origin. In addition, the certificate of origin must include name and address of the importer, description of the goods, and address of the shipping company.

The certificate of origin is required by the customs authority of the importing country for the purpose of imposing import duty. It is usually issued by the Chamber of Commerce and contains information like seal of the chamber, details of the goods to be transported and so on. The certificate must provide the information required by the importer and be consistent with all other documents. It would normally include:

- the name of the company and address as of the exporter;
- the name of the importer;
- package numbers, shipping marks and description of goods to agree with that on other documents;
- any weight or measurements must agree with those shown on other documents;
- it should be signed and stamped by the Chamber of Commerce.

A certificate of origin is a document used in international trade. It traditionally states from what country the shipped goods originate, but "originate" in a C/O does not mean the country the goods are shipped from, but the country where their goods are actually made. When countries unite in trading agreements, they may allow certificate of origin to state the trading bloc as origin, rather than the specific country.

The document may be informal, i.e. issued for example by the exporter, but often the importing country may require a formal document, often to be confirmed by an official body in the exporting country.

The C/O is primarily important for classifying the goods in the customs regulations of the importing country, thus defining how much duty shall be paid. But it may also be important for import quota purposes and for statistical purposes, and especially for food shipments, it may also be important for health regulations. Before concluding a

¹ to the effect that – для того, щоб ...

transaction, the exporter and importer should always clarify whether a CO is required, and if so, agree on exactly the form and content of C/O.

A **preferential certificate of origin** is a document attesting that goods in a particular shipment are of a certain origin under the definitions of a particular bilateral or multilateral free trade agreement (FTA). This certificate is required by a country's customs authority in deciding whether the imports should benefit from preferential treatment in accordance with special trading areas or customs unions such as the European Union or the North American Free Trade Agreement (NAFTA) or before anti-dumping taxes are enforced. The definition of "Country of Origin" and "Preferential Origin" are different. The European Union for example generally determines the (non-preferential) origin country by the location of which the last major manufacturing stage took place in the production of products. The FTA rules are commonly called "Origin Protocols". Each rule is also accompanied by an exclusion rule that defines in which cases the product cannot obtain preferential status at all.

A popular example of the certificate of origin is the Form A. The C/O is based on the rules of the country of origin. The *country of origin* is the country where the goods are grown, produced or manufactured.

Certain operations such as packaging, splitting and sorting may not be considered as sufficient operations to confer origin. The certificate of origin includes the Form A, Chamber of Commerce Certificate of Origin, Exporter's Certificate of Origin, and Free Trade Market Certificate of Origin. The trade agreement, import practice, and letter of credit (L/C) stipulation determine the type of C/O needed.

Chamber of commerce certificate of origin. The importer or the importing country may require a specific certificate of origin (C/O) form issued by a Chamber of Commerce in the exporting country. Some countries may further require the consular legalization of the C/O after the Chamber of Commerce certification. The certification and legalization normally require payment of a fee.

Exporter's certificate of origin. Unless the letter of credit (L/C) stipulates a specific certificate of origin (C/O) form and/or the issuer and/or the wording (data content), the exporter may issue his/her own C/O using the company letterhead. The C/O contents may include the same data as in the commercial invoice and packing list, adding a declaration

that the goods in question are manufactured in the exporting country, and that the amount shown on invoice is the true and correct value.

Free trade market certificates of origin. NAFTA certificate of origin. The North American Free Trade Agreement (NAFTA) certificate of origin is used within the NAFTA countries (i.e., Canada, USA and Mexico). The form is available at the customs office. It is self-certified by the exporter.

EC certificate of origin. The European Community (EC) certificate of origin, as its name implies, is used in the European Community. It is issued by the Chamber of Commerce of the exporting country, usually with payment of a fee. EC countries consist of Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, and the United Kingdom.

Movement certificates. Different movement certificates are being used in the European Union (EU) – **EC** (European Community) and **EFTA** (European Free Trade Association) countries. The certificates require endorsement by the customs of the exporting country. **EFTA countries** consist of Austria, Finland, Iceland, Norway, Sweden, Switzerland, and Liechtenstein.

The certificate of origin must be signed by the exporter, and often notarized and then validated by a Chamber of Commerce.

Exercise 25. Answer the questions on text 3..

1. Where is the certificate of origin required? 2. What does certificate of origin include? 3. What does it usually state? 4. What is a preferential certificate of origin? 5. How does the European Union determine the country of origin? 6. Whom must the certificate of origin be signed by? 7. What is the certificate of origin important for?

Exercise 26. Give English equivalents.

Антидемпінгові податки; багатостороння безмитна торговельна угода; брати початок; двостороння безмитна торговельна угода; преференційний сертифікат походження; імпортна квота; надавати юридичної сили; оподатковувати; фірмовий бланк; торгова палата; Північноамериканська угода про вільну торгівлю; засвідчувати; торговельний блок; країна-експортер; легалізувати; нотаріально завіряти; митниця; форма та зміст; формулювання, редакція

(документу); умова; обумовлення; виняток із правила; санітарні норми; МИТО.

Exercise 27. Say whether the following statements are true or false. Correct the false ones.

1. The Certificate of Origin is required by the tax agency of the importing country for the purpose of imposing import duty. 2. This raises a definition problem in cases where less than 100 % of the raw materials and processes and added value are not all from one country. 3. The document may be only formal even when issued for example by the exporter. 4. C/O may also be important for import quota purposes and for statistical purposes, and especially for medicines. 5. A preferential certificate of origin is a document attesting that goods in a particular shipment are of a certain origin out of the definitions of a particular bilateral or multilateral free trade agreement. 6. The certificate must provide the information required by the importer and be consistent with all other documents. 7. When countries unite in trading agreements, they may not allow Certificate of Origin to state the trading bloc as origin, rather only one specific country.

Exercise 28. Match the definitions with proper terms.

Definitions

Terms

- | | |
|--|------------------------|
| 1. Negotiations, meetings, or agreements, involving only the two groups or countries that are directly concerned | a) quota |
| 2. A limited quantity of a particular product which under official controls can be produced, exported, or imported | b) seal |
| 3. The manner in which someone behaves towards or deals with someone or something | c) impose |
| 4. Agreed upon or participated in by three or more parties, especially the governments of different countries | d) preference |
| 5. A group of countries or political parties with common interests who have formed an alliance | e) Chamber of Commerce |
| 6. A special mark or design, for example on a document, representing someone or something | f) multilateral |
| 7. A greater liking for one alternative over another or others | g) authority |

8. Require (a duty, charge, or penalty) to be h) bilateral undertaken or paid

9. A local association to promote and protect the i) treatment interests of the business community in a particular place

10. A person or organization having political or j) bloc administrative power and control.

Exercise 29. Complete the following sentences.

1. The Certificate of Origin is usually issued by ... and contains
2. C/O normally includes
3. "Originate" in a C/O does not mean
4. When countries unite in trading agreements, they may allow
5. The C/O is primarily important for
6. A preferential certificate of origin is
7. The European Union for example generally determines the (non-preferential) origin country by

Exercise 30. Give definitions to the following terms:

production; tariff; European Union; anti-dumping; raw materials; customs; added value; international agreement; certificate of origin; preferential certificate of origin; free trade agreement; Chamber of Commerce; bilateral; multilateral; quota.

Exercise 31. Translate the following sentences into English:

1. Країна походження товару визначається для здійснення тарифних і нетарифних заходів регулювання ввезення товару на митну територію України та вивезення товару з її території.
2. Сертифікат походження – це спеціальна форма, якою органи або особи, вповноважені надавати цей документ, конкретно засвідчують, що товари, яким належить даний сертифікат, походять з відповідної країни.
3. Форма та порядок оформлення сертифікату походження товару узгоджуються уповноваженими органами Сторін, між якими укладено угоду про вільну торгівлю, відповідно до їх національного законодавства.
4. Загальну форму сертифікату походження оформлюють на товари походженням із країн, які не мають із Україною двосторонніх торгових угод та які не є членами економічних союзів, куди входить Україна.
5. Сертифікат про походження подається у надрукованому вигляді, без виправлень, українською мовою, разом із вантажною митною декларацією,

іншими документами, необхідними для здійснення митного оформлення.

Exercise 32. Translate the sentences containing the Objective-with-the-Infinitive Complex.

1. All he has to do now is make things work. 2. He can make the existing system work. 3. We consider the agreement to be very important and provide benefits to both parties. 4. This allows a company to buy machines one at a time until they have the whole system. 5. Experience has shown to be far from the truth. 6. They have shown this method to have several advantages over the other. 7. The company designs packages but has them manufactured by others.

Exercise 33. Match the definitions with proper terms.

Definitions	Terms
1. The safety of a state or organization against criminal activity such as terrorism, theft, or espionage	a) allocation
2. Remaining the same in all cases and at all times; unchanging in form or character	b) freight
3. Goods transported in bulk by truck, train, ship, or aircraft	c) instruction
4. Detailed information about how something should be done or operated	d) law
5. A series of letters, numbers, or symbols assigned to something for the purposes of classification or identification	e) security
6. The system of rules which a particular country or community recognizes as regulating the actions of its members and which it may enforce by the imposition of penalties	f) uniform
7. The amount of a resource assigned to a particular recipient.	g) code

Exercise 34. Decipher the abbreviations.

AWB, C/O, L/O, CMR, MAWB, HAWB, VAT, ERS, NAFTA, FTA, EFTA.

Exercise 35. Speak on:

1. Transport and commercial documentation.
2. Types of invoices.
3. Certificate of origin.

Unit 16. DISTRIBUTIVE LOGISTICS

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

distributor, distribute, distributive, distribution, accumulation, rational, transferred, bypass, sequence, rationality, array.

Exercise 2. Memorize basic terminology to text 1.

distributive logistics – розподільча логістика, логістика збуту (дистриб'юції)

consumer demand – споживчий попит

retail outlet – торговельна точка, підприємство роздрібно́ї торгівлі

to bypass – обходити

third-party operator – оператор третьої сторони

per se – по суті

tradeoff – 1) обмін; 2) компроміс; 3) поступка

array – 1) набір, комплект; 2) ряд, серія; 3) розташовувати

non-durable goods – товари нетривалого зберігання

deployment – 1) розміщення, розвертання; 2) застосування, використання

pending – протягом

Exercise 3. Read and translate text 1.

Text 1. The Essence and Basic Functions of Distributive Logistics

The distributive logistics is an important part of the general logistics system which provides the most effective organization of the finished products distribution, including all the chains of distribution system: transporting, warehousing, packing and other.

Sales activity is not only a sale of the finished goods but also production orientation on consumers' demand satisfaction and active work on the product demand formation at the market, organization of effective distribution channels and promotion of the product.

The concept of distribution in the context of commercial activity has two substantial meanings. It is coordinated, or systematic, distribution and supplying of goods and all complex of operations which are carried out with the purpose of supplying goods and services according to the customers' order.

The main functions of delivery are determination of consumer demand and organization of its satisfaction; accumulation, sorting and distribution of the finished products inventories; establishment of economic relations according to the goods and services delivery; selection of rational forms of products promotion and trade organization.

A *channel of distribution* is a combination of firms and individuals who participate in the flow of goods and services from the manufacturer to the final user or consumer. There are physical distribution channel and trading channel.

Physical distribution channel is the term used to describe the method and means by which a product or a group of products are physically transferred, or distributed, from their point of production to the point at which they are made available to the final customer. In general, this end point is a retail outlet, shop or factory, but it may also be the customer's house, because some channels bypass the shop and go direct to the consumer.

Another type of channel is known as the *trading or transaction channel*. The trading channel is also concerned with the product, and with the fact that it is being transferred from the point of production to the point of consumption. The trading channel, however, is concerned with the non-physical aspects of this transfer. These aspects concern the sequence of negotiation, the buying and selling of the product, and the ownership of the goods as they are transferred through the various distribution systems.

One of the most fundamental issues of distribution planning is regarding the choice and selection of these channels. The question that arises, for both physical and trading channels, is whether the producer should transfer the product directly to the consumer, or whether intermediaries should be used. These intermediaries are, at the final stage, very likely to be retailers, but for some of the other links in the supply chain it is now very usual to consider a third-party operator to undertake the operation.

The combination of “logistics” and “distribution” concepts gives a new category – “distributive logistics”. The distributive logistics can be defined

as a process of the commercial channel and physical distribution of the finished goods and services with the purpose of satisfaction of consumer demand. The distributive logistics is built on the general logistics principles of co-ordination, integration, adaptation, optimality, rationality and system principle.

The main task of distributive logistics is to get a maximum profit for the enterprise with more complete consumer demand satisfaction.

Aims, tasks and functions of distributive logistics require the special forms of its organization that is a definitely organized process of selling finished goods.

Exercise 4. Answer the questions on text 1.

1. What does the distributive logistics provide? 2. What does sales activity include? 3. What two meanings does the concept of distribution have? 4. What are the main functions of delivery? 5. What is channel of distribution? 6. What is physical distribution channel? 7. What is transaction channel? 8. What is the role of third-party operator? 9. How can distributive logistics be defined? 10. What is the main task of distributive logistics?

Exercise 5. Give English equivalents.

Готова продукція; зберігання на складах; споживчий попит; просування продукту; постачання товарів; замовлення клієнта; встановлення економічних зв'язків; доставка товарів і послуг; канал збуту; кінцевий користувач; торговельна точка; обходити; споживання; володіння товарами; оператор третьої сторони; посередник.

Exercise 6. Say whether the following statements are true or false. Correct the false ones.

1. Sales activity is only a sale of the finished goods. 2. The main functions of delivery are determination of consumer's demand and organization of its satisfaction, and accumulation, sorting and distribution of the finished products inventories. 3. A channel of distribution is a combination of firms and individuals who participate in the flow of goods and services from the manufacturer to the intermediary. 4. Physical distribution channel is the method and means by which a product is physically transferred, or distributed, from its point of production to the

final customer. 5. The trading channel is mainly concerned with physical aspects of transfer of goods from the manufacturer to the consumer. 6. The distributive logistics can be defined as a process of the commercial, channel and physical distribution of the finished goods and services with the purpose of satisfaction of consumer's demand. 7. The main task of distributive logistics is to deliver products on time.

Exercise 7. Fill in the blanks with the following words and word combinations in brackets.

(order status, couriers, dependability, per se, retail store, on the shelves, tradeoff, array, unreliable, non-durable goods, network, deployment, customers, uncertain, inventories)

If we think of distribution services ..., fast delivery may be important, but ... may be even more. So, waiting for a long Delivery Lead Time (DLT) may be unpleasing, but very ... and ... DLT may be even more annoying. In fact the possibility of tracking shipments or to check ..., possibly via Web, is typically offered by ..., such as DHL and FedEx, by Internet-based sellers, and service centers of From the consumer's point of view, DLT must be zero for some products: no one would like to wait a few days for a bottle of milk. However, the DLT for milk is not zero from the point of view of the ... or of other actors along the supply chain. A zero DLT may make the management of ... much easier. At the other end of the spectrum, engineered-to-order items have a long DLT: no one would expect to find a radar system In between these extreme cases, there is an ... of intermediate possibilities. DLT is linked to the structures of the ..., the transportation means adopted, and the inventory levels and their ... in the network. If large amounts of goods are held near the ... (say at the stores), DLT is short; it can also be reduced if quick but costly transportation services are used. So, we see that there is a ... between DLT and different types of cost.

Exercise 8. Give the gist of the previous text in writing.

Exercise 9. Translate the following sentences into English:

1. Розподільча логістика – це частина системи загальної логістики, яка забезпечує найефективнішу організацію збуту готової продукції, включаючи всі ланцюги дистриб'ютивної системи. 2. Діяльність збуту включає продаж готової продукції,

орієнтування виробництва на задоволення споживчого попиту та активну роботу зі створення попиту на продукт на ринку, організацію ефективних каналів розподілу і просування продукту. 3. Серед головних функцій постачання є визначення та задоволення попиту споживачів, накопичення, сортування і розповсюдження готової продукції, встановлення економічних відносин щодо доставки продуктів і послуг, вибір раціональних форм просування продукту та організації торгівлі. 4. Канал збуту (фізичний канал розподілу та торговельний канал) – це фірми та особи, які беруть участь у доставленні товарів і послуг від виробника до кінцевого споживача. 5. Канал фізичного розподілу – це засіб, з допомогою якого товари та послуги передаються або поширюються від пункту виробництва до кінцевого споживача. 6. Торговельний канал також пов'язаний із потоком товарів від виробника до споживача, але включає й нефізичні аспекти доставки, такі як хід переговорів, купівлю і продаж продукту, право власності на товари. 7. Одним із важливих питань щодо вибору каналу розподілу є визначення, як буде передано товар: безпосередньо споживачеві чи через посередника. 8. Головним завданням логістики збуту є отримання максимального прибутку для підприємства за умови повнішого задоволення споживчого попиту.

Exercise 10. Match the definitions with proper logistics terms.

Definitions

Terms

- | | |
|---|--|
| <p>1. A warehouse that stores finished goods and from which customer orders are assembled</p> | <p>a) distribution channel</p> |
| <p>2. The planning activities associated with transportation, warehousing, inventory levels, materials handling, order administration, site and location planning, industrial packaging, data processing, and communications networks to support distribution</p> | <p>b) distribution requirements planning (DRP)</p> |
| <p>3. The warehouse facility which holds inventory from manufacturing pending distribution to the appropriate stores</p> | <p>c) distribution on demand (DOD)</p> |

4. One or more companies or individuals who participate in the flow of goods and services from the manufacturer to the final user or consumer d) distribution center (DC)
5. The extension of distribution requirements planning into the planning of the key resources contained in a distribution system: warehouse space, workforce, money, trucks, freight cars, etc e) distributor
6. The order fulfillment state a distribution operation achieves when it can respond, closest to real time, to changes in demand while shipping 100 percent customer compliant orders at the least cost f) distribution planning
7. A business that does not manufacture its own products, but purchases and resells these products. Such a business usually maintains a finished goods inventory g) distribution resource planning (DRP II)
8. A system of determining demands for inventory at distribution centers and consolidating demand information in reverse as input to the production and materials system. h) distribution warehouse

Exercise 11. Decipher the abbreviations.

DC, DRP, DOD, DLT, DRP II.

Exercise 12. Translate the following sentences into Ukrainian paying attention to the translation of the Subjective-with-the-Infinitive Complex

Model: - **He** is known **to be** a diligent man. Відомо, що він – працелюбна людина.

1. **The firm** was supposed **to take part** in this tender. 2. **The price discount** for making order during 3 days is said **to be** in the range of 10 %. 3. **The merchandise** has been expected **to be presented** at the retail outlet at the end of month. 4. **The demand** for new models of cars is supposed **to increase** over a period of 1 year. 5. **This new delivery**

channel is stated **to be** of great importance. 6. **Their sales** are projected **to be decreased** by 15 %. 7. **This channel** was reported **to be** unreliable. 8. **This manufacturer** is forecasted **to increase** production. 9. **The equipment** for tracking orders at this plant is considered **to be** out of order. 10. **The delay** of delivery was estimated **to cost** thousands of dollars.

Exercise 13. Define the Subjective-with-the-Infinitive Complex in the following sentences. Translate them.

1. Trained personnel is expected to handle these orders quickly. 2. The manufacturer is believed to fulfill the most complex clients' orders. 3. The intermediary policy cannot be said to be working. 4. Losses for delay have been estimated to be in thousands of euros. 5. This producer is claimed to be unprofitable as to bulk orders. 6. The distributive logistics is said to be built on the general logistics principles of co-ordination, integration, adaptation, optimality, rationality and system principle. 7. The costs for deployment of old trucks have been found to be higher than seems necessary. 8. Failure to establish right channel of distribution is considered to cause late deliveries. 9. They are expected to find customers for their new development.

Exercise 14. Memorize the terminology to text 2.

to trunk – транспортувати, перевозити автомагістралями

to haul – транспортувати, перевозити

to break down – розділяти, розбивати

brewing – пивоваріння

voluntary chain – однотипні роздрібні магазини однієї фірми;

мережа роздрібних магазинів з єдиним гуртовим покупцем

symbol – 1) символ, емблема, торговий символ; 2) позначка, знак

symbol retailer group – картель роздрібних торговців

cash-and-carry wholesaler – оптове, гуртове підприємство

самообслуговування

china – порцеляна

Exercise 15. Read and translate text 2.

Text 2. Physical Distribution Channel Types and Structures

There are several alternative physical channels of distribution that can be used, and a combination of these maybe incorporated within a

channel structure (Fig. 1). The main alternative channels for a single consumer product exist when the product is transferred from a manufacturer's production point to a retail store or shop. There are other channels that are used – channels from industrial suppliers to industrial customers, or channels that are direct to the final consumer.

Manufacturer direct to retail store. The manufacturer or supplier delivers direct from the production point to the retail store. As a general rule, this channel is only used when full vehicle loads are being delivered.

Manufacturer via manufacturer's distribution operation to retail store. This was one of the classic physical distribution channels and the most common channel for many years. Here, the manufacturer or supplier holds its products in a finished goods warehouse, a central distribution centre (CDC) or a series of regional distribution centres (RDCs). The products are trunked (line-hauled) in large vehicles to the sites, where they are stored and then broken down into individual orders that are delivered to retail stores on the supplier's retail delivery vehicles. This type of channel is still commonly used by the brewing industry.

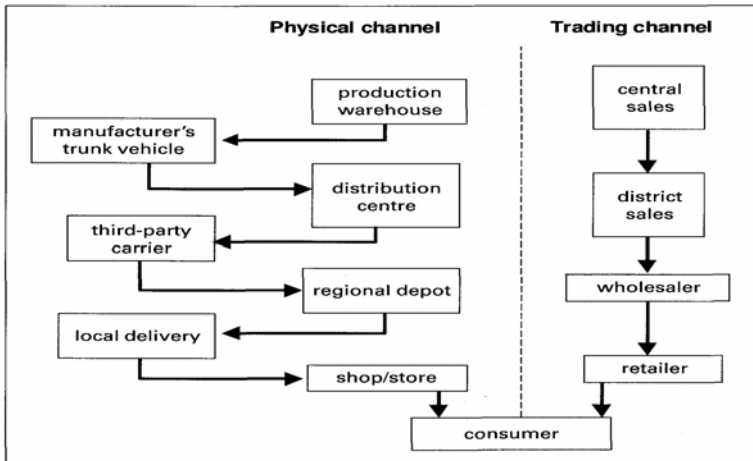


Fig. 1. Typical channel of distribution, showing the different physical and trading routes to the consumer

Manufacturer via retailer distribution centre to retail store. This channel consists of manufacturers supplying their products to national

distribution centres (NDCs) or RDCs, which are sites run by the retail organizations. These centres act as consolidation points, as goods from the various manufacturers and suppliers are consolidated at the site. The retailers then use their own delivery vehicles to deliver full vehicle loads of all the different manufacturers' products to their own stores.

Manufacturer to wholesaler to retail shop. Wholesalers have acted as the intermediaries in distribution chains for many years, providing the link between the manufacturer and the small retailers' shops. However, this physical distribution channel has altered in recent years with the development of wholesale organizations or voluntary chains. These wholesaler organizations are known as 'symbol' groups in the grocery trade. They were generally begun on the basis of securing a price advantage by buying in bulk from manufacturers or suppliers.

Manufacturer to cash-and-carry wholesaler to retail shop. Another important development in wholesaling has been the introduction of cash-and-carry businesses. These are usually built around a wholesale organization and consist of small independent shops collecting their orders from regional wholesalers, rather than having them delivered. The increase in cash-and-carry facilities has arisen as many suppliers will not deliver direct to small shops because the order quantities are very small.

Manufacturer via third-party distribution service to retail shop. Third-party distribution or the distribution service industry has grown very rapidly in recent years. A number of companies have developed a particular expertise in warehousing and distribution. These companies consist of those offering general distribution services as well as those that concentrate on providing a 'specialist' service for one type of product (e.g. china and glass) or for one client company.

Manufacturer via small parcels carrier to retail shop. Very similar to the previous physical distribution channel, these companies provide a 'specialist' distribution service where the 'product' is any small parcel. The competition generated by these companies has always been quite fierce.

Manufacturer via broker to retail shop. This is a relatively rare type of channel, and may sometimes be a trading channel and not a physical distribution channel. A broker is similar to a wholesaler in that it acts as intermediary between manufacturer and retailer. Its role is different, however, because it is often more concerned with the marketing of a

series of products, and not really with their physical distribution. Thus, a broker may use third party distributors, or it may have its own warehouse and delivery system. The broker can provide an alternative physical distribution channel.

The channel structures can differ very markedly from one company to another. The main differences are: the types of intermediaries; the number of levels of intermediaries (how many companies handle the product); and the intensity of distribution at each level.

An individual company may have many different products and many different types of customers. Such a company will therefore use a number of different channels within its distribution operation. This, together with the large number of variable factors and elements possible within a channel structure, makes it difficult to summarize effectively.

Exercise 16. Answer the questions on text 2.

1. What alternative physical channels of distribution exist within a channel structure? 2. What is the main condition for the channel *manufacturer direct to retail store* to be used? 3. What channel was one of the common classic physical distribution channels? 4. In what channel type are different distribution centers used? 5. What wholesaler organizations are known as “symbol” groups? 6. What is their principle of operation? 7. What are cash-and-carry businesses? 8. What is third-party distribution? 9. What is the role of a broker in the distribution channel structure? 10. How can channel structures differentiate from a company to a company?

Exercise 17. Decipher the abbreviations.

RDC, NDC, CDC, DLT, DRP, DC, DOD.

Exercise 18. Translate the following sentences into English.

1. Головним з-поміж альтернативних каналів збуту для окремого споживчого продукту вважають канал «виробник → магазин роздрібно́ї торгівлі». 2. Канал розподілу «виробник → магазин роздрібно́ї торгівлі» використовують лише за умови повного завантаження транспортного засобу для доставлення. 3. Канал збуту «виробник → розподільчий центр → магазин роздрібно́ї торгівлі» базується на тому, що виробник або постачальник зберігає товар на складі готової продукції, головному або в одному з регіональних центрів збуту, після

чого товари розвозяться у містя, де вони зберігаються і розподіляються на індивідуальні замовлення для доставлення у магазини роздрібно́ї торгівлі. 4. Канал збуту «виробник → оптовик → магазин роздрібно́ї торгівлі» презентований картелями роздрібних торговців, які забезпечують цінову перевагу, купуючи гуртом у виробників або постачальників. 5. Фірми, що продають товар за готівковий розрахунок без доставлення, є незалежними невеликими магазинами в межах оптового підприємства, які збирають замовлення від регіональних гуртових фірм. 6. У разі залучення у процес доставлення третьої сторони вона може надавати спеціалізовані послуги щодо складування та збуту для одного типу продукції (наприклад, порцеляни або скла). 7. У каналі «виробник → брокер → магазин роздрібно́ї торгівлі» роль брокера полягає в посередницькій діяльності, але він швидше займається продажем серії продуктів, ніж фізичним збутом. 8. Структура каналів збуту компаній може відрізнятись за типом посередників, кількістю рівнів посередників та інтенсивністю збуту на кожному рівні. 9. Оскільки компанія може мати значний асортимент продукції та різні типи клієнтів, їй необхідно користуватися різними каналами збуту.

Exercise 19. Translate into Ukrainian paying attention to the translation of the verbs used as predicates in the Subjective-with-the-Infinitive Complex.

1. The company **appears** to have accepted a new strategy in customer services provision. 2. Delivery vehicles **proved** in short supply through month. 3. The channel “factory direct home” **seems** to be a relatively rare alternative. 4. Internet and shopping from home **turned out** to be run by third-party companies. 5. The channel “factory to factory” **may seem** to be an extremely important one as it includes all of the movements of industrial products. 6. A lot of goods **may happen** to be ordered by catalogue and delivered to home by post or parcel carrier. 7. Investments in line-haul operation development **turn out** to be justified in future.

Exercise 20. Translate into English using the Subjective-with-the-Infinitive Complex.

1. Цей продукт виявився популярним серед замовників (to grove). 2. Така політика збуту виявилася неефективною в минулому

(to prove). 3. Так трапилося, що виробники постачали свою продукцію у національні або регіональні центри збуту, які управлялися організаціями роздрібної торгівлі (to happen). 4. Виявилось, що гуртові фірми діяли як посередники у мережі збуту протягом багатьох років (to turn out). 5. Здається, вони втратили попит на частково зібрані продукти у цьому сегменті ринку (to seem). 6. Середня кількість посередників, очевидно, буде значно меншою, ніж прогнозовано на початку року (to appear). 7. Вірогідно, що виробник звернеться по допомогу до спеціалізованої компанії щодо збуту та складського зберігання (to be likely).

Exercise 21. Memorize the terminology to text 3.

unit load – штабельований вантаж; транспортний пакет; тарно-штучний вантаж

Exercise 22. Read and translate text 3.

Text 3. Channel Selection

Channel objectives will necessarily differ from one company to another, but it is possible to define a number of general points that are likely to be relevant. These should normally be considered by a company in the course of its distribution planning process to ensure that the most appropriate channel structure is developed.

The main points that need to be addressed are as follows:

To make the product readily available to the market consumers at which it is aimed. Perhaps the most important factor here is to ensure that the product is represented in the right type of outlet or retail store. Having identified the correct marketplace for the goods, the company must make certain that the appropriate physical distribution channel is selected to achieve this objective.

To enhance the prospect of sales being made. This can be achieved in a number of ways. The most appropriate factors for each product or type of retail store will be reflected in the choice of channel. The general aims are to get good positions and displays in the store, and to gain the active support of the retail salesperson, if necessary. The product should be 'visible, accessible and attractively displayed'. Channel choice is affected by this objective in a number of ways:

- Does the deliverer arrange the merchandise in the shop?
- Are special displays used?
- Does the product need to be demonstrated or explained?
- Is there a special promotion of the product?

To achieve co-operation with regard to any relevant distribution factors. These factors may be from the supplier's or the receiver's point of view, and include minimum order sizes, unit load types, product handling characteristics, materials handling aids, delivery access (e.g. vehicle size) and delivery time constraints, etc.

To achieve a given level of service. Once again, from both the supplier's and the customer's viewpoints, a specified level of service should be established, measured and maintained. The customer normally sees this as crucial, and relative performance in achieving service level requirements is often used to compare suppliers and may be the basis for subsequent buying decisions.

To minimize logistics and total costs. Clearly, costs are very important, as they are reflected in the final price of the product. The selected channel will reflect a certain cost, and this cost must be assessed in relation to the type of product offered and the level of service required.

To receive fast and accurate feedback of information. A good flow of relevant information is essential for the provision and maintenance of an efficient distribution service. It will include sales trends, inventory levels, damage reports, service levels, cost monitoring, etc.

Taking into account market and product characteristics, another aspect to be considered concerns the *characteristics of the channel* itself. There are two different factors that are important. Firstly, does the channel being considered serve or supply the customer in the way required? A simple example might be a new grocery product that needs to be demonstrated or tested in the shop. There would be no point in distributing this product through a small self-service store where no facilities can be provided for a demonstration. Secondly, how efficient is the channel being considered? Efficiency may include a number of different features related to sales or distribution. These might include the sales potential in the outlets served, the size of orders placed, the frequency of delivery required, etc.

Competitive characteristics that need to be considered concern the activities of any competitors selling a similar product. Typical decisions are whether to sell the product alongside these similar products, or

whether to try for different, exclusive outlets for the product to avoid the competition. It may well be that the consumer preference for a wide choice necessitates the same outlets being supplied. Good examples include confectionery and most grocery items. Also of very real significance is the service level being offered by the competition. It is essential that channel selection is undertaken with a view to ensuring that the level of service that can be offered is as good as, or better than, that which is being provided by key competitors. This may well be the main area for competitive advantage, especially for those products where it is very difficult to differentiate on quality and price.

In the final analysis, it is often the *size and the financial strength* of the company that is most important in determining channel strategy. Only a fairly large and cash-rich company can afford to set up a distribution structure that includes all of its own warehousing and transport facilities. With these, the company has more control and can provide the service it thinks its customers require. Smaller and less financially secure companies may have to use intermediaries or third-party organizations to perform their distribution function. In these instances, it may be less easy to ensure provision of the service they feel their customers would like.

These factors will all need to be taken into account when designing a channel structure and selecting the appropriate channel members. A formalized approach that might be adopted when undertaking the design of a channel structure is set out in Fig. 2.

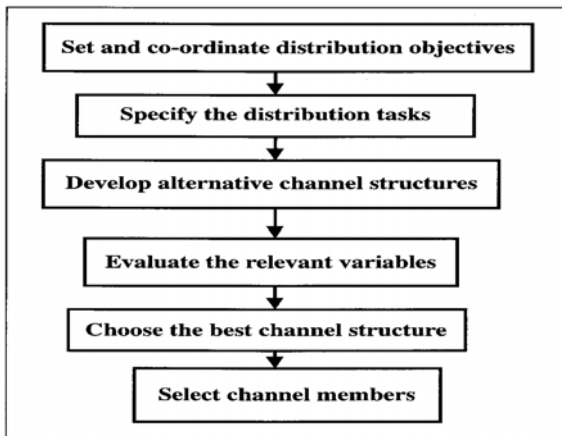


Fig. 2. Designing a channel structure – a formalized approach

Exercise 23. Answer the questions on text 3.

1. How can a company make the product readily available to the market consumers? 2. How can we enhance the prospect of sales? 3. What should be taken into account with regard to relevant distribution factors? 4. What does a consumer consider crucial? 5. Why are logistics and total costs very important? 6. What does feedback of information include? 7. What must be taken into account when considering the characteristics of the channel itself? 8. What decisions can be made as to competitive characteristics? 9. What other factors may influence the choice of channel strategy?

Exercise 24. Give English equivalents.

Процес планування збуту; магазин роздрібної торгівлі; торгова точка; доступний; засоби завантаження-розвантаження матеріалів; обмеження у часі; вимоги до рівня обслуговування; загальні витрати; зворотний зв'язок; звіт про пошкодження; моніторинг витрат; магазин самообслуговування; головні конкуренти; конкурентна перевага.

Exercise 25. Say whether the following statements are true or false. Correct the false ones.

1. It is not important to ensure that the product is represented in the right type of outlet or retail store. 2. The most appropriate factors for each product or type of retail store will be reflected in the choice of channel. 3. Distribution factors can include minimum order sizes, unit load types, product handling characteristics, materials handling aids, delivery access and delivery time constraints, etc. 4. The customer normally sees crucial and compares price options from different suppliers. 5. Costs are not very important, as they are not reflected in the final price of the product. 6. The efficiency of a channel can be measured by the level of service rendered. 7. Competitive characteristics concern the activities of any competitor selling a different product. 8. Large and cash-rich companies can provide services their customers require using intermediaries or third party organizations to perform their distribution function.

Exercise 26. Match idioms (1-8) and their explanations (a-h).

1. bring someone a) because of me or for my sake

- to account
- | | |
|-----------------------------------|--|
| 2. by all accounts | b) not for any reason |
| 3. call somebody to account | c) to consider something |
| 4. on my account | d) to make sure that somebody pays for what he has done |
| 5. on no account | e) to use a situation to one's advantage |
| 6. take something into account | f) to demand that someone explains what he has done and why, especially if this was apparently wrong |
| 7. turn something to good account | g) not important or does not matter |
| 8. give a good account of oneself | h) in the opinion of most people |
| 9. of no account | i) to do well |

Exercise 27. Replace the underlined words with above mentioned idioms.

1. *A lot of manufacturers consider* the choice of channels for each type of products. 2. To receive fast feedback of information the intermediaries must *bear in mind* such factors as trends, inventory levels, damage reports, service level, cost monitoring. 3. All suppliers *must be answerable* for the delays of orders. 4. During last campaign this firm *has shown itself* as a reliable partner. 5. *Under no circumstances* we should refuse help from this distribution centre. 6. The company is able to *make good use* of raw materials.

Exercise 28. Define the functions of for+infinitive. Translate the sentences.

1. He asked for the documents to be sent by post. 2. The main problem is for material to be published as soon as possible. 3. It is impossible for companies hit by fraud to keep it secret. 4. It is still advantageous for foreign companies to operate in this field. 5. It is now commonplace for orders to be communicated computer to computer. 6. There is no sense at all for forwarders to concentrate on this. 7. We should not wait for events to take their course. 8. For a quality control

system to be effective it is necessary to decide what to check and how often. 9. It is possible for the system to operate continuously.

Exercise 29. Speak on:

1. Basic functions of distributive logistics.
2. Distribution channel types.
3. Motives of channel selection.

Unit 17. INSURANCE

Exercise 1. Memorize the basic terminology to text 1.

insurance – 1) страхування; 2) страховий поліс, страховка
to govern – 1) керувати; 2) визначати; 3) спрямовувати; регулювати
to authorize – 1) дозволяти; 2) вповноважувати
on-site inspection – інспектування на місці
annual audit – щорічна ревізія / аудит
auditor – ревізор, фінансовий контролер
to appoint – призначати
at the cost of – за рахунок
to oblige – зобов'язувати; покладати обов'язок; примушувати
to submit – 1) надавати (*документи*); 2) передавати на розгляд
consolidated report – зведений звіт
reinsurance – перестраховування
to exceed – перевищувати
paid – 1) платний; 2) сплачений
charter capital – статутний капітал
insurance premium – страховий внесок, страхова премія
life insurance agreement – угода про страхування життя
insurance broker – страховий брокер, маклер
insurance benefit – страхова допомога / компенсація
cross-border – перехресний, що проходить через кордон
joint-stock company – акціонерне товариство
full partnership – повне товариство
limited partnership – товариство з обмеженою відповідальністю
additional responsibility company – компанія з додатковою
відповідальністю
insurer – 1) страхове товариство; 2) страховальник
individual – особа
mortgage – застава; іпотека, іпотечний кредит

in excess of – що перевищує, виходить за межі
to underwrite – приймати на страхування

Exercise 2. Read and translate text 1.

Text 1. Insurance Services in Ukraine

Insurance services in Ukraine are governed by the *Law of Ukraine on Insurance*, the *Insurance Law*.

The State Commission for the Regulation of the Financial Services Markets of Ukraine (the "Regulator") is the specialized state agency responsible for the regulation and control of the insurance business in Ukraine. The Regulator is authorized to issue licenses to insurance companies as well as to adopt specific insurance regulations. The Regulator is also authorized to carry out on-site inspections and document examinations of insurance companies. Finally, the Regulator may demand an additional annual audit of the financial statements of an insurance company, to be conducted by an auditor appointed by the Regulator at the cost of the insurance company.

Insurance companies are obliged to submit quarterly and annual reports to the Regulator. In addition, insurance companies are obliged to prepare and publish their annual financial statements and consolidated reports. The accuracy of these reports must be confirmed by an independent auditor.

The Insurance Law also regulates reinsurance. When the cost of insuring a single object exceeds 10 % of the sum of paid charter capital and formed free reserves and insurance reserves, the insurance company is obliged to conclude a reinsurance agreement. An insurance premium may only be paid in hryvnia. Upon agreement of the parties the financial obligations of the life insurance agreement may be determined in a foreign currency. Insurance benefits are to be paid in the currency stated in the insurance agreement.

Under the *Insurance Law*, foreign insurers are not allowed to conduct direct insurance activity in the Ukrainian market (with the exception of cross-border reinsurance). Only a Ukrainian legal entity in the form of a joint-stock company (open or closed), a full partnership, a limited partnership, or an additional responsibility company may become an insurer in Ukraine.

The *Insurance Law* requires that an insurer must be established by, and must exist with, at least three shareholders (participants). Ukrainian and foreign legal entities and individuals may be shareholders of an insurance company.

Only legal entities with an insurance license may use the words "insurer", "insurance company" and "insurance organization" in their name.

Exercise 3. Answer the questions on text 1.

1. What law are insurance services governed by in Ukraine? 2. Who is "the regulator" of the insurance business in Ukraine? 3. What is the Regulator authorized to do? 4. Why is an auditor appointed by the Regulator? 5. What are insurance companies obliged to do? 6. What does the Insurance Law also regulate? 7. When is a reinsurance agreement concluded? 8. What currency may an insurance premium be paid in? 9. What currency are insurance benefits to be paid in? 10. Who may become an insurer in Ukraine? 11. What does the Insurance Law require? 12. Who may use the words "insurer", "insurance company" and "insurance organization" in their name?

Exercise 4. Translate the definitions of the following terms.

Insurance – an arrangement by which a company or the state undertakes to provide a guarantee of compensation for specified loss, damage, illness, or death in return for payment of a specified premium.

Insurance company – a company whose main activity is providing insurance. This may include life, fire, motor, health, or many other varieties of insurance. As the premiums for policies are paid before claims occur, and in the case of life policies the funds collected accumulate for decades, insurance companies hold large stocks of assets. This makes them major participants in the market for government bonds, equity shares, and commercial and household mortgages.

Reinsurance – the system by which the issuers of insurance policies pass on part of the risk to others, by themselves taking out further insurance policies. Reinsurance normally applies only to claims on a policy or group of policies in excess of some minimum amount. This limits the insurer's maximum possible losses if claims on the policies turn out to be higher than expected: it is thus a method of risk-spreading.

Insurer – a person or company that underwrites an insurance risk; the party in an insurance contract undertaking to pay compensation.

Insurance broker – company registered as an adviser on matters of insurance and as an arranger of insurance cover with an insurer on behalf of a client.

Insurance policy – a document that sets out the terms and conditions of an insurance contract, stating the benefits payable and the premium required.

Insure – arrange for compensation in the event of damage to or loss of (property), or injury to or the death of (someone), in exchange for regular payments to a company or to the state

Exercise 5. Give English equivalents.

Страхування; видавати ліцензії; щорічна ревізія; фінансовий звіт; ревізор; перестраховання; фінансове зобов'язання; страховий внесок; страховий брокер; страхова компенсація; юридична особа; акціонерне товариство; товариство з обмеженою відповідальністю; страхова компанія; акціонер.

Exercise 6. Say whether the following statements are true or false. Correct the false ones.

1. The Regulator is authorized to issue licenses to insurance companies as well as to adopt specific insurance regulations. 2. Insurance companies are obliged to submit monthly reports to the Regulator. 3. When the cost of insuring a single object exceeds 10 % of the sum of paid charter capital and formed free reserves and insurance reserves, the insurance company is obliged to address an insurance broker. 4. An insurance premium may be paid in any currency. 5. Insurance benefits are to be paid in the currency stated in the insurance agreement. 6. The Insurance Law requires that an insurer must be established by, and must exist with, at least one shareholder (participant). 7. Only Ukrainian legal entities and individuals may be shareholders of an insurance company.

Exercise 7. Change the sentences into the Passive Voice.

1. The Law of Ukraine on Insurance governs insurance services in Ukraine. 2. The Regulator may demand an additional annual audit of the financial statements of an insurance company, to be conducted by an

auditor appointed by the Regulator at the cost of the insurance company. 3. The Insurance Law also regulates reinsurance. 4. The Insurance Law requires that an insurer must be established by, at least three shareholders (participants). 5. The Regulator carries out on-site inspections and document examinations of insurance companies. 6. The law does not permit foreign insurers to conduct direct insurance activity in the Ukrainian market (with the exception of cross-border reinsurance).

Exercise 8. Translate the following sentences into English.

1. Страховий бізнес в Україні контролюється Державною Комісією з регулювання ринків фінансових послуг України. 2. Спеціалізована державна агенція вповноважена давати ліцензії страховим компаніям, ухвалювати спеціальні страхові правила, інспектувати на місці та перевіряти документацію страхових компаній. 3. Перевірку фінансових звітів страхової компанії та додатковий щорічний аудит може здійснювати ревізор, призначений державною агенцією, за рахунок страхової компанії. 4. Точність щорічних фінансових звітів має підтверджувати незалежний ревізор. 5. Страхові виплати мають здійснюватися у валюті, вказаній у страховій угоді. 6. Закон про страхування вимагає, щоб страхові товариства створювали щонайменше троє акціонерів.

Exercise 9. Translate the sentences defining the functions of the Gerund.

1. They started a new business with a view to **providing** insurance services to shippers. 2. This financial report needs **checking up**. 3. **Understanding** all risks is the first step for **securing** your cargo. 4. High rates have discouraged shippers from **fulfilling** their liabilities in time. 5. The insurance company was thinking about **concluding** a reinsurance agreement. 6. We have little interest in **carrying** their own document examinations. 7. In insurance business the price of **being unprepared** is rather high. 8. The insurance law is responsible for **not allowing** foreign insurers to conduct direct insurance activity in Ukraine.

Exercise 10. Memorize the basic terminology to text 2.
to engage (in) – займатися

brokerage – маклерство
provision – забезпечення
to enter into an agreement – укласти угоду
under the authorization – з дозволу
reimbursement – відшкодування, компенсація
tax-payer – платник податку
state registry – державний реєстр

Exercise 11. Read and translate text 2.

Text 2. Insurance Agents and Brokers

There are two types of insurance intermediaries in Ukraine: agents and insurance brokers.

A **broker** is a representative of an insured entity and may not engage in any activity other than brokerage. Brokerage activities are very narrowly defined in Ukraine and do not include the provision of any services on behalf of and/or in favour of an insurance company.

According to Ukrainian law a broker must have a brokerage agreement with an insured entity rather than with an insurance company. Moreover, a conservative interpretation of existing Ukrainian law suggests that a broker may not enter into an agreement with an insurance company.

Ukrainian law also states that a broker must receive his fee from an insured entity rather than from an insurance company.

Insurance agents are individuals or legal entities acting on behalf of, and under the authorization of, an insurance company. They carry out a portion of the insurance company's activities including, in particular, concluding insurance contracts, obtaining insurance premiums and performing functions in connection with insurance payments and reimbursements. Insurance agents are representatives of an insurance company and act in its interests for fees based on the relevant agency agreement with an insurance company.

Non-resident insurance and reinsurance brokers may provide their services only through permanent representation offices in Ukraine which must be registered as tax-payers in accordance with Ukrainian legislation and included in the state registry of insurance and reinsurance brokers.

Exercise 12. Answer the questions on text 2.

1. What types of insurance intermediaries exist in Ukraine? 2. Who does a broker represent? 3. What limitations of broker's activities are

imposed by Ukrainian law? 4. What institution must a broker have a brokerage agreement with? 5. What do insurance agents act on behalf of? 6. What do activities of an insurance agent include? 7. How are insurance agents paid for their services? 8. What conditions are stipulated by Ukrainian legislation as for non-resident insurance and reinsurance brokers' services?

Exercise 13. Give English equivalents.

Посередник; страховий агент; застрахована організація; займатися чимось; маклерство; на користь; маклерська угода; консервативне трактування; укладати угоду; отримувати винагороду; юридична особа; з дозволу; укладання договору страхування; отримання страхових внесків; страхові виплати, платник податків; українське законодавство; державний реєстр.

Exercise 14. Say whether the following statements are true or false. Correct the false ones.

1. A broker as a representative of an insured entity may engage in any activity. 2. According to Ukrainian law a broker must have a brokerage agreement with an insurance company. 3. Ukrainian law states that a broker must receive his fee from an insured, entity rather than from an insurance company. 4. Insurance agents are individuals or legal entities working independently. 5. Insurance agents conclude insurance contracts and obtain insurance premiums. 6. Insurance agents are representatives of an insurance company and act in its interests for fees based on the relevant agency agreement with an insurance company. 7. Non-resident insurance and reinsurance brokers may provide their services through representative offices in Ukraine.

Exercise 15. Memorize the basic terminology to text 3.

to secure – гарантувати, забезпечувати
financial arrangements – фінансові розрахунки, угоди про фінансування
coverage – 1) покриття, оплата; 2) загальна сума ризику, покрита договором страхування; 3) зона дії
insurance coverage – страхове покриття, страхова сума
to sink – тонути, знижуватись

shifting – переміщення
theft – крадіжка
to mislead (*p. pp. misled*) – вводити в оману
unforeseeable – непередбачуваний
to fill the need – задовольняти потребу
inland – 1) розташований всередині країни; 2) внутрішній
comprehensive – всебічний
warehouse-to-warehouse coverage – покриття ризиків перевезення зі складу на склад
deterioration – погіршення, псування
recall – 1) відклик; 2) відкликати
rejection – 1) бракування; 2) відмова; 3) відхилення (*пропозиції*)
sensitive equipment – чутливе обладнання
bonded warehousing – зберігання товарів, за які не сплачене мито на митному складі
relocation – переміщення
riot – бунт, заколот
civil commotion – громадські хвилювання
peril – небезпека, ризик
shipping – 1) морський флот; 2) судноплавство; 3) відвантаження, відправлення
certificate of insurance coverage – страхове свідоцтво
to fall short – виявитися недостатнім
Cargo Clause – пункт контракту щодо вантажу
total loss insurance – страхування загальної суми збитків
stranding – посадження на мілину
collision – зіткнення
fault of vessel management – помилка в керуванні судном
bursting – вибух, розрив
explosion – 1) вибух; 2) спалах (*гніву*)
latent defects – прихований дефект
sweat – осідання вологи
stowage – плата за складування
pilferage – дрібна крадіжка
leakage – витік, теча

Exercise 16. Read and translate text 3 using the vocabulary.

Text 3. Cargo Insurance

Given the modern variety of products and services on the insurance market, it is difficult to estimate the financial status of this or that insurance company and independently define where and on what conditions it is necessary to get insurance. In order to make a rational choice you should select only those insurers, whose insurance conditions are most close to a best balance of price, reliability, and quality and who will insure your cargo depending on the plan of transportation, financial arrangements and the nature of your cargo, securing the most reliable insurance coverage and best price.

The probability of sustaining a loss on goods in transit is greater than you may think. On average, three ships sink every week. Long voyages, extensive moving and shifting of cargo, theft, and bad weather all add substantially to the potential for loss or damage.

Many shippers are misled into relying on the carrier to pay for losses in transit. That can be a major mistake. Law or tariff restrictions limit the liability of most carriers. Also, most carriers are not responsible for losses which are unforeseeable and beyond their control.

When there is a genuine need for cargo insurance, insurance agents are able to fill that need effectively and work with you to design an insurance policy, which meets your unique transportation needs.

Among many options the insurance agents can offer are airfreight and ocean coverage; inland truck or rail coverage; comprehensive all risk, warehouse-to-warehouse coverage (including high risk countries); product deterioration and / or refrigeration breakdown protection; product recall or rejection; highly technical or sensitive equipment; contingency coverage; perishable items; container insurance; multinational processing, distribution and/or warehousing (including bonded warehousing); project relocation; war risks protection; strikes, riots and civil commotion.

Insurance can be provided for shipments made by ocean, air, rail and truck, and can cover a variety of perils using an all risk policy. Special endorsements can be included to insure freight which is not covered by a typical cargo policy.

Shipping insurance is a "must-have" in today's global shipping and moving industry. Current transport logistics and international transport

systems involve a lot of different vendors carrying only LIMITED LIABILITY. Your cargo travels without FULL VALUE insurance. Not to obtain the cargo insurance is to place your business and personal assets under a substantial risk.

Getting international shipping insurance or domestic cargo insurance is very simple: select the cargo you're shipping or receiving (cars, boats, household goods, commercial freight), look up insurance quotes based on provided rates, submit freight shipping details, and receive your certificate of insurance coverage within minutes.

There's no greater myth in the transportation industry today than being told, "Your cargo is fully insured – don't worry". While the carriers are required by some regulatory agency to obtain cargo insurance coverage of some type – you may find that the minimum coverage offered by the transport companies falls short of the true value of your cargo. Ocean shipping lines are only responsible for up to \$500 per "package" which can be considered a pallet, a crate or even a whole container. Air carriers, rail operators and trucking companies have the similar rules when it comes to their shipment liability. Also their insurance policies exclude many factors that can lead to potential freight damages and financial losses.

Cargo insurance is usually provided by means of one of three Cargo Clauses – A, B or C, plus War Clauses and Strikes Clauses.

ALL RISK INSURANCE (Clause A) is against all risk of physical loss or damage from any external cause. It is used for most shipments. TOTAL LOSS INSURANCE (Clause C) is warranted free from particular average. It is not concerned about theft.

Possible causes of loss or damage are stranding, sinking, burning, collision, fault of vessel management, bursting of boilers, latent defects of hull, explosion, water damage, heavy weather, ship's sweat, condensation, improper stowage by carrier, theft or pilferage, non-delivery, breakage or leakage.

Exercise 17. Answer the questions on text 3.

1. What makes the choice of insurance difficult? 2. What should one take into consideration while selecting an insurer? 3. What can cause losses on goods? 4. Why is it a mistake to rely on the carrier to pay for losses in transit? 5. What options can an insurance agent offer? 6. In what way can one get an international shipping or domestic cargo

insurance? 7. What Cargo Clauses provide cargo insurance? 8. What are possible causes of loss or damage?

Exercise 18. Give English equivalents.

Гарантувати; страхова сума; вантажовідправник; відповідальність; непередбачуваний; задовольняти потребу; всебічний страховий захист; покриття ризиків перевезення зі складу на склад; бракування; покриття непередбачуваних обставин; митний склад; ризик; індосамент; продавець; страхування внутрішнього вантажу; предмети домашнього вжитку; призначена ціна; вантажний тариф; піддон; страхування всіх ризиків; страхування загальної суми збитків; плата за складування.

Exercise 19. Say whether the following statements are true or false. Correct the false ones.

1. You should select only those insurers who will insure most reliable insurance coverage and best price. 2. It is useful to rely on the carrier to pay for losses in transit. 3. The probability of sustaining a loss on goods in transit is very small. 4. Usually most carriers are responsible for losses which are unforeseeable and beyond their control. 5. Insurance agents are able to fill that need effectively and work with you to design an insurance policy, which meets your unique transportation needs. 6. Not to obtain the cargo insurance doesn't mean to place your business and personal assets under a substantial risk. 7. Clause A is used for particular shipments.

Exercise 20. Match the definitions with the proper terms.

Definitions	Terms
1. A future event or circumstance that is possible but cannot be predicted with certainty	a) insurance
2. An amount to be paid for an insurance policy, usually calculated according to the value of the consignment, type of goods and other specific risks from the insurer's perspective	b) insurance broker
3. An arrangement by which a company or the state undertakes to provide a guarantee of compensation for specified loss, damage, illness, or death in return for payment of a specified premium	c) reinsurance

4. Company registered as an adviser on matters of insurance and as an arranger of insurance cover with an insurer on behalf of a client d) premium
5. A person employed to sell insurance policies e) contingency
6. The system by which the issuers of insurance policies pass on part of the risk to others, by themselves taking out further insurance policies. f) insurance agent

Exercise 21. Translate the following sentences into English:

1. Для того, щоб правильно обрати страхову компанію, необхідно брати до уваги поєднання ціни, надійності та якості, фінансові розрахунки, характер вантажу. 2. Багато вантажовідправників помиляються, покладаючися на те, що перевізник відшкодує збитки під час транзиту. 3. Більшість перевізників не відповідають за непередбачувані збитки. 4. Страхові агенти авіаперевезення вантажу можуть запропонувати страхове покриття, всебічний страховий захист, покриття ризиків перевезення зі складу на склад, страхове покриття непередбачуваних обставин, страхування контейнерів. 5. Якщо вантаж не страхується типовим вантажним страховим полісом, для його захисту застосовують спеціальні індосаменти. 6. Не отримувати вантажне страхування означає наражати ваш бізнес та особисті активи на значний ризик. 7. Для того, щоб застрахувати ваш вантаж, необхідно ознайомитися зі страховими цінами, надати детальну інформацію про вантаж, і ви отримаєте страховий сертифікат за кілька хвилин. 8. Оскільки страхові поліси убезпечують від багатьох чинників, це може призвести до потенційних фінансових збитків.

Exercise 22. Speak on:

1. Insurance services in Ukraine.
2. Insurance agents and brokers.
3. Cargo insurance and its types.

Unit 18. CUSTOMS REGULATIONS: IMPORT AND EXPORT

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

protectionism, excise, entrance, receipt, import, importer, export, exporter, importation, exportation, abandonment, applicable, auspice, circulation, fertilizer, preferential, exemption, pursuant, levy, minuscule, dump.

Exercise 2. Read dialogue 1 and translate it using the notes below, then reproduce the dialogue in pairs.

Dialogue 1

A: Are there times when you think that protectionism is justified?

B: Definitely. Developing countries which want to start manufacturing their own goods have a strong case. This makes them less dependent on imports, and helps with their balance of trade. In this case, the government needs to protect the young industry from outside competition, for a few years.

A: And what about established industries in developed countries?

B: Well, protectionism can help against unfair competition.

A: Unfair competition? Is there really such a thing?

B: I think so. Sometimes aggressive companies dump their goods in importing countries. They don't make a profit, but this kills the local competition.

Notes

protectionism – протекціонізм (*економічна політика держави, спрямована на захист національної економіки від іноземної конкуренції*)

balance of trade – баланс (*зовнішньої*) торгівлі

unfair – нечесний, несправедливий

dump – демпінгувати (*викидати на ринок товар у великій кількості*)

Exercise 3. Memorize the basic terminology to text 1.

Customs and Excise – митне та акцизне управління

customs duty – мито

outside competition – зовнішня конкуренція
forbidden goods – заборонені товари
local competition – внутрішня конкуренція
visible trade – видима торгівля (*експорт та імпорт товарів*)
invisible trade – невидима торгівля (*експорт та імпорт послуг*)
carousel trade – незаконна податкова схема «карусель НДС»
receipts – прибуток, виторг

Exercise 4. Read and translate text 1.

Text 1. A Bit About the Customs

Basically, the Customs, or Customs and Excise (to give them full title) are representatives of a country's government. They are a government department. They are found at ports and airports – the places where people bring goods into or out of the country. They have four main functions. The first function is to calculate and collect the duty on imported goods which are dutiable. Remember, that you don't have to pay duty on all goods. The second function is to issue import and export licences for restricted goods. The third function is to prevent trade in forbidden goods. That is to stop people trading in certain drugs, wildlife, that sort of things. The fourth function is to collect import and export figures. They use these figures to calculate the country's Balance of Trade.

Every passenger having reached the age of 16 who is going to fly abroad should fill in Customs Declaration and preserve it within the whole period of temporary entrance / departure and submit it to the customs authorities in case of citizen's return.

Visible and Invisible Imports and Exports.

Balance of Trade and Balance of Payment.

Goods, such as cloth and television, are visible (you can see them). Goods you sell abroad are visible exports. When you sell visible exports, money will come into your country. When you buy visible imports, money will leave your country.

Some imports and exports are invisible. For example, if an engineering expert from country A goes to country B to help them improve their engineering industry, he will earn money from B and bring it back to A. The expert is providing a service (which is his knowledge or expertise). For B this is an invisible import (because

money leaves the country), but for A it is an invisible export (because money comes into the country).

The difference between the amount the country spends on visible imports and the amount it receives for visible exports is its Balance of Trade. The difference between the total amount a country spends on imports (both visible and invisible) and other payments abroad and the total amount it receives from exports (both visible and invisible) and other receipts is its Balance of Payment.

Exercise 5. Match the definitions with proper terms.

Definitions	Terms
1. The policy some countries have of helping their own industries by putting a large tax on imported goods or by restricting imports in some other way	a) carousel trade
2. A limited quantity of a particular product which under official controls can be produced, exported, or imported	b) free trade
3. Selling products in an export market cheaper than in the home market, or cheaper than they cost to make, usually in order to increase market share	c) visible trade
4. The difference in value, over a period of time, between the goods a country imports and the goods it exports	d) invisible trade
5. A trade without government regulations.	e) dumping
6. Refers to goods	f) balance of trade
7. Refers to capital and services	g) protectionism
8. A complex form of VAT fraud.	h) quota

Exercise 6. Complete the sentences matching the beginnings (1-6) with the end portions (a-f).

1. <i>Free trade</i> exists when goods can be traded easily between countries...	a) ... which are kind of tax on imported goods.
2. <i>Protectionism</i> is where countries try to protect home producers...	b) ... complicated <i>bureaucracy</i> and complex customs regulations.
3. One way to do this is by using <i>tariffs</i> ...	c) ... without restrictions.
4. Another way is by using <i>quotas</i> which limit...	d) ... the number or quantity of goods that can be imported.

5. Domestic manufacturers often complain that foreign competitors... e) ... from foreign competition and cheap imports.
6. Exporters, on the other hand, often complain about... f) ... try to destroy them by *dumping* their goods at very low prices.

Exercise 7. Fill in the blanks with the words in italics from exercise 6.

1. These new import ... make our products 50 % more expensive.
 2. Government ... limit the import of luxury cars to just 200 each year.
 3. ... is a very good idea in principle, but in practice we need ... to help domestic manufacturers to survive.
 4. This ... is awful; just look at all these forms we've got to fill in.
 5. We can't compete with their prices; they must be ... their goods to put us out of business.

Exercise 8. Translate the following sentences into English:

1. Політика протекціонізму в країнах, що розвиваються, робить їх менш залежними від імпорту, тобто захищає їхні товари від зовнішньої конкуренції.
 2. У розвинутих країнах протекціонізм захищає економіку від нечесної конкуренції.
 3. Агресивні компанії демпінгують свої товари у країнах-імпортерах, не отримуючи від цього прибутку, але знищуючи внутрішню конкуренцію.
 4. Митниці розташовуються у міжнародних аеропортах та морських портах і є представництвами уряду країни.
 5. Митниця підраховує та збирає мито на імпортовані товари, що підлягають миту; видає імпортні та експортні ліцензії на обмежені для вивозу товари; запобігає торгівлі забороненими товарами.
 6. Кожен пасажир, який досяг 16-річного віку, виїжджаючи за кордон, має заповнити митну декларацію.
 7. Різниця між сумами, які країна витрачає на видимий імпорт і сумами, які вона отримує за видимий експорт, є її торговельним балансом.
 8. Різниця між загальними сумами, які країна витрачає на імпорт (видимий та невидимий) та інші закордонні платежі, і загальними сумами, отриманими від експорту (видимого та невидимого) та інших прибутків, є платіжним балансом країни.

Exercise 9. Memorize the basic terminology to text 2.

- customs border – митний кордон
 the Customs Code – митний кодекс

the Law of Ukraine On Customs Tariffs of Ukraine – закон України
про митні тарифи України
customs-free trade zone – зона безмитної торгівлі
destruction – знищення
abandonment – залишення; відмова (*від права, позову*)
customs broker – митний брокер (маклер), агент із митного
очищення імпортованих вантажів
customs authorities – митні органи влади, митне управління, митна
адміністрація
upon compliance with – відповідно до
customs fee – митний збір
submission – подання (документів); подання на розгляд
observance – дотримання
non-tariff requirements – нетарифні вимоги
under the auspices – за підтримки, під егідою
exempt from – звільнений від; що не підлягає чомусь
expiration of the term – закінчення терміну
wear and tear – фізичне і моральне зношення; експлуатаційне
зношення
import charge – податок на імпорт

Exercise 10. Read and translate text 2.

Text 2. Customs Regulations in Ukraine

The general principles of customs procedures in Ukraine are defined, and the movement of goods across the customs border of Ukraine as well as the procedures for customs control and other related issues are regulated by the *Customs Code of Ukraine* (the *Customs Code*), dated 11 July 2002. In addition to the *Customs Code*, the applicable Ukrainian legislation on customs also includes the *Law of Ukraine on Customs Tariffs of Ukraine* and other relevant acts.

Goods moved across the customs borders of Ukraine must be supported by proper documentation and require declaring by either an importer/exporter of the goods or a licensed customs broker to the relevant customs authorities.

The *Customs Code* establishes two separate regimes, **import** and **export**. The *Customs Code* defines the import regime as permitting goods and other products to move across the customs border of Ukraine

upon their compliance with the following formalities: payment of customs duties, relevant taxes, and customs fees (if applicable); submission of appropriate documents for the import/export of such goods; and observance of tariff and non-tariff requirements and other relevant restrictions in accordance with the applicable Ukrainian legislation. All goods imported under the auspices of the import regime may be used without any limitations on the territory of Ukraine.

The *Customs Code* provides that **re-import** and **re-export** are new customs regimes, whereby goods originating from Ukraine or a foreign country, which are taken out of or into the customs area of Ukraine for a period established under the applicable Ukrainian legislation, are exempt from numerous requirements which are otherwise applicable to the export and import regimes.

Goods and other products may be moved across the territory of Ukraine under the **transit regime**, provided that all of the applicable customs fees are paid and the appropriate documents are submitted to the customs authorities.

Under the *Customs Code*, goods that are imported to or exported from Ukraine on a temporary basis are exempt from import/export duties, provided that such goods are imported/exported for a period that does not exceed one year, and that they are exported/imported back prior to the expiration of the term of the temporary import/export in the same condition in which they were imported/exported (*e.g.*, without having been in any way processed or reconstructed) except for natural wear and tear. The maximum one-year term may be extended in certain cases by a written application of the person concerned.

Under the **customs warehouse regime**, products (goods) may be stored under customs control for a specific period of time prior to their subsequent import or export without paying any import taxes and charges, provided that they comply with the relevant non-tariff measures or other restrictions.

The **special customs zone regime** applies to products which are imported to or exported from the special economic zones throughout the territory of Ukraine. Under this regime, no tariff or non-tariff measures should be applied unless otherwise stipulated by law.

Under the **customs free trade store regime**, goods and their supplements that are not intended for consumption on the customs territory of Ukraine are permitted to be sold without the payment of any

import taxes or customs duties or the application of any tariff or non-tariff measures, provided that such goods are sold within special areas under customs control, such as points of admission on the customs border of Ukraine intended for international connections, and other relevant areas.

Under the **regime of processing on the customs territory** of Ukraine, goods originating from other countries may be processed on the territory of Ukraine without the application of any tariff or non-tariff measures to such goods, provided that such goods will be exported outside the customs territory of Ukraine.

Under the **regime of processing outside the customs territory** of Ukraine, goods which are not subject to any restrictions for circulation within Ukraine may be taken out of Ukraine without the application of any tariff or non-tariff measures to such goods, provided that such goods will be imported back into Ukraine.

Destruction is the **customs regime** whereby goods brought into the customs territory of Ukraine are subject to destruction under customs control, or must be abandoned in favour of the state, without the payment of any import taxes or the application of any tariff or non-tariff measures.

Under the **regime of abandonment of goods for the benefit of the state**, the owner of the goods may abandon the goods in favour of the state without the payment of any import taxes or the application of any tariff or non-tariff measures. The owner cannot benefit from such abandonment.

Exercise 11. Answer the questions on text 2.

1. What documents regulate Customs procedures in Ukraine?
2. What does the Customs Code provide?
3. Who has to declare the goods moved across the customs borders?
4. What does the import regime permit?
5. Are re-export and re-import regimes simpler than import/export ones? Ground your answer, please.
6. What is specific about temporary export / import in Ukraine?
7. What does a customs warehouse regime provide?
8. What does the special customs zone regime stand for?
9. How can goods be sold under customs free trade store regime?
10. How are goods processed under the regime of processing on the customs territory of Ukraine?
11. How are goods processed under the regime of processing outside the customs territory

of Ukraine? 12. What does destruction mean? 13. What is meant by the regime of abandonment of goods for the benefit of the state?

Exercise 12. Give English equivalents.

Рух товарів через митний кордон; українське законодавство щодо митниці; митний кодекс; тимчасовий імпорт; митний склад; магазин безмитної торгівлі; знищення товарів; залишення товарів на користь держави; відповідна документація; митний брокер; оплата мит; надання відповідних документів; дотримання вимог щодо тарифів; обмеження; за підтримки; звільняти від сплати мита; закінчення строку; податок на імпорт.

Exercise 13. Match definitions with proper terms.

Definitions	Terms
1. Official department that administers and collects the duties levied by a government on imported goods	a) customs fee
2. An area designated for storage of commercial goods not yet cleared by customs.	b) customs duty
3. A set of written rules defining the regimes of moving goods and other products across the customs border	c) customs house broker
4. The act of giving up the ownership of something covered by an insurance policy and treating it as if it has been completely lost or destroyed.	d) customs clearance
5. A business firm that oversees the movement of international shipments	e) customs code
6. A sum of money that is paid to be allowed to move goods across the customs border (if applicable)	f) abandonment
7. A tax imposed on imports or exports (trade tariff) in and out of a country.	g) customs border
8. Process of clearing import / export cargo through customs (by examination of the documentation and/or the goods themselves.	h) customs

Exercise 14. Say whether the following statements are true or false. Correct the false ones.

1. The general principles of customs procedures in Ukraine are defined, and the movement of goods across the customs border of Ukraine as well as the procedures for customs control and other related issues are regulated by the *Customs Code of Ukraine*, dated 11 July 2002. 2. Only an importer / exporter declares goods moved across the customs borders supported by proper documentation. 3. All goods imported under the auspices of the import regime may be used without any limitations on the territory of Ukraine. 4. Under re-import and re-export regimes, as to the Customs Code, goods taken out or into customs area of Ukraine, are exempt from numerous requirements. 5. Transit regime requires that all applicable customs fees are paid. 6. Under the *Customs Code*, goods that are imported to or exported from Ukraine on a temporary basis are exempt from import / export duties, provided that such goods are imported/exported for a period that does not exceed 6 months. 7. Under the customs warehouse regime, products may be stored under customs control for a specific period of time prior to their subsequent import or export without paying any import taxes and charges. 8. Under the customs free trade store regime, goods and their supplements that are not intended for consumption on the customs territory of Ukraine are permitted to be sold within special areas under customs control, such as points of admission on the customs border of Ukraine intended for international connections, and other relevant areas. 9. Destruction is the customs regime whereby goods brought into the customs territory of Ukraine must be abandoned in favour of the state, without the payment of any import taxes or the application of any tariff or non-tariff measures.

Exercise 15. Translate the following sentences into English.

1. Митний кодекс України регулює рух товарів через митні кордони України та процедури митного контролю. 2. Митний кодекс забезпечує рух товарів через кордони з метою імпорту та експорту, транзиту через територію України, тимчасового імпорту на територію України, оброблення товарів поза митною територією України, знищення товарів, відмови від права власності на товари на користь держави. 3. Митний кодекс дозволяє імпортувати за умови дотримання таких формальностей: сплати мита, відповідних

податків, надання необхідних документів, дотримання тарифів відповідно до чинного українського законодавства. 4. Товари, які імпортуються та експортуються з України на тимчасовій основі, звільняються від імпортно-експортного мита за умови, що вони імпортуються/експортуються протягом періоду, який не перевищує 1 рік. 5. Відповідно до митного складського режиму, товари можуть зберігатися під митним контролем певний час до їх імпортування/експортування без сплати будь-яких податків на імпорт, якщо вони не підлягають сплаті мита або іншим обмеженням. 6. Власник товару може залишити його на користь держави без сплати будь-яких податків на імпорт.

Exercise 16. Translate the following sentences defining the functions of ing-forms(gerund, present participle).

1. They worked very hard with a view to *dumping* their goods in *importing* countries. 2. *Being* a price leader in this market is *becoming* more and more difficult. 3. The present practice of *exporting* goods to *developing* countries is *coming* under control. 4. We have little interest in *importing* dutiable items. 5. Customs is responsible for *collecting* import and export figures to calculate the country's Balance of Trade. 6. One way the country regulates businesses is by *maintaining* fair competition. 7. The cost of *providing* expert services can be both invisible export and invisible import. 8. They stopped *moving* goods across the customs borders without proper documentation.

Exercise 17. Memorize the basic terminology to text 3.

excise tax – акцизний збір

undergo – зазнавати

affix – прикріплювати, додавати

additive – добавка (*харчова*)

expiration date – термін придатності

preferential rate – пільговий тариф

pursuant to – відповідно до

two-tier structure – дворівнева структура

to levy – обкладати (*податком, митом*)

to impose – оподатковувати, обкладати, накладати (*обов'язок*)

miniscule – дуже незначний

Exercise 18. Read and translate text 3.

Text 3. Import-Export Taxes and Customs Duties

As in other European countries, Ukrainian import-export operations are subject to various taxes, including, but not limited to, customs duties and value added tax. Further, depending on the specific product, excise tax and other official costs associated with obtaining licences or necessary product labels may be applicable.

The Cabinet of Ministers has also implemented a licensing system for the import of certain goods, such as chemical substances, fertilizers, pharmaceuticals, cosmetics and veterinary items, among others.

Several categories of import products are subject to special licenses or "certifications" such as pharmaceutical, agro-chemical and food products. All imported food products undergo a "certification" process, during which the required labels containing various information (in the Ukrainian language) must be affixed onto the product. The required information includes the product name, volume, chemicals and additives, expiration date, and calorie content, among others.

As a rule, all imports are subject to payment of customs duty (and, of course, the much-hated value added tax). The only exception applies to foreign investors who contribute qualified foreign investment into a Ukrainian resident company's authorized capital in exchange for the ownership rights in such company.

Ukrainian customs legislation establishes three levels of rates for the payment of customs duties in respect of imported products.

A preferential rate of customs duties (as well as an exemption from the payment thereof) is applied to: products originating from countries with which Ukraine has entered into a customs union; products originating from countries with which Ukraine has created special customs zones; or upon the establishment of a special "preferential" customs regime pursuant to an international agreement of Ukraine.

Reduced rates of customs duties are applied to goods originating from countries and economic unions which have been granted most-favoured nation treatment in Ukraine.

Customs duties are payable in full in respect of all other goods and products not covered in the two categories described above.

Export duties are levied only with respect to certain limited categories of products (*e.g.*, livestock *etc.*).

Currently no value added tax (VAT) is charged on goods exported outside Ukraine. Ukrainian VAT legislation sets up a two-tier structure, designed to effectively protect domestic market from foreign imports. Of course, VAT is levied on all products and services manufactured and sold in Ukraine. Costs associated with obtaining/maintaining equipment that are reflected in the final price of the goods also are subject to VAT.

The Ukrainian government has always levied excise tax on luxury items imported into Ukraine, such as alcoholic beverages and tobacco products. The excise tax rates and the listed products tend to change constantly. For instance, the Cabinet of Ministers imposed minimum customs values for certain foodstuffs (e.g., coffee, black caviar, frozen chicken and turkey legs, among others) and clothing (fur coats and leather jackets). In addition to customs duties, customs fees for carrying out the customs clearance of goods are currently levied on all goods, the value of which exceeds US\$ 100. A customs fee of US\$ 5 is levied on goods valued between US\$ 100 and US\$ 1,000; for goods valued over US\$ 1,000 customs fees are levied at the rate of 0.2 % of the customs value of such goods, but not more than US\$ 1,000.

Goods exported outside the territory of Ukraine may be subject to: licensing and quotas; export taxes (export duties, customs fees, export VAT); pricing restrictions; and / or contract registrations.

As a rule, in any import-export transaction something can always go wrong at any moment. Even a miniscule degree of noncompliance with Ukrainian import rules may lead to significant delays, increased costs, additional efforts, and even lost profits (especially in case of perishable goods). As legislation in this area changes all too frequently, foreign business entities wishing to sell their products in Ukraine must inform themselves about the latest applicable import taxes and duties, certificates and licences, contract formalities and related matters.

Exercise 19. Answer the questions on text 3.

1. What are Ukrainian import-export operations subject to?
2. What products has the Cabinet of ministers implemented a licensing system for?
3. What information about imported food products is necessary to undergo a certification?
4. Why are foreign investors exempt from paying customs duty?
5. How many levels of rates exist for payment of customs duties in respect of imported goods?
6. What products are subject to a preferential rate of customs duties?
7. When are reduced rates of customs duty used?

8. What are export duties levied on? 9. What is VAT designed for?
10. What may goods exported outside the territory of Ukraine be subject to? 11. What can lead to delays, increased costs and even lost profits?

Exercise 20. Give English equivalents.

Оподатковувати; податок на додану вартість; акцизний збір; отримання ліцензії; хімічні речовини; добрива; добавки; термін придатності; підлягати сертифікації; пільгова ставка; відповідно до; знижений тариф; дворівнева структура; митне очищення; невідповідність; звільнений від сплати мита; ліцензування; обкладати митом.

Exercise 21. Translate the following sentences into English:

1. Імпортно-експортні операції в Україні підлягають сплаті численних податків, включаючи мито та податок на додану вартість, акцизний збір та інші сплати, пов'язані з отриманням ліцензій. 2. Усі імпортовані харчові продукти зазнають сертифікації, під час якої до продукту додаються ярлики українською мовою з різною інформацією про продукт: назва, об'єм, хімічні речовини і добавки, кінцевий термін споживання, вміст калорій. 3. В українському митному законодавстві передбачено три рівні митних тарифів на імпортовані товари: пільговий тариф, знижений тариф та спеціальний тариф на інші категорії товарів, не включені до двох вище зазначених. 4. Пільговий тариф застосовується до товарів, що походять із країн, з якими Україна увійшла у митний союз. 5. Експортне мито накладається лише на обмежені категорії товарів (наприклад, рогата худоба). 6. Дворівнева структура податку на додану вартість в українському законодавстві ефективно захищає внутрішній ринок від іноземного імпорту. 7. Витрати, пов'язані з отриманням/утриманням устаткування, також підлягають податку на додану вартість. 8. Український уряд завжди накладав акцизний збір на товари розкоші, імпортовані в Україну, такі як алкогольні напої та тютюнові вироби. 9. Крім звичайного мита, накладаються й митні збори на товари, вартість яких перевищує 100 дол. США.

Exercise 22. Translate the sentences with Gerundial Complexes.

1. There is no hope of our getting a complete analysis of doors market in Ukraine within one week. 2. Nobody knew of their having

refused participating in the local competition. 3. We have learned of their starting a series of carousel trade. 4. We insist on the documents being sent immediately. 5. He suggested our opening talks. 6. We could solve this problem in case of your giving us all the necessary data.

Exercise 23. Speak on:

1. Customs regulations.
2. Customs Code of Ukraine.
3. Customs duties.

Unit 19. LOGISTICS MANAGEMENT

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

invisible, algorithm, scheduling, lie on, managerial, expertise, overarching, venture, encompass, generic, curve, recipient, faithfulness, endogenous, synergy, superordinate, fluid, tier, guideline.

Exercise 2. Memorize the basic terminology to text 1.

chart – схема

continuum – безперервний спектр

interface activity – взаємозв'язок; взаємодія, міжфункціональна діяльність

trade-off – альтернатива, компроміс; знаходити альтернативне рішення

expertise – спеціальні знання, професійна компетенція

Exercise 3. Read, translate and entitle text 1.

Text 1

Logistics management is the managerial responsibility to design and administer a logistical system to control the flow of materials, work in process and finished inventory to meet the strategic objective of the enterprise.

The goal of logistical performance is to achieve a predetermined level of manufacturing - marketing support at the lowest possible total cost expenditure. The logistical manager has the fundamental responsibility for planning and administering an operating system capable of implementing this goal.

Administrative organization is the structure that facilitates the creation, the implementation and the evaluation of plans. It is the formal or informal mechanism for allocating the human resources of the firm to achieve the firm's goals. The organization may appear as a formalized chart of functional relationships, or it may be an invisible set of relationships understood by the members of the firm, but not stated in any formal way, or it may be a combination of these. Choosing an optimal way is probably the firm's most difficult task. No algorithms exist for doing this. Here we'll focus on some guidelines that may be useful in establishing acceptable organizational structure.

Any particular organizational structure by which a firm chooses to manage its logistics activities should be designed to help achieve a number of objectives. Chief among these are activity and function coordination, system planning and design, and system administration.

Activity and function coordination. All of the activities of a business firm lie on a continuum, and when these activities are divided into the various functional areas of the firm, there will remain some activities that are not logically the sole responsibility of a single area.

They are customer services that "overlap" between logistics and marketing, and production scheduling that "overlaps" between logistics and manufacturing. If logistics is established as a single, integrated function, such interface activities require coordination between the functional areas. The organization of the firm should be designed to handle the interface activity problem.

The second type of coordination concerns the activities within the logistics function. Logistics activities commonly include transportation, inventory management, customer service, order processing, information flows, warehousing, materials handling, protective packaging, product scheduling, and facility location. Since inventories can be traded off against customer service, transportation traded off against inventories, order processing costs traded off against customer service, etc. it is necessary to achieve the best economic trade-off among the various activities, build "bridges" between the functional areas and to develop innovative ways of measuring the performance of each area that would encourage coordination and cooperation.

System planning and design: The second objective for organizational structure is to make provision for the planning function. The logistics system is influenced by the changes taking place in the external and

internal environment, therefore, planning and re-planning for system design and operation should be a continuing activity. Besides the managers, planning assistance is provided by a staff planning group or by technical and managerial assistance purchased by the organization in the form of outside consulting services.

System administration: The final objective is that the organizational structure should facilitate the implementation and control of plans and policies. In most companies, logistics activities are too broad and complex for one individual to handle entirely on his/her own. Logistics activities should be divided among different people having special expertise, and different levels of responsibility and authority should be established for implementing various phases of logistical plans.

Exercise 4. Answer the questions on text 1.

1. What is logistics management? 2. What goal does it pursue? 3. What does administrative organization facilitate and what mechanisms does it provide? 4. What organizational structure should a logistician design to achieve the required objectives? 5. What is meant by activity and function coordination? 6. What does logistics activity include? 7. What are the ways of encouraging coordination and cooperation? 8. Why is design and planning system important in logistics management? Detail your answer. 9. What is the purpose of system administration?

Exercise 5. Find in text 1 the English equivalents to the following word combinations:

потік інформації; обробка матеріалів; економічна альтернатива; вирішувати проблеми координованої діяльності; захисна упаковка; управління матеріально-технічними ресурсами; розробка плану виготовлення продукції; обробка замовлення; інноваційні методи.

Exercise 6. Choose the correct definition to each word and form sentences with them:

- | | |
|--------------|--|
| 1) goal | a) the exact goal |
| 2) purpose | b) direction / action you take to get to the goal / target |
| 3) objective | c) reason you aim to achieve that target or goal |

- | | |
|-----------|---|
| 4) target | d) specific attainments that can be achieved by following a certain number of steps |
| 5) aim | e) long-term aims that you want to accomplish |

Exercise 7. Complete the sentences.

1. The logistical manager has the fundamental responsibility for
2. The organization may appear as
3. Customer services “overlap” between ... , and production scheduling “overlaps” between
4. Logistics activities commonly include
5. Since inventories can be traded against
6. The logistics system is influenced by
7. Planning assistance is provided by
8. Logistics activities should be divided among

Exercise 8. Put questions to the italicized words.

1. *The logistical manager has the fundamental responsibility for planning and administering an operating system.*
2. *All of the activities of a business firm lie on a continuum.*
3. *Planning assistance is provided by a staff planning group.*
4. *Logistics activities should be divided among different people having special expertise.*

Exercise 9. Imagine you are a logistical manager responsible for company planning and administering. What would your organizational structure be based on?

Exercise 10. Memorize the basic terminology to text 2.

- overarching corporate structure – загальна корпоративна структура
to venture – 1) ризикувати; 2) наважуватися, зважуватися
to gear toward – спрямувати на щось
business activity – господарська (комерційна) діяльність
competitive strategy – конкурентна стратегія
to outperform – випереджати, обганяти за виробничими показниками
experience curve – 1) крива зростання загальної ефективності; 2) крива освоєння виробництва (баланс між підвищенням ефективності та інвестиціями у ці зусилля)
total – загальна кількість

cost leadership – стратегія мінімізування витрат з метою здобуття конкурентної переваги
to shield – захищати
margin – 1) маржа; 2) різниця між собівартістю та ціною продажу; 3) гранична величина
competitive edge – конкурентна перевага
sector-wide – загальносекторальний (галузевий)
build-up of capacity – нарощування потенціалу
far-sighted – далекоглядний
to double – подвоювати(ся), збільшувати(ся) вдвічі
to incur costs – зазнавати збитків
recipient – одержувач, вантажоодержувач
faithfulness – 1) достовірність; 2) відданість, лояльність; 3) чесність, правдивість
endogenous factor – внутрішній чинник

Exercise 11. Read, translate and give the gist of text 2.

Text 2. Operational Logistics Structure

A company can use different means to determine its operational logistics structures, e.g. overarching corporate, business and functional strategy.

Overarching corporate strategy

A production company's top-executive leadership bears the responsibility of developing an overarching strategy that sets the business future course. Among other issues, the managers will decide whether the company will venture into new markets, develop new products or reduce its investments in particular areas. Most strategic decisions have a direct impact on logistics.

Overarching corporate strategies are geared toward the development of the entire company and encompass its overall business activities. Depending on the development goals, these strategies can be divided into growth, stabilization and reduction strategies. Their forms produce different effects on logistics and, as a result, require adjustments to logistics systems.

Business strategy

Business strategies determine the products with which and the markets in which a company intends to achieve competitive advantages.

Here are three promising types of generic competitive strategies that enable companies to outperform their sectoral competitors: *comprehensive cost leadership*; *sector-wide differentiation*; *concentration on focal areas* such as *market niches*.

The strategy of comprehensive cost leadership requires rigorous exploitation of the experience curve effect to reduce unit costs through an aggressive build-up of capacities and strict cost control. A company that pursues the cost leadership strategy must rely on logistics process capacities provided by simple and far-sighted logistics systems. This includes technological capacities to implement flows of materials, to simplify procedures and to anticipate the required processes.

In this strategy, profit is earned by selling large quantities of items at low prices. The lower unit costs mean that these margins can still be achieved when competitors are no longer profitable due to lower experience curve effects.

The experience curve effect describes the phenomenon in which the costs of producing a product decrease with the total produced. It is estimated that doubling the production total leads to cost reductions of 20–30 %.

The differentiation strategy strives to lend a special status to a product from the customer's perspective enabling it to be perceived as unique throughout the sector. The differentiation can result from a special brand image, product quality or special product-related services. This also includes a high-level delivery service.

Differentiation shields the company from its competitors and creates a customer relationship with the product. As customers are ready to pay a higher price for the image, the quality and/or the additional services, profits generated by this strategy result from higher margins, but not high sales volumes.

The strategy of concentrating on focal areas such as market niches requires the company's focus to be placed on a particular customer group, a regional market or a small range of products within a sector. The competitive edge comes from the adjustment to the specific requirements of a market segment and cost advantages in this market segment.

In contrast to the cost leadership strategy, the cost advantages are not based on the experience curve effect which is related to large sales volumes. Rather, certain costs are never incurred at all, e.g.,

warehousing costs for delivery warehouses when a regional market is supplied directly from the plant.

Functional strategy

The strategy of the functional logistics area determines, in particular, the structure of the delivery services. Delivery services are logistics services that are provided in connection with the delivery of goods to the customer. The principal parts of delivery service are *delivery time*, *delivery reliability*, *delivery readiness*, *delivery condition* and *delivery flexibility*.

Delivery time extends from the point at which an order arrives at the supplier to the point at which the recipient obtains the goods. It involves the processing of the order, the picking, the securing of the cargo, loading, transport and unloading at the destination.

Delivery reliability (delivery dependability, adherence to deadlines) describes the faithfulness (probability) with which delivery times are kept. Delivery reliability is linked to two endogenous factors: reliability of the work process and delivery readiness. The work processes carried out in the individual phases of the delivery time must be conducted within the time framework specified. Delivery reliability shows the extent to which the requested quantity can be delivered.

Delivery readiness shows the extent to which a supplier is able to deliver goods from a warehouse. The condition of the delivery covers two factors used by the customer to judge the quality of a delivery: delivery accuracy and the condition of the delivery. Delivery accuracy shows the extent to which the ordered products were delivered in the desired type and quantity.

The condition of the delivery largely depends on how well the packaging performed its job of protecting the delivery of goods.

The degree of delivery flexibility is based on the supplier's delivery system. If it is possible to respond to the customer's special needs, the degree is high. On the other hand, some systems require the customer to act in accordance with the supplier's rigid rules of distribution logistics. *Delivery flexibility* is primarily linked to three factors – contract terms, supplier terms and information from the customer.

Exercise 12. Answer the questions on text 2.

1. What operational logistics structures can a company determine?
2. What responsibility does a production company's top-executive

leadership bear? 3. Where are overarching corporate strategies geared toward? 4. What are promising types of generic competitive strategies? Detail your answer. 5. What does the functional strategy determine? 6. Will you differentiate the principal parts of delivery service?

Exercise 13. Match the definitions with proper terms.

Definitions	Terms
1. Relationship between efficiency gains and investment in the effort	a) build-up of capacity
2. To venture into new markets	b) consistency
3. An all-embracing structure	c) delivery readiness
4. Accumulation of potential to achieve the required results	d) delivery flexibility
5. The ability of distributing goods and services to cost effectively vary their output within a certain range and given timeframe	e) outperform
6. Protect	f) experience curve effect
7. To make something twice as much or many	g) cost leadership
8. Strategy used by businesses to create a low cost of operation within their niche	h) overarching
9. Planning prudently for the future; foresighted	i) endogenous factor
10. Performing the act of taking goods, letters, parcels, etc. to a place	j) double
11. Ability of an organization to produce goods and services more effectively than competitors do, thereby outperforming them	k) far-sighted
12. Ratio of the number of deliveries made without any error (regarding time, place, price, quantity, and / or quality) to the total number of deliveries in a period	l) be geared toward
13. Be more successful than other companies or countries	m) recipient
14. Risk starting doing an activity in a new place	n) delivery reliability
15. One who receives something from a giver	o) sector-wide

16. Organized in the way suitable for a particular purpose, situation or group of people
17. Internal constituent
18. The process of bringing together governments, donors and other stakeholders within any sector.
- p) faithfulness
- q) shield
- r) competitive edge

Exercise 14. Give English equivalents.

Загальна конкурентна стратегія; випереджати за виробничими показниками; крива освоєння виробництва; загальна корпоративна структура; ризикувати; виходити на нові ринки; спрямований на; вести господарську (комерційну) діяльність; стратегія мінімізування витрат з метою здобуття конкурентної переваги; надійність поставок, отримувач; внутрішній чинник; збільшувати вдвічі; нарощування потенціалу; гнучкість поставки; далекоглядний; готовність поставки; достовірність.

Exercise 15. Say whether the following statements are true or false. Correct the false ones.

1. Depending on the company's position on the market, the overarching corporate strategies can be divided into growth, stabilization and reduction strategies. 2. The strategy of comprehensive cost leadership provides an increase in unit costs through an aggressive build-up of capacities and strict cost control. 3. The experience curve effect describes the phenomenon in which the costs of producing a product increase with the total produced. 4. Experience curve effect is not related to large sales volumes. 5. Cost advantages are based on the experience curve effect. 6. Delivery reliability extends from the point at which an order arrives at the supplier to the point at which the recipient obtains the goods. 7. Delivery time shows the extent to which a supplier is able to deliver goods from a warehouse. 8. Delivery flexibility is linked to three factors – corporate strategy, consignee terms and information from the customer. 9. The condition of the delivery largely depends on how well the packaging performed its job of protecting the delivery of goods.

Exercise 16. Choose the correct word in the brackets.

1. A production company's top-executive leadership bears the responsibility of developing an (operational / overarching) strategy that sets the business future course. 2. Business strategies determine the products with which and the markets in which a company intends to achieve (competitive / comparative) advantages. 3. In the strategy of comprehensive cost leadership, (profit / surplus) is earned by selling large quantities of items at low prices. 4. The experience curve effect describes the phenomenon in which the costs of producing a product (decrease / outweigh) with the total produced. 5. Delivery services are logistics services that are provided in connection with the (delivery / relief) of goods to the customer. 6. Delivery reliability shows the (extent / area) to which the requested quantity can be delivered. 7. The condition of the delivery (covers / keeps on) two factors used by the customer to judge the quality of a delivery: delivery accuracy and the condition of the delivery. 8. Some systems require the customer to act in accordance with the (supplier's / manufacturer's) rigid rules of distribution logistics.

Exercise 17. Fill in the blanks with the appropriate words given in the box.

<i>experience curve effect, determine, conducted, readiness, doubling, competitive advantage, reliability, cost leadership, overarching, flexibility, adjustment, carried out, shields, endogenous</i>
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1. The forms of the ... corporate strategy produce different effects on logistics and require ... to logistics systems. 2. Business strategies ... the products with which and the markets in which a company intends to achieve 3. The strategy of comprehensive ... requires rigorous exploitation of the 4. ... the production total leads to cost reductions of 20–30 %. 5. Differentiation ... the company from its competitors and creates a customer relationship with the product. 6. The work processes ... in the individual phases of the delivery time must be ... within the time framework specified. 7. Delivery reliability is linked to two ... factors: ... of the work process and delivery 8. The degree of delivery ... is based on the supplier's delivery system.

Exercise 18. Translate the sentences into Ukrainian and put questions (general, special, subject-question, alternative and disjunctive) to each.

1. A production company's top-executive leadership bears the responsibility of developing its overarching strategy. 2. Most strategic decisions have a direct impact on logistics. 3. A company must rely on logistics process capacities provided by simple and far-sighted logistics systems. 4. Certain costs are never incurred at all.

Exercise 19. Translate the following sentences into English:

1. Топ-менеджери приймають рішення щодо виходу на нові ринки, розробки нових продуктів та зменшення обсягу інвестицій у певні сфери діяльності. 2. Стратегія диференціювання має на меті надати особливого статусу продукту як унікальному з точки зору покупця. 3. Реалізуючи стратегію мінімізуванні витрат з метою здобуття конкурентної переваги, компанія отримує прибуток з продажу значної кількості продукту за низькою ціною. 4. Конкурентна перевага є результатом пристосування до конкретних вимог сегменту ринку та низьких показників витрат на виробництво у цьому сегменті. 5. Термін «поставка» розуміють як час, витрачений на обробку замовлення, комплектування, завантаження, транспортування і розвантаження у пункті призначення.

Exercise 20. Work in pairs and discuss effective business strategies.

Exercise 21. Memorize the basic terminology to text 3.

to do first-rate job – виконувати першочергову роботу

mandatory – обов'язковий

interactivity – інтерактивність

to fragment – сегментувати, ділити на частини / фрагменти

line-and-staff structure – лінійно-штабна структура управління компанією

to trace order – слідкувати за виконанням замовлення

data processing system – система обробки даних

chain of command – вертикаль управління

center around – зосереджуватися на

clear-cut – чіткий, очевидний

Exercise 22. Read and translate text 3.

Text 3. Organizational Forms of Logistics Management

Many alternatives are open to top management when considering how to organize logistics management. There are many companies that do a first-rate job of managing logistics activities, yet a separate logistics organization has not been established. Formal organizational structures are not mandatory for good management. At least two ways are important here. First, coordination could be encouraged through persuasion of subordinates in the direction of top management's own thinking, and suggestions are likely to be made toward developing lines of communication that facilitate coordination. Second, interfunctional and interactivity committees are also facilitating. Even when logistics activities are fragmented among a number of functional areas, committees are advisable to be formed. Achieving coordination through informal organizational procedures is the obvious advantage for not increasing administrative overhead.

Line-staff structure: Line and staff management has two separate hierarchies: (1) the line hierarchy in which the departments are revenue generators (manufacturing, selling), and their managers are responsible for achieving the organization's main objectives by executing the key functions (such as policy-making, target setting, decision-making); (2) the staff hierarchy, in which the departments are revenue consumers, and their managers are responsible for activities that support line functions (such as accounting, maintenance, personnel management). While both hierarchies have their own chains of command, a line manager may have direct control over staff employees, but a staff manager may have no such power over the line employees. In modern practice, however, the difference in the two hierarchies is not so clear-cut and jobs often have elements of the both types of functions.

Having made the decision to formalize the organizational structure, the resulting organization has various line and staff responsibilities. The line organization usually deals with daily operational and administrative matters that are directly associated with production, distribution and sale of products. The staff organization primarily engages in analysis and advisory activities to assist the line organization. Different relative proportions of line and staff create alternative organizational designs.

Managers with line authority are those people in the organization who are directly responsible for achieving organizational goals. Line authority is represented by the standard chain of command starting with the board of directors and extending down activities of the organization that are carried out. Line authority is based primarily on legitimate power. In manufacturing, the line activists center around production of goods. In marketing, line activities center around product promotion. Logistics activities aimed to satisfy customers' desires in the short term can be considered line activities. Line activities can be easily identified by simply tracing an order through the distribution system.

Staff authority belongs to those individuals or groups in an organization who provide services and advice to line managers. The concept of staff includes all elements of the organization that are not classified as line. Staff provide managers with varied types of expert help and advice. Staff authority is based primarily on expert power. Staff offer line managers planning advice through research, analysis and options development. Staff can also assist in policy implementation, monitoring and control in legal and financial matters; and in the design and operation of data processing systems.

Exercise 23. Answer the questions on text 3.

1. What encourages coordination in logistics management? 2. What is the line and staff structure of organizational management? 3. What is the functional difference between line and staff organizations? 4. What is line authority based on? 5. What is staff authority responsible for?

Exercise 24. Guess the term through the definition.

1) the order in which authority and power in an organization is wielded and delegated from top management to every employee at every level of the organization; 2) a military-type organizational structure, commonly employed in large, centralized corporations; 3) pyramid-like ranking of ideas, individuals, items, etc., where every level (except the top and the bottom ones) has one higher and one lower neighbour; 4) something which must be done, or which is demanded by law; 5) giving advice; 6) clear or obvious without needing any proof; 7) operations performed on a given set of data to extract the required information in an appropriate form such as diagrams, reports, or tables.

Exercise 25. Give Ukrainian equivalents.

Primarily, mandatory, to encourage, to be associated with, interactivity, administrative overhead, data processing system, legitimate power, to trace an order, to center around, to vary, chain of command.

Exercise 26. Complete the sentences with appropriate English equivalents.

1. Formal organizational structures are not *обов'язкові* for good management. 2. When logistics activities are fragmented among a number of functional areas, committees *доцільно* to be formed. 3. The line organization usually deals with daily operational and administrative matters, *безпосередньо пов'язані з* production, distribution and sale of products. 4. Line authority is represented by the *звичайною вертикаллю управління* with the board of directors and extending down activities of the organization that are carried out. 5. Line activities *зосереджується на* product promotion. 6. Logistics activities aimed to *задовольняти бажання замовників* in the short term can be considered line activities. 7. *Поняття «штабна структура організації»* includes all elements of the organization that are not classified as line.

Exercise 27. Fill in the blanks with the ing-forms from the box and explain their functions in the sentences.

<i>considering, increasing, extending, managing, tracing, resulting, thinking, developing, achieving</i>
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1. ... coordination through informal organizational procedures is the obvious advantage for not ... administrative overhead. 2. There are many companies that do a first-rate job of ... logistics activities, yet a separate logistics organization has not been established. 3. Line activities can be easily identified by simply ... an order through the distribution system. 4. Many alternatives are open to top management when ... how to organize logistics management. 5. The ... organization has various line and staff responsibilities. 6. Line authority is represented by the standard chain of command starting with the board of directors and ... down activities of the organization that are carried out. 7. Coordination could be encouraged through persuasion of subordinates

in the direction of top management's own ..., and suggestions are likely to be made toward ... lines of communication that facilitate coordination.

Exercise 28. Retell the text as if you were a representative of:

- line authority
- staff authority
- top management.

Exercise 29. Speak on:

1. Logistics management.
2. Operational logistics structure.
3. Line and staff management.

Unit 20. LOGISTICS IT

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

capture, cellular, measure, spreadsheet, flea, unique, accomplishment, requirement, replenishment, efficient, freight, fraught, lead-time, alleviate, mileage, leverage, purchasing, accuracy, diverse, synchronized, dispersed, paradigmatic, enabler, differentiator, tremendous, aggregation, customization, indispensable, actionable.

Exercise 2. Memorize the basic terminology to text 1.

to capture information – збирати інформацію

to span – охоплювати

distribution requirements planning (DRP) – планування вимог до розподілу запасів

logistics pipeline – система матеріально-технічного постачання,

inventory turn – обіговість складських запасів

JIT replenishment – своєчасне поповнення запасів, поповнення запасів у точно визначений термін

host system – головна комп'ютерна система, централізована система

to freight bill – вантажна накладна

to alleviate – полегшувати

trailer – причіп; причіпний вагон; трейлер, тягач із причіпними візками

highway mileage – протяжність автомобільних доріг у милях
real-time system – система роботи в режимі реального часу
order filling – виконання замовлення
manual purchasing method – неавтоматизований метод (процес)
закупівель
seamless exchange – безперебійний обмін
automatic identification (Auto ID) – автоматична ідентифікація,
розпізнавання
enabler – той, хто надає можливість (*щось зробити*)

Exercise 3. Read and translate text 1.

Text 1. Information Technology Opportunities in Logistics

Information is one of the key elements of efficient and effective supply chain management. Information is needed to master, manage, control, measure, forecast, optimize and follow-up any kind of industrial and commercial activity. Information needs to be captured, stored, analyzed, used, shared and transmitted in order to become the base for efficient decision-making at every level of an organization (strategic, tactical and operational), and at every stage of a supply chain (supplier, manufacturer, distributor, etc).

Information technology is the fourth logistics front for improved operations. The proper use of information technology spans all of the logistics fronts and without an integrated approach to this technology, the other logistics areas cannot work effectively.

The first information technology opportunity is a distribution requirements planning (DRP). DRP is a global planning tool to manage the total logistics pipeline; it brings closer integration of the complete logistics network and will drive savings through the total network. DRP aids in planning transportation costs, warehousing requirements, inventory quantities, and positions. Because it is global by nature, DRP will provide a company with global measurement of distribution. A properly implemented DRP system will allow increased inventory turns, permit quicker responses to market changes, support JIT replenishment, shrink obsolescence, anticipate and minimize future inventory problems.

The second information technology opportunity is electronic data interchange (EDI). EDI is the electronic transfer of documents from one computer system to another. The purpose of EDI is to provide accurate external information. EDI takes externally produced and transmitted information and allows it to be electronically received into the host system. Then the host system is able to electronically send information to another external computer system. Since the transaction is free from human intervention EDI provides a high level of accuracy for the information being received and transmitted.

Companies that wish to improve their logistics operations must invest in the EDI technologies. An associated benefit with EDI is that it allows a company to integrate itself with its trading partners more closely. Thus, EDI is required if two companies are to become closely integrated with the same logistics goals. The second associated benefit with EDI is that it reduces information lead-time, and hence allows the logistics network to be more responsive to customer needs and changing market conditions. It also reduces the transportation and order processing lead-time.

The third information technology opportunity is in the utilization of Warehouse Management Systems (WMS). WMS is a software package used to meet two objectives of warehousing: to maximize the use of space, equipment and labour, and to exceed customer expectations. WMS accomplishes this by directing labour and providing inventory and location expectations.

The use of WMS provides many logistics benefits. It helps reduce warehouse operating costs by improving labour productivity in two ways. First, WMS reduces the travel time for task performance. Second, productivity is improved by eliminating the unproductive or non-value-added steps performed by employees. For example, WMS will reduce hunt and search time as a result of potentially high levels of inventory. By creating the environment that approaches 100 percent information accuracy, WMS eliminates many non-value-added steps. The second benefit of the WMS technology is that it is real-time. As a result, WMS can support a reduction in lead-time. These reductions are for both order processing and inventory management. The said benefits can, in turn, support better customer service and a quicker turn on inventory, both of which will provide financial savings in warehousing operations.

The fourth information technology opportunity applies to utilization of transportation management systems (TMS). Today, transportation management is a relationship-based business. The transportation department spends the vast majority of its time answering questions, performing administrative tasks, reviewing freight bills, and managing the carrier relationship. Unfortunately, these tasks leave very little time for the actual planning of the transportation process. TMS technology alleviates many of the administrative tasks through automation. The transformation management system is known to provide five basic functions: planning, carrier performance, trailer loading, highway mileage freight payment auditing and transportation. When automated, these functions provide significant opportunities for improvement and allow the transportation department to manage rather than react to transportation events.

The fifth information technology opportunity is in order processing. The nature of the pull system and the need to improve the logistics network require faster order processing. Batch order processing systems are replaced with real-time order processing systems to speed the process of order filling. As a result, the companies that can process orders real-time or same-day are gaining a competitive advantage. The challenges with real-time order processing are to make sure the existing computer systems can support the operation and that the physical distribution system can handle small order processing windows.

The sixth information technology opportunity is in electronic purchasing or e-procurement. Manual purchasing methods generate significant volumes of paper, thus introducing multiple opportunities for error. In addition, manual paperwork adds lead-time to the logistics process. Electronic purchasing will allow for a more seamless exchange of information between trading partners and reduce the amount of time for purchasing. This reduction in time will result in a total inventory reduction.

The seventh opportunity is automatic identification (Auto ID) technologies. They encompass all of the technologies associated with printing and reading bar codes, including the printer technology and radio frequency (RF) equipment. Application of the automatic identification technologies will support the highest level of information accuracy.

The key to understanding Auto ID technologies is to understand that it is an information accuracy enabler, i.e. they enable information to be accurately transmitted between all steps in the process. For instance, the need to accommodate real-time exchange of information is accomplished through real-time systems and Auto ID makes the accomplishment 100-percent accurate; bar coding in logistics allows information to be quickly and accurately processed internally and externally that contributes to considerable reduction in time a product spends in the pipeline. The high level of accuracy also aids in the reduction of non-value-added processes associated with inaccurate information.

Exercise 4. Answer the questions on text 1.

1. What is the role of information in the supply chain management?
2. How does information technology influence other logistics fronts?
3. What is the first information technology opportunity?
4. What does EDI stand for?
5. Why is it worth investing in EDI?
6. Where is the third information technology opportunity applied?
7. How does it help WMS to meet objectives?
8. What logistics benefits does WMS provide?
9. Why would you advise a transportation department to introduce the transportation management system?
10. What is the advantage of electronic purchasing?
11. How will a company benefit from the automatic identification technology?

Exercise 5. Find in text 1 English equivalents of the following words and word combinations.

Подальша діяльність; охоплювати; передавати інформацію, збирати інформацію; планування вимог до розподілу запасів; головна комп'ютерна система; поповнення запасів у точно визначений термін; система матеріально-технічного постачання; обіговість складських запасів; обробка замовлення; виконання замовлення; моральне зношення; час на підготовку інформації; вантажна накладна; полегшувати завдання; навантажувати причіп; сплата за перевезення вантажу автомобільним транспортом відповідно до пробігу в милях; система роботи в режимі реального часу; неавтоматизований метод закупівель; неефективні процеси; штрихове кодування; забезпечувати отримання точної інформації; автоматична ідентифікація.

Exercise 6. Give nouns (as many as possible) and adjectives (if any) corresponding to the following verbs. Translate them. Make use of a dictionary if necessary.

Model: differ - difference- different- differential

відрізнятися - різниця - відмінний, несхожий - диференціальний

Manage, measure, store, forecast, optimize, analyze, transmit, supply, distribute, improve, save, require, provide, implement, permit, respond, replenish, anticipate, produce, intervene, associate, integrate, exceed, accomplish, eliminate, perform, process, benefit, contribute, allow.

Exercise 7. Match the definitions with proper logistics terms.

Definitions

Terms

- | | |
|---|--|
| <p>1. Methods of automatically identifying objects, collecting data about them, and entering them directly into computer systems</p> | <p>a) supply chain management (SCM)</p> |
| <p>2. Purchase and sale of supplies, work and services through the Internet and other information and networking systems</p> | <p>b) distribution requirements planning (DRP)</p> |
| <p>3. A part of the supply chain aimed at controlling the movement and storage of materials within a warehouse and processing the associated transactions, such as shipping, receiving, picking, etc.</p> | <p>c) logistics pipeline</p> |
| <p>4. Strategic advantage of a business entity over rivals</p> | <p>d) JIT replenishment</p> |
| <p>5. Inventory system of having the right products, at the right time, in the right place and in the exact amount without the safety net of excessive inventory</p> | <p>e) electronic data interchange (EDI)</p> |
| <p>6. Period between a customer's order and the delivery of a final product</p> | <p>f) lead-time</p> |

- | | |
|--|--|
| 7. Manufacturing system in which production is based on actual daily demand (sales), and where information flows from market to management in a direction opposite to that in traditional (push) systems | g) real-time system |
| 8. Management of material and information flow in a supply chain to provide the highest degree of customer satisfaction at the lowest possible cost | h) warehouse management system (WMS) |
| 9. Computing systems that are able to deal with and use new information immediately | i) competitive advantage |
| 10. Structured transmission of data between organizations by electronic means | j) electronic purchasing |
| 11. A method used in logistics for planning orders within a supply chain | k) automatic identification technology |
| 12. The system of equipment, materials and supplies movement to where they will be used. | l) pull system |

Exercise 8. Match the beginnings (1-8) with the endings (a-h) to complete the sentences.

- | | |
|---|--|
| 1. Information needs to be captured, stored, analyzed, used, shared and transmitted ... | a) information to be quickly and accurately processed internally and externally. |
| 2. Without an integrated approach to the information technology ... | b) answering questions, performing administrative tasks, reviewing freight bills, and managing the carrier relationship. |
| 3. A properly implemented DRP system will allow ... | c) are gaining a competitive advantage. |
| 4. The purpose of electronic data interchange is ... | d) increased inventory turns, permit quicker responses to market changes, support JIT replenishment, shrink obsolescence, anticipate and minimize future inventory problems. |

- | | |
|---|---|
| 5. The two objectives of warehousing are ... | e) to provide accurate external information. |
| 6. The transportation department spends the vast majority of time ... | f) the other logistics areas cannot work effectively. |
| 7. The companies that can process orders real-time or same-day ... | g) to maximize the use of space, equipment and labour, and to exceed customer expectations. |
| 8. Bar coding in logistics allows ... | h) in order to become the base for efficient decision-making at every level of an organization (strategic, tactical and operational). |

Exercise 9. Say whether the following statements are true or false. Correct the false ones.

1. DRP is a global planning tool to manage the procurement system.
2. EDI is the inter-company transfer of documents from a supplier to a buyer.
3. WMS designs the use of space, equipment and labour to meet customer expectations.
4. TMS technology alleviates many of the administrative tasks through the supply chain management.
5. Order processing systems are replaced with real-time order processing systems to speed the process of order filling.
6. Electronic purchasing results in a total inventory increase.
7. Application of the automatic identification technologies supports the highest level of information dissemination.

Exercise 10. Define the tense and voice form of the verbs in the following sentences. Put questions to the italicized words.

1. *The proper information technology* should be used at all logistics fronts.
2. The DRP system allowed *increased inventory turns, permitted quicker responses to market changes, supported JIT replenishment, shrank obsolescence, anticipated and minimized future inventory problems*.
3. The host system will be able to electronically send information to another *external computer system*.
4. WMS can support a *reduction* in lead-time.
5. *Batch order processing systems* have been replaced with real-time order processing systems.
6. The high level of accuracy also aids in the reduction of non-value-added processes *associated with inaccurate information*.

Exercise 11. Identify Past Participle in the sentences and explain its functions.

1. Information is needed to master, manage, control, measure, forecast, optimize and follow-up any kind of industrial and commercial activity. 2. Information needs to be captured, stored, analyzed, used, shared and transmitted. 3. Without an IT approach integrated into this technology, the other logistics areas cannot be managed effectively. 4. A properly implemented DRP system will allow increased inventory turns, permit quicker responses to market changes, support JIT replenishment, shrink obsolescence, anticipate and minimize future inventory problems. 5. Batch order processing systems are replaced with real-time order processing systems.

Exercise 12. Share information with your partner providing examples of:

1. Distribution requirements planning (DRP).
2. Electronic data interchange (EDI).
3. Warehouse Management Systems (WMS).
4. Transportation management systems (TMS).
5. Order processing.
6. Electronic purchasing.
7. Automatic identification (Auto ID) technology.

Exercise 13. Memorize the basic terminology to text 2.

shared database – спільна база даних

software – програмне забезпечення

to re-key – повторно вводити дані у комп'ютер

dashboard – інформаційна панель

portal – портал (веб-сайт, призначений для надання інтегрованої інформації)

to disperse – розпорозувати; розосереджувати; розсіювати

customization – виготовлення продукту відповідно до (технічних) вимог замовника

to upgrade – поліпшувати якість

deployment – впровадження, введення в дію

Wide Area Network (WAN) – глобальна (обчислювальна) мережа, регіональна мережа

link – канал зв'язку (через глобальні мережі)

disparate – несумірний; неоднаковий, різний; непорівнянний
vendor lock-in – залежність користувачів від постачальника
flea market – блошиний ринок, «барахолка»; речовий ринок
paradigmatic – хрестоматійний
virtual mall – інтернет-магазин
industry-specific – внутрішньогалузевий
content management – контент-менеджмент, управління інформаційним наповненням
community service – обслуговування низки компаній (однієї галузі)
aggregation of content – збирання інформаційного матеріалу
integration of content – узагальнення інформаційного матеріалу
fraught (with) – 1) сповнений (*чимось*), повний; 2) здатний викликати / породжувати щось; 3) стурбований, занепокоєний
matchmaking – налагодження контактів / зв'язків
community of interest – спільність інтересів
transaction processing – оброблення інформації в процесі оформлення угод
static pricing – статичне, фіксоване ціноутворення
dynamic pricing – динамічне, диференційоване ціноутворення

Exercise 14. Read and translate text 2.

Text 2. Components of Logistics IT

IT for logistics includes three key components: *Enterprise Resources Planning (ERP)*, *Supply Chain Collaboration (SCC)* and *Digital Marketplaces (DM)*.

Enterprise Resources Planning (ERP) means the techniques and concepts for integrated management of businesses as a whole from the effective use of management resources to the improvement of enterprise management efficiency. Originally ERP packages were targeted at the manufacturing industry and consisted mainly of functions for general planning and management of core business, such as sales management, production management, accounting, finance, etc. In recent years adaptation has become possible not only to the manufacturing industry, but also diverse types of industry, and, as a result, at the global level.

The central feature of all ERP systems is a shared database that supports multiple functions used by different business units. In practice,

this means that employees in different divisions, for example, accounting and sales, can rely on the same information for their specific needs.

ERP software also offers some degree of synchronized reporting and automation. Instead of forcing employees to maintain separate databases and spreadsheets that have to be manually merged to generate reports some ERP solutions allow staff to pull reports from one system. For instance, with sales orders automatically flowing into the financial system without any manual re-keying, the order management department can process orders more quickly and accurately, and the finance department can close the books faster. Other common ERP features include a portal or dashboard to enable employees to quickly understand the business' performance on key metrics.

There are various modules in an ERP system like Finance / Accounts, Human Resource Management, Manufacturing, Marketing / Sales, Supply Chain / Warehouse Management, Project Management, etc. Since ERP is a modular software system it's possible to implement either a few modules or many modules based on the requirements of an organization. With more modules implemented, the integration between various departments might be better. ERP can integrate other systems like bar-code reader, for example, to the ERP system through an API (Application Programming Interface), as well as it makes order tracking, inventory tracking, revenue tracking, sales forecasting and related activities easier. The ERP system is suitable for managing globally dispersed companies.

However, to reap the benefits of ERP systems, the businesses need to deal with certain problems and disadvantages. ERP systems are generally difficult to use (and learn). The cost of ERP software, planning, customization, configuration, testing, implementation, etc. is too high. Its deployment takes 1-3 years to get completed and fully functional. Too little customization may not integrate the ERP system with the business process, as well as too much customization may slow down the project and make it difficult to upgrade. One should not expect payback immediately after the ERP implementation and it is quite difficult to measure it. There maybe additional indirect costs like new IT infrastructure, upgrading the WAN links, etc. The ERP implementation is difficult to achieve in decentralized organizations with disparate business

processes and systems. But once an ERP system is applied it becomes a single vendor lock-in for further upgrades, customization, etc.

Supply Chain Collaboration (SCC) facilitates the cooperation of participating members along the supply chain to improve performance. The benefits of collaboration include revenue improvement, cost reductions, and operational flexibility to cope with high demand uncertainties.

The concept of collaboration can be categorized into three dimensions:

- information sharing refers to the act of capturing and disseminating timely and relevant information for decision makers to plan and control supply chain operations;
- *decision synchronization* refers to joint decision-making in planning and operational contexts;
- *incentive alignment* refers to the degree to which chain members share costs, risks, and benefits.

A **Digital Marketplace** is a marketplace created by digital technology – obviously the Internet plays a crucial part in it. Digital goods like books, CD, music, newspapers, databases, travel services and magazines are the first ones to have been sold over the Internet. There are three common varieties of DMs: consumer to consumer (C to C), business to consumer (B to C), and business to business (B to B).

- *C to C DMs* allow consumers to trade values among themselves. These DMs are usually organized as virtual auction houses or virtual flea markets. The paradigmatic examples are Ebay, rozetka.com.ua, etc.

- *B to C DMs* are virtual malls. The paradigmatic example is Amazon, which is originated from a bookseller and is a true B to C DM.

- The newest category is the *B to B DM*. There are as yet no dominant paradigmatic examples, so it is still a wide-open emerging field of business.

Within these varieties there are two basic types of DM: horizontal and vertical. Horizontal DMs organize sellers of business process, or function-specific, or values that are generic across all industries: for examples: pens and pencils. There are items that are used by every type of industry and appear, usually, as general operating expenses. Vertical DMs are industry-specific inputs to the value-generation or production process, for example, auto parts suppliers to the big three automobile giants in Japan.

As to functional characteristic of DMs they distinguish content management, community services and transactions processing.

Content management refers to the aggregation and integration of content. Usually this content is organized as a metacatalog. This means that the product catalogs of the many sellers in the market need to be aggregated, then integrated into one metastructure for the convenience of the buyers. In addition, all sorts of other information are required, for example, product reviews, transaction records, buyer information for sellers, etc. The content management architecture of the market is very important, and is usually fraught with complication and expense.

Community services form the Vertical DMs as industry-specific inputs to the value-generation or production process, for example, auto parts suppliers to the big three automobile giants in Japan.

This will be a key differentiator between competing markets serving the same industry or business function. The basic community services are search facilitation and matchmaking processes. They are key to the operation and value of the market. DMs form around communities of interest. It is the community that defines and determines the market, and without appropriate community building and bonding efforts, a DM will not succeed. The community forms the market.

Transaction processing is where most attention has been focused. In fact, most conventional DM typologies distinguish DMs on the basis of their transaction processing mechanisms. Thus, the most visible activity in a market is the process of price discovery or price setting.

There are two basic price-setting models in DMs: static and dynamic. Static pricing determines the use of only one price; it is an environment-dependent pricing where the price changes with the environment. Dynamic pricing depends on both the current environment and the stock level.

Exercise 15. Answer the questions on text 2.

1. What are the components of IT logistics?
2. What does Enterprise Resources Planning mean?
3. What was it originally focused on?
4. What functions did it serve?
5. What is the ERP central feature?
6. How is it interpreted in practice?
7. What is meant by synchronized reporting?
8. What modules does ERP contain?
9. What are ERP benefits?
10. What disadvantages does it bring?
11. What is the purpose of Supply Chain Collaboration?
12. What advantages does it offer?

13. What categories does the concept of collaboration fall into? 14. How does the Digital Marketplace vary? Detail each of the varieties. 15. What is the difference between horizontal and vertical DMs? 16. How are DMs classified according to their functional characteristics? 17. What does price-setting in DMs depend on?

Exercise 16. Find in text 2 English equivalents of the following words and word combinations.

Зведена (електронна) таблиця фінансового стану; спільна база даних; повторно вводить дані у комп'ютер; інтернет-магазин; налагодження контактів/зв'язків; фіксоване ціноутворення; диференційоване ціноутворення; блошиний ринок; залежність користувачів від постачальника; канал зв'язку через глобальні мережі; управління інформаційним наповненням; введення в дію; виготовлення продукту відповідно до технічних вимог замовника; розосереджена компанія; інформаційна панель; спільність інтересів; узагальнення інформаційного матеріалу; збирання інформаційного матеріалу; функціонально-спеціалізований; взаємодія; внутрішньогалузевий, обробка інформації в процесі оформлення угоди.

Exercise 17. Find in text 2 appropriate terms to the following definitions:

primary area or activity that a company was founded on or focuses on in its business operations; varied or different; any business that transfers raw materials into finished or semi-finished goods; a large amount of information stored in a computer system in such a way that it can be easily looked at or changed; a part of a company that operates as a separate part of the whole business; interactive computer application program for organization and analysis of information in a tabular form; electronic device that scans a barcode by shining a laser beam on it; a function that is used to verify and correct warehouse stock levels recorded in the system; the situations where a customer is dependent on a vendor for products and services and is unable to use another vendor without substantial switching costs; a market which usually takes place outside, where old or used goods are sold cheaply; an Internet site that mimics a department store or shopping center, enabling customers to access a variety of retailers using a shared site or site links; establishing

relations with other people; a type of computer processing in which the computer responds immediately to user requests.

Exercise 18. Find in text 2 synonyms for the following words:

common, book-keeping, done by hand, stock, keep an eye on, summarize, spread, anticipate, separate, modernize, fixed, changing, implicit, measurement, deal, low-cost, condition, efficient, be aimed at, decisive role, various types, create reports, make possible, make easier, put into practice, prevalent, cooperation, stimulus, recouplement.

Exercise 19. Find in text 2 antonyms for the following words:

hinder, ignore, ruin, collection, disagreement, inappropriateness, withdraw, increase, seller, simplicity, individuality, separation, uselessness, destruction.

Exercise 20. Choose the correct word in brackets.

1. The central feature of all (ERP / DRP) systems is a shared database that supports multiple functions used by different business units. 2. Dashboard enables employees to quickly (understand / evaluate) the business' performance on key metrics. 3. ERP is a (modular / digital) software system for modules implementation based on the requirements of an organization. 4. Too much customization may (accelerate / slow down) project implementation. 5. ERP is better employed in (centralized / decentralized) organizations. 6. Information sharing refers to the act of timely (disseminating / storing) of available data. 7. The consumer to consumer digital market allows trading between (consumers themselves / legal entities). 8. Vertical DMs are industry-specific (inputs / output) to the value- (generation / distribution) processes. 9. The basic community services are search (facilitation / complication) and (matchmaking / benchmarking) processes. 10. Static pricing depends on (environment / stock level).

Exercise 21. Translate the following sentences into English:

1. Під синхронізацією рішень розуміють спільні рішення щодо планування і виробничої діяльності. 2. Спільна база даних допомагає працівникам різних підрозділів, наприклад, бухгалтерії і відділу продаж, користуватися тією ж самою інформацією. 3. Що

більше модулів має система планування ресурсів підприємства, то ефективніша взаємодія між його підрозділами. 4. Серед переваг співпраці можна виділити збільшення доходів, скорочення витрат, експлуатаційну гнучкість у вирішенні проблем нестійкого попиту. 5. Ринок цифрових технологій формується за спільністю інтересів.

Exercise 22. Find in the sentences Past Participle and translate them into Ukrainian.

1. Enterprise Resources Planning means the techniques and concepts for integrated management of businesses. 2. ERP packages were composed mainly of functions for general planning and management of core business. 3. Separate databases and spreadsheets have to be manually merged to generate reports. 4. With more modules implemented, the integration between various departments might be improved. 5. C to C DMs are usually organized as virtual auction houses or virtual flea markets. 6. Transaction processing is where most attention has been focused on.

Exercise 23. Make the following sentences interrogative and negative.

1. In recent years adaptation has become possible not only to the manufacturing industry, but also diverse types of industry. 2. ERP software also offers some degree of synchronized reporting and automation. 3. The order management department can process orders more quickly and accurately. 4. A Digital Marketplace is a marketplace created by digital technology. 5. Amazon is morphing from a bookseller. 6. They distinguish content management, community services and transactions processing.

Exercise 24. Draw up a table of benefits and disadvantages of three IT components for logistics. Share your opinion with a partner.

Exercise 25. Decipher the abbreviations using a dictionary if necessary. Explain them.

SCC, SCM, DM, WAN, CD, ERP, C to C DM, B to C DM, B to B DM, API, IT, GPS, RFID, RTLS, KPI, DRP, WMS, JIT, RF, EDI, TMS, Auto ID, C&F, CHAs, BOL.

Exercise 26. Speak on:

1. IT opportunities in logistics.
2. Components of logistics IT.

Unit 21. LOGISTICS OUTSOURCING

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

judiciously, ample, nimble, viable, spread, janitorial, pivotal, encompass, utilization, alliance, acute, upfront, drastic, ambiguity, quotation, mitigation, deviation, customization.

Exercise 2. Memorize the basic terminology to text 1.

judiciously – розумно, розсудливо
to drain profit – витратити прибутки
in-house service – послуги, які надаються самою компанією
non-core function – неголовна (непрофільна) функція
to leverage resources – оптимізувати (максимально використовувати) ресурси
janitorial and landscaping operations – послуги з прибирання та благоустрою
outside firm – зовнішня фірма; фірма, яка не є складовою даної галузі
payroll – 1) платіжна відомість; 2) нарахування заробітної платні
cost-effectively – рентабельно, прибутково
to run into – сягати (*величини*), обходитися (*в певну суму*)
nimble – спритний
to refine – поліпшувати, удосконалювати
ongoing relationship – тривалі стосунки
executive-level support – підтримка на рівні керівництва
affected employee – тут: працівник, задіяний в аутсорсінгу

Exercise 3. Read, translate and give the gist of text 1.

Text 1. Logistics Outsourcing

In logistics considerable quantities of materials are required to be transported and stored at various locations. Raw materials and components are to be moved over long distances from vendor supply points to production centres. These materials have to be stored for some

time as raw materials and later as finished goods. Finished goods have to be transported to the point of consumption. As the production and consumption cycle never matches, storage becomes inevitable. But stored inventories have to be judiciously controlled so that their carrying cost does not drain the company's profits. In such cases, the logistics service provider takes care of storage and inventory management and ensures the availability of the right product, at the right place, and at the right time. Logistics operations are a specialized functional area and the majority of marketing and manufacturing organizations have no expertise in it. Hence, there is a need for outsourcing operations to experts in the field.

A company can basically choose between three different options to handle its logistics activities effectively and efficiently. Firstly, it can provide in-house services. Secondly, it can set up an own logistics subsidiary or buy a logistics firm. Thirdly, it can outsource the service and then buy the service from an external provider.

The issue of outsourcing logistics services has received widespread attention over the last 15 years. What does actually logistics outsourcing mean? It stands for *the use of a third party provider for all or part of an organization's logistics operations, and at that its utilization by the firms is increasing*. In the broader sense, logistics outsourcing relationships are *long and short-term contracts or alliances between manufacturing and service firms and third party logistics providers*.

Outsourcing is a viable business strategy because turning non-core functions over to external suppliers enables companies to leverage their resources, spread risks and concentrate on issues critical to survival and future. For instance, an insurance company might outsource its janitorial and landscaping operations to firms that specialize in those types of work since they are not related to insurance or strategic to the business. The outside firms that are providing the outsourcing services are third-party providers, or as they are more commonly called, service providers.

Companies began employing the outsourcing model to carry out narrow functions, such as payroll, billing and data entry. Those processes could be done more efficiently, and therefore more cost-effectively, by other companies with specialized tools and facilities and specially trained personnel.

Currently, outsourcing takes many forms. Organizations still hire service providers to handle distinct business processes, such as benefits

management. But some organizations outsource whole operations. The most common forms are information technology outsourcing (ITO) and business process outsourcing (BPO).

Business process outsourcing encompasses call center outsourcing, human resources outsourcing (HRO), finance and accounting outsourcing, and claims processing outsourcing. These outsourcing deals involve multi-year contracts that can run into hundreds of millions of dollars. Frequently, the people performing the work internally for the client firm are transferred and become employees for the service provider.

Some nimble companies that are short of time and money, such as start-up software publishers, apply multisourcing - using both internal and service provider staff - in order to speed up the time to launch. They hire a multitude of outsourcing service providers to handle almost all aspects of a new project, from product design, to software coding, to testing, to localization, and even to marketing and sales.

The process of outsourcing generally consists of four stages: 1) strategic thinking, to develop the organization's philosophy about the role of outsourcing in its activities; 2) evaluation and selection, to decide on the appropriate outsourcing projects and potential locations for the work to be done and service providers to do it; 3) contract development, to work out the legal, pricing and service level agreement (SLA) terms; and 4) outsourcing management or governance, to refine the ongoing working relationship between the client and outsourcing service providers. In all cases, outsourcing success depends on three factors: executive-level support in the client organization for the outsourcing mission; ample communication to affected employees; and the client's ability to manage its service providers.

The outsourcing professionals in charge of the work on both the client and provider sides need a combination of skills in such areas as negotiation, communication, project management, the ability to understand the terms and conditions of the contracts and service level agreements (SLAs), and, above all, the willingness to be flexible as business needs change.

The challenges of outsourcing become especially acute when the work is being done in a different country (offshored), since that involves language, cultural and time zone differences.

Exercise 4. Answer the questions on text 1.

1. What does the configuration of individual logistics processes depend largely on? 2. What are the three options a company can choose to handle logistics activities effectively and efficiently? 3. What does logistics outsourcing mean? 4. Why is outsourcing a viable business? 5. What do companies employ the outsourcing model for? 6. What forms can outsourcing take on? 7. Why could outsourcing be beneficial for a start-up company? 8. What stages do the outsourcing process consist of? 9. What factors does outsourcing depend on? 10. What skills should outsourcing professionals possess?

Exercise 5. Match the English – Ukrainian equivalents.

- | | |
|--|---|
| 1) in-house service | a) ефективна стратегія |
| 2) utilization | b) рентабельно, прибутково |
| 3) non-core function | c) постійний зв'язок |
| 4) leverage resources | d) виписування рахунків |
| 5) viable strategy | e) використання |
| 6) janitorial and landscaping operations | f) керування прибутками |
| 7) outside firm | g) підтримка на рівні керівництва |
| 8) payroll | h) спритна компанія |
| 9) billing | i) послуги, які надаються самою компанією |
| 10) data entry | j) зовнішня фірма |
| 11) cost-effectively | k) обійтися в суму |
| 12) benefits management | l) працівник, задіяний в аутсорсінгу |
| 13) encompass | m) нарахування заробітної платні |
| 14) run into (a sum) | n) введення даних |
| 15) nimble company | o) тривалі стосунки |
| 16) refine relationship | p) оптимізувати використання ресурсів |
| 17) ongoing relations | q) поліпшувати стосунки |
| 18) executive-level support | r) непрофільна функція |
| 19) ample communication | s) послуги з прибирання та благоустрою |
| 20) affected employee | t) включати, охоплювати |

Exercise 6. Use the following word combinations in the sentences of your own and translate them into Ukrainian:

to speed up the time, to handle activity, to set up a subsidiary, to turn over functions to, to be related to, to decide on appropriate projects, to work out an agreement, to be judiciously controlled, to drain profits, to take care of, to be short of, to choose between options.

Exercise 7. Find words in text 1 that have the same or similar meaning to the following:

use, application, branch, include, payment, invoicing, profitably, labourer, optimize, chief, part, manufacture, specialist, purchase, problem, experience, secondary, smart, management, continuous, responsible for, involve, deal with.

Exercise 8. Say whether the following statements are true or false. Correct the false ones and ground your answers in your own words.

1. Outsourcing is disadvantageous for company's activity.
2. Outsourcing involves company's employees in writing a business plan, developing a company's strategy and exploiting available resources.
3. The outsourcing professionals are in charge of the work on both the client and provider sides and must be highly competent in negotiation, communication, project management, and other business areas.

Exercise 9. Put questions to the italicized words.

1. The issue of *outsourcing logistics* services has received *widespread* attention *over the last 15 years*.
2. *The challenges of outsourcing* became especially acute *in different countries*.
3. *The outsourcing success* depends on *executive-level* support, *ample* communication *and ability to manage service providers*.
4. *Companies* hire a *multitude* of *outsourcing service* providers *to handle almost all* aspects of a new project.

Exercise 10. Sum up the information about the purpose, forms, stages and factors of outsourcing.

Exercise 11. Memorize the basic terminology to text 2.

to opt – обирати

primal phase – початковий етап

portfolio – комплексний пакет послуг
to cater to the needs – намагатися задовольнити потреби
to bundle services – надавати пакет послуг
time-critical shipment – термінове відвантаження
risk sharing – розподіл ризику
cash-flow – рух грошових коштів; надходження і витрата готівки
fixed costs – фіксовані, постійні видатки
variable costs – змінні видатки

Exercise 12. Read, translate and give the gist of text 2.

Text 2. Logistics Service Provider

The lack of specific knowledge and suitable infrastructure in the targeted markets force firms to turn to the competence of logistics service providers, especially, a third party supplier, or contract logistics services. A third party transportation service provider handles a company's logistics needs; huge savings for time, money, and effort are gained. Those who carry on retail business, for example, will be able to reduce their needs for warehouse storage, vehicles, and labour when they opt to contract the work out. They will be able to bring down their fixed expenses and capital investments, use their financial resources in their core business activities.

A logistics service provider (LSP) refers to an outside provider employed by firms to perform some or all of its logistics activities. LSPs differ considerably in the scope and depths of services offered. The services offered by the LSPs range from a narrow spectrum, mainly consisting of warehousing and transportation services in primal phases, to integrated service portfolios, including a multitude of different services for the advanced phases. Five kinds of LSPs can be distinguished: carriers, freight forwarders, courier & express & parcel/postal providers (CEP), third party / contract LSPs and fourth party LSPs.

Carriers typically own logistics assets and concentrate mainly on supplying transportation services. They are mostly confined to either road, sea, air or rail transportation and only in few cases also offer combinations of these services. They receive their orders either directly from the customer or through a freight forwarder and with their service

portfolio cater to the needs of traditional logistics of the first phase of logistics development.

Freight forwarders offer coordinating functions and intermediating services. They bundle transportation services, offer warehousing and also supply a combination of the two. They also provide additional services, such as transportation planning and management, and also sometimes act as carriers by using own assets for transportation or warehousing. Overall, freight forwarders in their coordinating function address the needs of firms which are located in the second phase of logistics.

The third phase of logistics development requires inter-organizational flow and process orientation, and therefore, demands comprehensive logistics solutions. During this phase, solution providers in the form of CEP and third party service providers become increasingly important depending on the needs of the customers.

CEP providers are also transportation providers, but with a focus on the distribution of small units to any destination, often with time-critical shipments. As opposed to carriers, CEP providers send parcels or mail through their networks, employing different transportation vehicles and incorporating handling at hubs. In this way, they can virtually supply door-to-door services anywhere in the world, without having to rely on any third parties. Still, carriers and brokers are sometimes employed to reduce capital intensity. Core competencies of CEP providers are the operation and management of highly complex distribution networks.

3PL or 3rd party service logistics is a company that manages logistics need by providing transportation, warehousing, documentation, IT support, customs clearance and other government formalities. It owns assets and works on a ground level.

The economic advantages of using 3PL suppliers are:

- elimination of infrastructure investments;
- access to world-class processes, products, services or technologies;
- improved ability to react quickly to changes in business environments;
- risk sharing;
- better cash-flow;
- reduction of operating costs;
- exchange of fixed costs with variable costs;

- access to resources not available in one's own organization.

Peter Muller (1993) is supposed to be the first to have identified different types of 3PLs. To him, there are four distinct classes of 3PLs:

1. Asset-based 3PLs use their own assets (e.g. trucks and warehouses) to offer dedicated logistics services.

2. Management-based 3PLs supply logistics management through information systems or consulting.

3. Integrated 3PLs use their own assets to provide logistics services, but also subcontract from other vendors if necessary.

4. Administration-based 3PLs mainly offer administrative management (e.g. freight payment).

4PL-providers serve as an intermediary and general contractor for inter-organizational supply chains without supplying any physical process by itself. 4PL is a company that manages the 3PLs on behalf of the major company. 4PLs do not own any asset and do not work on a ground level. 4PLs bid for 3PL providers, select the 3PLs for the company to ensure global shipments and integrate 3PLs' operations for the goods to reach smoothly from one 3PL to another 3PL company. Therefore, the major company does not have to deal with all the 3PLs individually. 4PLs provide it with all the required information.

In essence, the 4PL logistics providers are supply chain integrators. They assemble and manage the resources, capabilities and technology of their own organization with those of complimentary service providers to deliver a comprehensive supply chain solution.

Fig. 1 demonstrates various levels of logistics service providers.

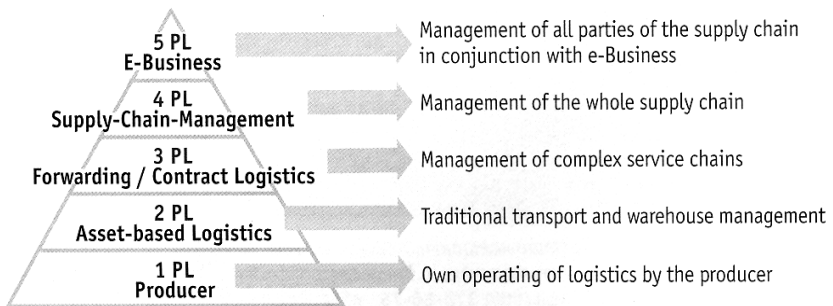


Fig. 1. Various levels of logistics service providers

Exercise 13. Answer the questions on text 2.

1. What forces firms to turn to the competence of logistics service providers? 2. What do logistics service providers refer to? 3. How do LSPs differ? 4. What is CEP? 5. Will you differentiate between carriers, freight forwarders, and CEP? 6. What are economic advantages of 3PLs as compared with 4PLs?

Exercise 14. Match the terms to appropriate definitions.

Definitions	Terms
1. A set of services within a given firm	a) target market
2. Incomings and outcomings of cash representing the operating activities of a company	b) bring down
3. A cost of labour, material or overhead that changes according to the change in the volume of production units	c) service portfolio
4. Risk management method in which the cost of the consequences of a risk is distributed among several participants in a company, such as in a syndicate	d) cater
5. To choose smth or decide to do it in preference to anything else	e) bundle services
6. A particular market segment at which a marketing campaign is focused.	f) time-critical
7. A cost that does not change with an increase or decrease in the amount of goods or services produced.	g) risk sharing
8. To try to satisfy a need, especially one which is not popular or not generally acceptable	h) cash-flow
9. To provide a package of services	i) fixed costs
10. Cause to fall, reduce a charge	j) variable costs
11. Urgent, limited in time.	k) opt

Exercise 15. Find in text 2 English equivalents of the following words and word combinations.

Рух грошових коштів; цільовий ринок; постійні видатки; комплексний пакет послуг; намагатися задовольнити потреби; розподіл ризику; вантажне експедиційне агентство; змінні видатки;

термінове відвантаження; надавати пакет послуг; зменшувати витрати; отримувати замовлення безпосередньо від клієнта; доступ до ресурсів.

Exercise 16. Find in text 2 synonyms for the following words and word combinations.

Service supplier, desired market, cut down, package, stage, inflexible costs, support, flexible costs, in-house, major activities, concentrate on, urgent, situated, additional, mediatory, general, nevertheless.

Exercise 17. Give antonyms for the following words and word combinations.

Consumer, scarcity, waste, stop, wholesale, increase, unable, suitable, variable, profit, core, inside, none, similar, slightly, broad, primal phase, typical, public, spread, many, demand, receive, directly, outside, like others, excluding, unemployed, peripheral, worsen, slowly.

Exercise 18. Say whether the following statements are true or false. Correct the false ones.

1. An outside provider is employed by a company and performs some or all of its logistics activities. 2. LSPs are enablers of logistics outsourcing. 3. LSPs were originally offering a very wide spectrum of services. 4. There can currently be distinguished three types of LSPs. 5. Carriers are firms that own assets for distribution purposes. 6. CEP providers can virtually supply door-to-door services anywhere in the world, without having to rely on any third parties. 7. Freight forwarders are intermediaries between providers and buyers of transportation services. 8. 3PLs offer their customers such logistics solutions as warehousing and pick / pack operations. 9. 4PLs subcontract all operations from other LSPs and confine themselves to the management of logistics systems. 10. The first author to identify different types of 3PLs distinguishes five major 3PL classes.

Exercise 19. Translate the following sentences into English:

1. Логістичний провайдер першого рівня – «автономна логістика» – це вантажовласник, який сам виконує всі логістичні операції. 2. Логістичний провайдер другого рівня – «традиційна логістика» – компанія, яка виконує традиційний набір послуг із

транспортування та управління складською інфраструктурою. 3. Логістичний провайдер третього рівня – «логістика для третіх осіб» – логістичний оператор, який зобов'язується виконувати всі логістичні завдання споживачів і пропонує ще й інформаційні та фінансові послуги. 4. Логістичний провайдер четвертого рівня – «інтегрована логістика» – є менеджером ланцюга постачання, який об'єднує ресурси, потужність і технології своєї організації з ресурсами, потужностями та технологіями іншого логістичного підприємства та управляє ними, щоб запропонувати споживачам найповніший асортимент послуг. 5. Логістичний провайдер п'ятого рівня – «інтернет-логістика» – управління усіма складовими інтегрованого (єдиного) ланцюга постачання з допомогою електронних засобів інформації.

Exercise 20. Complete the following to make sentences so that they become the type in brackets. Study the model.

<p><i>Model:</i> 3PL is a company (purpose) – 3PL is a company that manages logistics need by providing transportation, warehousing, documentsatation)</p>
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1. The logistics service provider (reason)
2. The logistics service provider (contrast)
3. The logistics service provider (purpose)

Exercise 21. Retell text 2 as if you were:

1. a 3PL.
2. a 4PL.
3. a 1PL.

Exercise 22. Memorize the basic terminology to text 3.

shortlisting – відбір з переліку кандидатів

challenging process – складний процес

upfront research – попереднє дослідження

solicit – вимагати; клопотати

request for quotation – запит на котирування; заява на конкурсну пропозицію

price quotation – котирування цін

timeframe for response – термін для отримання відповіді

pivotal step – кардинальний крок
accountable for – відповідальний за (*щось*)
friction points – гострі моменти; розбіжності
remedy – шлях вирішення проблеми
exit strategy – стратегія завершення діяльності, виходу з проекту
mitigation – запобігання наслідкам; пом'якшення наслідків
on track – згідно з планом
drastic deviation – суттєве відхилення
gain sharing – участь у прибутку
collaboration – співпраця

Exercise 23. Read, translate and give the gist of text 3.

Text 3. Common Outsourcing Strategy

A successful transition to outsourcing with a 3PL is a process that depends on a variety of factors that differ from business to business. The decision to outsource is based on the company's operation plans, goals, product lines, expansion, acquisitions, etc. Before making this decision, it is necessary to conduct a comprehensive study and document the advantages, challenges and cost benefits of outsourcing.

Once a decision has been made to outsource, the next step is to adopt a scientific selection process and appoint a team of consultants who are specialists in this area to assist in shortlisting and recommending the suitable 3PL that fits all your requirements at the best possible price. Evaluating and selecting the right 3PL partner is a challenging and risky process for even the most experienced companies. While this process can be challenging, a systematic approach and a well developed outsourcing strategy will clarify your needs and alternatives and positively impact the final decision.

The following strategy can be used for selecting a 3PL for your company:

1. **Set Objectives.** Clear business objectives for choosing a 3PL provider should be developed and prioritized. This will guide the selection process and assist in evaluating the success. It is also advisable to determine the type of provider relationship.

2. **Determine Customer Service Requirements.** Conduct upfront research to identify a select list of preliminary 3PL candidates. All

eligible 3PL companies should be surveyed to determine facility locations, warehousing and distribution strengths and weaknesses as well as their service areas. This will help in eliminating companies that cannot adequately address your functional specifications. Developing a detailed method for critically evaluating the capabilities of 3PL candidates can make or break an outsourcing selection process.

3. Solicit Requests for Quotation. The request for information (RFI) or quotation (RFQ) is a tool to gather information and measure the strengths with respect to capabilities and cost effectiveness of outsourcing. When selecting a 3PL, the RFQ document should be as detailed as possible and it should be accompanied by all relevant documents about the project and expectations. The RFQ should include a detailed description of the areas to be outsourced including: the scope of the contract, locations, facilities, departments; information on volumes involved, number of deliveries, warehouse sizes, number of items, etc.; the logistics tasks to be performed; the level of performance required. Furthermore, the RFQ should indicate a format for price quotation and a timeframe for responses.

4. Visit the Potential Provider's Facilities. Facilitating tours of a potential 3PL provider's facilities and interviews with their existing clients is an important next step. Experiencing the company's facilities gives you a chance to determine how flexible their operation is and their willingness to work to meet your needs as they change.

5. Prepare Legal Documentation. Contract negotiation is a pivotal step in a 3PL relationship. It is necessary to document what is agreed and what is disagreed clearly in order to avoid ambiguity in the relationship, as well as to determine if the 3PL is accountable for the level of accuracy and product conditions, to establish what party will finance improvements in case of system upgrades. The contract should specify all possible friction points and address them with remedies. Exit strategies such as mediation and arbitration should also be part of a 3PL contract.

6. Develop Project Implementation Plan. There should be a detailed logistics outsourcing project implementation plan as well as periodic reviews in place to make sure everything is on track and there are no drastic deviations in the scope of the project.

The project implementation is the process of translating thoughts into actions and it requires active co-operation and co-ordination on both

sides of the relationship. Project implementation includes IT integration, operating procedures, customization, understanding the service measures, defining the escalation process etc. All these activities require precise handling and a dedicated team. The 3PL companies usually have their own project implementation methodology.

7. Design Efficient Performance Measurement System. During the startup phase of the outsourcing relationship the customer must take the initiative to develop performance measurements and reporting methods that support the company's business goals for the outsourcing strategy.

The 3PL's performance should be measured on qualitative and quantitative performance measures regularly. Ideally, financial, productivity, utilization, quality and cycle time measures should be considered.

One of the objectives of performance measurement is not just to measure the performance but also initiate necessary corrective actions with regard to negative performance and explore the possibility of gain sharing in the case of positive performance so as to encourage continuous improvements. Regular performance measurement presents the perfect opportunity for both the customer and the 3PL to communicate effectively and to make the outsourcing relationship a great success.

8. Trust and Collaboration. The success of an outsourcing relationship between a company and the 3PL provider requires a combination of trust and collaboration. Trust determines the level of flexibility a company can allow the 3PL in managing the operations to the best of their capability. The outsourcing arrangement can be truly successful only when there is a high level of trust between both parties in the business relationship, otherwise it most certainly will fail.

To build trust in your relationship with a 3PL it is crucial to select the right 3PL partner that can meet your particular requirements and with whom you can strengthen your relationships. Thus, the key to a successful logistics outsourcing is a well-organized process of selecting and communicating with the potential 3PL providers.

Exercise 24. Answer the questions on text 3.

1. What does a successful transition to outsourcing with a 3PL depend on? 2. What is a decision to outsource based on? 3. What do RFI

and RFQ imply? 4. Why is evaluating and selecting the right 3PL partner a challenging and risky process? 5. What should a company keep in mind when setting objectives to outsource? 6. How are customer service requirements determined? 7. Why is it necessary to gather information about and measure the strengths of a 3PL? 8. What does a visit to the potential providers' facilities mark? 9. Why is it advisable to develop a project implementation plan? 10. What is meant by an efficient performance measurement system? 11. The success of an outsourcing relationship between a company and the 3PL provider requires a combination of trust and collaboration, doesn't it? Give a detailed answer.

Exercise 25. Find in text 3 English equivalents of the following words and word combinations.

Попереднє дослідження; кардинальний крок; співпраця; відповідальний за (щось); виконання робіт на замовлення; юридична документація; шлях вирішення проблеми; відбір з переліку кандидатів; вимагати, клопотати; стратегія виходу з проекту; згідно з планом; термін для отримання відповіді; запобігання наслідкам; запит на котирування; складний процес; розбіжності.

Exercise 26. Find the terms in text 3 through the definitions:

1) a reduced list of candidates for some situation that has been cut down from a larger list; 2) preliminary research; 3) a standard business process whose purpose is to invite suppliers into a bidding process to bid on specific products or services; 4) a document that states some contractual relationship or grants some right; 5) to be responsible for; 6) a way of solving a problem or ordering someone to make a payment for harm or damage they have caused, using a decision made in a court of law; 7) a part of an emergency plan which sets down the conditions or events under which the plan is activated; 8) making or altering to individual or personal specifications; 9) minimization of the potential impact of a threat or warning; 10) means of leaving one's current situation, either after a predetermined objective has been achieved, or as a strategy to mitigate failure.

Exercise 27. Fill in the blanks with the appropriate words given in the box:

flexibility, friction, dedicated team, upfront research, remedies, depends, overlook, challenging, risky

1. Evaluating and selecting the right 3PL partner is a ... and ... process for even the most experienced companies. 2. The decision to outsource ... on the company's operation plans, goals, product lines, expansion, acquisitions. 3. Conduct ... to identify a select list of preliminary 3PL candidates. 4. The contract should specify all possible ... points and address them with 5. Trust determines the level of ... a company can allow the 3PL in managing the operations. 6. Project implementation requires precise handling and a 7. Many companies ... critical areas when they define their contractual relationships.

Exercise 28. Translate the sentences into Ukrainian and put questions to each (general, special, subject-question, alternative and disjunctive).

1. The decision to outsource is based on the company's operation plans, goals, product lines, expansion, acquisitions. 2. All eligible 3PL companies should be surveyed to determine facility locations, warehousing and distribution strengths and weaknesses. 3. The RFQ indicates a format for price quotation and a timeframe for responses. 4. Regular performance measurement presented the perfect opportunity for both the customer and the 3PL to communicate effectively and to make the outsourcing relationship a great success. 5. The outsourcing arrangement can be truly successful only when there is a high level of trust between both parties in the business relationship. 6. Inefficiency leads to a breakdown in the relationship.

Exercise 29. Decipher the abbreviations and translate them.

3PL, RFI, RFQ, BPO, HRO, ITO, SLA, LSP, CEP, BPO, BOL, AFB, ATS, ERP, WAN, IAN, SCC, DM, EDI.

Exercise 30. Read the sentences with Participial Constructions and translate them into Ukrainian.

1. Having employed the outsourcing model companies began carrying out narrow functions, such as payroll, billing and data entry.

2. The people performing the work internally for the client firm are transferred and become employees for the service provider. 3. Being a logistics service provider the firm takes care of storage and inventory management and ensures the availability of the right product, at the right place, and at the right time. 4. Stored inventories controlled, their carrying cost does not drain the company's profits. 5. Turning non-core functions over to external suppliers companies leverage their resources, spread risks and concentrate on issues critical to survival and future. 6. The third-party providers were said rendering outsourcing services. 7. Those who carry on retail business opt to contract the work out being able to reduce their needs for warehouse storage, vehicles, and labour.

Exercise 31. Work in pairs and discuss the following:

1. Setting outsourcing objectives and determining customer service requirements. 2. Project implementation plan development and visiting the potential provider's facilities. 3. Building up trust and gaining collaboration with partners.

Exercise 32. Find the way out of the following problem situations.

1. You signed a three-year contract with the 3PL, but in a year the latter has appeared to be on the verge of bankruptcy.

2. Your company failed in the bid to outsource transaction management. The next tender will take place in a month.

3. Your performance measurement system has turned out be wasteful. Your company incurs great losses and is about to break the contracts concluded.

Exercise 33. Speak on:

1. Logistics outsourcing concept.

2. Logistics service providers.

3. Common outsourcing strategy.

Unit 22. SUPPLY CHAIN MANAGEMENT

Exercise 1. Memorize the basic terminology to text 1.

tangible – матеріальний

series – ряд

tanker collection – збір у цистерну

bottling plant – розливна установка / машина для пляшок

to extract – вилучати

crude oil – неочищена нафта

value chain – ланцюг додавання вартості

demand chain – ланцюг управління виробництвом і поставками

to go beyond – перевищувати; виходити за межі

Exercise 2. Read and translate text 1.

Text 1. Supply Chain

In reality, organizations do not work in isolation, but each one acts as a customer when it buys materials from its own suppliers, and then it acts as a supplier when it delivers materials to its own customers. Materials are all the things that an organization moves to create its products. These materials can be both tangible (such as raw materials) and intangible (such is information).

A wholesaler, for example, acts as a customer when buying goods from manufacturers, and then as a supplier when selling goods to retail shops. A component maker buys raw materials from its suppliers, assembles these into components, and passes the results to other manufacturers. Most products move through a series of organizations as they travel between original suppliers and final customers. Milk moves through a farm, tanker collection, dairy, bottling plant, distributor, and supermarket before we buy it. A toothbrush starts its journey with a company extracting crude oil, and then it passes through pipelines, refineries, chemical works, plastics companies, manufacturers, importers, exporters, wholesalers and retailers before finishing in your bathroom. A sheet of paper moves through several organizations before it reaches our desk.

People use different names for these chains of activities and organizations. When they emphasize the operations, they refer to the process; when they emphasize marketing, they call it logistics channel; when they look at the value added, they call it a value chain, when they see how customer demands are satisfied, they call it a demand chain.

Every product has its own unique supply chain. A supply chain consists of the series of activities and organizations that materials move through on their journey from initial suppliers to final customers. The supply chain for Levi jeans starts with cotton growing in a field and ends when you buy the jeans in a shop. The supply chain describes the

total journey of materials. Along this journey, materials may move through raw materials suppliers, manufacturers, finishing operations, logistics centres, warehouses, third party operators, transport companies, wholesalers, retailers, and a whole range of other operations. Sometimes, the supply chain goes beyond the final customer to add recycling and re-use of materials.

Exercise 3. Answer the questions on text 1.

1. When does an organization act as a customer and when does it act as a supplier? 2. What can materials be? 3. What do most products move through? You give examples from the text? 4. What names do people use for chains of activities and organizations? 5. What does a product supply chain consist of?

Exercise 4. Give English equivalents.

Клієнт; постачальник; матеріальний; нематеріальний; магазин роздрібної торгівлі; сировина; кінцевий споживач; нафтопереробний завод; оптовий торговець; додана вартість; ланцюг додавання вартості; перероблення відходів.

Exercise 5. Translate conditional sentences of three types into Ukrainian.

1. If the documents are not exchanged this month, the transportation treaty will not become effective until March 15. 2. Unless there is now a speedy reversal of this situation irreparable damage will be done. 3. If demand for goods always matched production, there would be no need to store goods. 4. If the company had met performance goals, management would have evaluated possible supply chain alternatives. 5. Had the new process been used last year, the demand for product would have been met.

Exercise 6. Translate the following sentences into English, describing benefits of well designed supply chains.

1. Виробники розміщують операції в найзручніших місцях, незалежно від місця розташування своїх клієнтів. 2. Зосереджуючи операції на великих виробничих об'єктах, виробники можуть отримати економію, зумовлену зростанням масштабів виробництва. 3. Виробники не зберігають значних запасів готової

продукції, оскільки вони, зазвичай, утримуються далі у ланцюгу постачання, ближче до споживача. 4. Коли гуртовики розміщують великі замовлення, виробники зменшують витрати на одиницю продукції, що призводить до зниження цін. 5. Гуртовики зберігають товари багатьох постачальників, надаючи роздрібним торговцям можливість вибору товарів. 6. Оптовики знаходяться поруч з роздрібними торговцями і можуть швидко виконати нове замовлення. 7. Роздрібники мають менші запаси товарів, оскільки оптові торговці забезпечують їм надійні поставки.

Exercise 7. Write a summary of text 1.

Exercise 8. Memorize the basic terminology to text 2.

inwards – усередину

outwards – зовні, за межі

upstream – 1) зворотний потік; 2) угору за течією

downstream – 1) головний напрямок (*ланцюга постачання*); 2) вниз за течією

tier – 1) ряд; 2) рівень, клас

to converge – сходитися (*про лінії, шляхи*)

to diverge – розходитися

feeder services – місцева (допоміжна) транспортна / автобусна лінія

clearing house – клірингова палата

strand – складова (*частина чогось*)

SCOR (Supply Chain Operations Reference) – базова модель / інструмент діагностування для управління ланцюгом постачання

Exercise 9. Read and translate text 2.

Text 2. Supply Chain Structure

The simplest view of a supply chain has a single product moving through a series of organizations, each of which somehow adds value to the product. Taking one organization's point of view, activities in front of it – moving materials inwards – are called upstream; those after the organization – moving materials outwards – are called downstream.

The upstream activities are divided into tiers of suppliers. A supplier that sends materials directly to the operations is a first tier supplier; one that send materials to a first tier supplier is a second tier supplier; one that sends materials to a second tier supplier is a third tier supplier, and so on back to the original sources.

Customers are also divided into tiers. One that gets a product directly from the operations is a first tier customer; one that gets a product form a first tier customer is a second tier customer; one that gets a product from a second tier customer is a third tier customer, and so on to final customers.

In practice, most organizations get materials from many different suppliers, and sell products to many different customers. Then the supply chain converges as raw materials move in through the tiers of suppliers, and diverges as products move out through tiers of customers.

A manufacturer might see sub-assembly providers as first tier suppliers, component makers as second tier suppliers, materials suppliers as third tier suppliers, and so on. It might see wholesalers as first tier customers, retailers as second tier customers, and end users as third tier customers.

It is fairly easy to imagine the shape of a manufacturer's supply chain, but most other organizations use the same general approach. Airlines, for example, move passengers from pick-up points, through local feeder services to major "hub" airports, on to another hub, and then back out through local services to their destinations; banks collect all cheques in central clearing houses before sending them to branches and customers.

Each product has its own supply chain, and there is a huge number of different configurations. Some are very short and simple – such as a cook buying potatoes directly from a farmer. Others are surprisingly long and complicated. An everyday product like a shirt has a long journey from the farm growing cotton through to the final customer. It also has several chains merging as buttons, polyester, dyes and other materials join the main process. In the same way, when you buy a computer, many strands of the supply chain merge as Intel provides the processor, Matshita the DVD drive, Agfa the scanner, Hewlett-Packard the printer, Microsoft the operating system, and so on.

Supply chains diverge to meet demand from different types of customer. Manufacturers of car components, for example, sell some

products to car assembly plants, some to wholesalers for garages doing repairs, some to retail shops for individual customers, and some directly to customers through websites. Then the supply chain divides into separate strands with the same product following alternative routes.

The picture of supply chains is getting more complicated, with various mergers and divisions along their length. The reality is even more complex, as each organization works with many – often thousands – of different products, each of which has its own supply chain.

Some people argue that the term “supply chain” gives too simple a view, and they prefer to talk about a supply network or supply web. However, the term “supply chain” is the usual name when it is recognized that it refers to a complex pattern of movements.

Exercise 10. Answer the questions on text 2.

1. What is the simplest view of a supply chain? 2. What are upstream activities? 3. How are customers divided? 4. What is the general approach used by many organizations? Give examples. 5. How do supply chains converge? 6. How do supply chains diverge? 7. What makes the supply chain more complicated?

Exercise 11. Give English equivalents.

Постачальник першого рівня; вартість; сировина; отримувати матеріали; сходитися; розходитися; вузловий аеропорт; клірингова палата; філія; альтернативні шляхи; складова; відповідати потребам; об'єднання і підрозділи.

Exercise 12. Translate the following sentences into English:

1. Управління ланцюгами постачання передбачає інтегрування ключових бізнес-процесів, що охоплюють усіх постачальників товарів, послуг та інформації. 2. Управління ланцюгами постачання – це високо інтерактивний, комплексний та системний підхід, що потребує одночасного розгляду та врахування багатьох аспектів обміну. 3. Інформаційні зв'язки також мають бути включені до ланцюга постачання. 4. Хоча інформація не є процесом, вона значною мірою сприяє координації діяльності всіх ланцюгів. 5. Слід пам'ятати, що потоки продукції виникають лише після того, як почав циркулювати потік інформації.

Exercise 13. Match the definitions with proper logistics terms.

Definitions

Terms

- | | |
|--|---|
| 1. The determination of how to structure a supply chain. Design decisions include the selection of partners, the location and capacity of warehouse and production facilities, the products, the modes of transportation, and supporting information systems | a) supplier |
| 2. A non-profit organization dedicated to improving the supply chain efficiency of its members. Its membership consists primarily of practitioners representing a broad cross section of industries, including manufacturers, services, distributors, and retailers. It is the organization responsible for the SCOR standards | b) supply chain event management (SCEM) |
| 3. A provider of goods or services | c) supply chain |
| 4. Starting with unprocessed raw materials and ending with the final customer using the finished goods, it links many companies together | d) supply chain design |
| 5. It is an application that supports control processes for managing events within and between companies. It consists of integrated software functionality that supports five business processes: monitor, notify, simulate, control and measure supply chain activities | e) supply chain operations reference model (SCOR) |
| 6. This is the model developed by the Supply Chain Council as a standardized method of measuring supply chain performance and is built around six major processes: plan, source, make, deliver, return and enable. | f) supply chain council |

Exercise 14. Translate the following into English paying attention to the usage of conditional sentences.

1. Якщо транспортна компанія здійснює доставку в одне місто, вона може доставити товари в інші міста, розташовані поруч, зупиняючися на складах, щоб організувати місцеву доставку.
2. Якби в даній місцевості існував склад, овочі можна було б

залишити на зберігання. 3. Якщо ви добре ставитиметеся до замовників, вони продовжуватимуть користуватися вашими послугами. 4. Якщо ви не достатньо швидко задовольнятимете потреби споживача, не знижуючи при цьому якість, це зробить конкурент. 5. Якби ми виконували нашу роботу добре, ми зробили б значний внесок у розвиток місцевої, національної, світової економіки. 6. Навіть якщо б він там опинився, він би вам не допоміг. 7. Якби не було проблем із транспортними документами, не було б необхідності звертатися до постачальників другого рівня.

Exercise 15. Memorize the basic terminology to text 3.

cornerstone – наріжний камінь

discrepancy – різниця, розбіжність

alignment – 1) вирівнювання; 2) групування, блок, союз

commitment – 1) зобов'язання; 2) прихильність, відданість;
3) переконання

empowerment – уповноваження

span – 1) з'єднувати; 2) охоплювати

slowdown – уповільнення, зниження

conceal – 1) приховувати; 2) маскувати

conversion – реструктуризація

cohesive – єдиний, об'єднаний

Exercise 16. Read and translate text 3.

Text 3. Supply Chain Management

In any industrialised or nonindustrialized society, goods must be physically moved between the place they are produced and the place they are consumed. Except in very primitive cultures, in which each family meets its household needs, the exchange process has become the cornerstone of economic activity. Exchange takes place when there is a discrepancy between the amount, type, and timing of goods available and the goods needed. If a number of individuals or organizations within a society have a surplus of goods that someone else needs, there is a basis for exchange.

Channels develop when many exchanges take place between producers and consumers. The alignment of firms that bring products or services to market has been called the supply chain, the demand chain or

the value chain. Supply chain management (SCM) is a term that has grown significantly in use and popularity since late 1980s, although considerable confusion exists about what it actually means. Many people use the term as a substitute or synonym for logistics. However, the definition of supply chain management is much broader than logistics. Supply chain management is the integration of business processes from end user through original suppliers that provides products, services, and information that add value for customers.

A number of important differences exist between this definition of supply chain management and the Council of Logistics Management's definition of logistics. Foremost, supply chain management is the management of all key business processes across members of the supply chain. While SCM represents a relatively new way of approaching business and different views exist regarding the process involved, the key processes typically would include: customer relationship management, customer service management, demand management, order fulfillment, manufacturing flow management, procurement, and product development and commercialization. At some companies such as Xerox, the returns channel process is also included. Key areas required for successful implementation of SCM are executive support, leadership, commitment to change, and empowerment.

Thus, SCM is a systems approach that is highly interactive and complex, and requires simultaneous consideration of many trade-offs. SCM spans organizational boundaries, considering trade-offs both within and among organizations regarding where inventory should be held and where activities should be performed.

The dynamic nature of business environment requires management to monitor and evaluate the performance of supply chain regularly and frequently. When performance goals are not met, management must evaluate possible supply chain alternatives and implement changes. SCM is particularly important in mature and declining markets and during periods of economic slowdown when market growth cannot conceal inefficient practices. SCM also is critical in new product development and market development, when the organization is making decisions related to supply chain configuration.

As defined by the Council of Supply Chain Management Professionals (CSMP) supply chain management encompasses the planning and management of all activities involved in sourcing and

procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies. Supply chain management is an integrating function with primary responsibility for linking major business functions and business processes within and across companies into a cohesive and high-performing business model. It includes all of the logistics management activities noted above, as well as manufacturing operations, and it drives coordination of processes and activities with and across marketing, sales, product design, finance and information technology.

Exercise 17. Answer the questions on text 3.

1. What has become the cornerstone of economic activity in any industrialized or nonindustrialized society? 2. When is there a basis for exchange? 3. When do channels develop? 4. What is known about the meaning of the term Supply Chain Management? 5. What does supply chain management encompass? 6. What key processes are typically managed across members of the supply chain? 7. What does SCM require as a systems approach? 8. How should the performance of supply chain be monitored and evaluated? 9. When is SCM particularly critical? 10. What is SCM primary responsibility as an integrating function?

Exercise 18. Give English equivalents.

Наріжний камінь; важлива риза; внутрішні потреби; розбіжність; розрахунок часу; обмін; об'єднання; виконання замовлення; постачання; уповноваження; компроміс; розвинений ринок; охоплювати; пошук джерел постачання; реструктуризація; посередник; прихильність; приховувати; співпраця; відповідальність.

Exercise 19. Say whether the following statements are true or false. Correct the false ones.

1. The exchange process has become the cornerstone of economic activity in all societies. 2. Exchange takes place when there is a discrepancy between the amount, type, and timing of goods available

and the goods needed. 3. Supply chain management is the integration of business processes from end user through original suppliers that provides products, services, and information adding value for customers. 4. The SCM key processes typically include: customer relationship management, customer service management, demand management, order fulfillment, manufacturing flow management, procurement, and product development and commercialization. 5. SCM is particularly important in developing markets and during periods of economic slowdown when market growth cannot conceal inefficient practices. 6. Chain management drives coordination of processes and activities with and across marketing, sales, product design, finance and information technology.

Exercise 20. Match the definitions with proper logistics terms.

Definitions	Terms
1. The sequence of processes involved in the production and distribution of a commodity	a) trade-off
2. The act of obtaining something such as supplies for organization.	b) supply chain
3. Balance achieved between two desirable but incompatible features	c) slowdown
4. A decline in economic activity.	d) procurement

Exercise 21. Translate the following sentences into English:

1. Термін «управління ланцюгами постачання» був запропонований консультантами на початку 1980-х років, після чого набув великої популярності. 2. Постачальники першого рівня – це ті організації, у яких компанія безпосередньо купує товари та послуги. 3. Постачальники другого рівня – це постачальники постачальників першого рівня. 4. До основних учасників (primary members) ланцюгів постачання відносять всі незалежні компанії чи стратегічні одиниці, які виконують операційні / управлінські види діяльності у процесах обслуговування конкретного споживача або ринку. 5. До допоміжних учасників (supporting members) ланцюгів постачання відносять компанії, участь яких обмежується лише наданням ресурсів, знань, можливостей чи активів основним учасникам ланцюгів.

Exercise 22. Translate the sentences with conjunctions.

1. The wise manager involves as many people as he can at every level in both work and decision-making. 2. Such definition is of great importance both to individual managers and to the organizations as a whole. 3. A number of items on show were either being displayed publicly for the first time or were new to the British market. 4. It is unclear either what the program objectives were at the outset or why it was so abruptly discontinued.

Exercise 23. Decipher the abbreviations.

SCM, SCOR, CSMP, SCEM.

Exercise 24. Speak on:

1. Supply chain structure.
2. Supply chain management.

Unit 23. BENCHMARKING

Exercise 1. Practice the pronunciation of the following words repeating after the teacher:

benchmark, benchmarked, benchmarking, benchmarker, benchmarkee, identification, identify, indicator, measurement, measurable, achievable, prompt, astonish, compare, comparison, appraisal, ethical, generic, practice, convince, peer, pioneer, superior, invention, rigorous, synonymous, technique, similarity, credibility, panacea, pursue, perceive, turnaround, boundary, survey, key, qualitative, quantitative, prioritize, necessitate, percentage.

Exercise 2. Read dialogue 1 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 1

A: What does the word “benchmarking” mean?

B: The word “benchmarking” is borrowed from land surveying. Early land surveyors used the term to identify a fixed point from which all other measurements are made. In the late 1970s however, it took a broader meaning. Applied to an organization, benchmarking is a process to determine who else does a particular activity the best and emulating what they do to improve performance.

A: What else is known about the history of benchmarking?

B: In the 1970s, Xerox was the largest manufacturer of copiers in the world. However, Japanese manufacturers were making better copiers, selling them for less, and making a good profit. This prompted the company to directly compare itself with its direct and best competitors to determine what it could do to increase productivity while decreasing costs.

A: What were the results from their benchmarking?

B: They were astonishing. This experience proved so valuable that it prompted Xerox to set out a standard approach for such work and to include it as one of the key elements of their corporate strategy for quality improvement – leadership through quality. The term “benchmarking” was used to describe the approach.

A: Comparisons between organizations, and the search for information about competitors, are not new. What differentiates benchmarking from traditional approaches?

B: A lot of things: the focus is not just on products or plans, but also on business practices; the aim is to discover the best practices, and thus to obtain a leadership position; the target companies used for comparison are also often drawn from other industry sectors and from other countries.

A: Is the information search conducted in a close or in an open and ethical fashion?

B: In an open and ethical one. There is often a high level of cooperation between the parties involved, with agreements to share information in both directions and to protect the confidentiality of sensitive information provided.

Notes

benchmarking – 1) бенчмаркінг; 2) перейняття досвіду (*процес пошуку нових, досконаліших прийомів роботи, що виконується шляхом порівняння власних прийомів із найкращими з тих, які використовують інші*); 3) раціоналізація господарської діяльності із застосуванням досвіду провідних компаній

benchmark – 1) здійснювати бенчмаркінг, порівнювати з еталоном; 2) порівняльна / еталонна оцінка; еталон; підстава для порівняння; стандарт; контрольний показник; точка відліку; відмітка; орієнтир

land surveying – межування; геодезія, фотографування місцевості
land surveyor – землемір, землевпорядник
to emulate – 1) імітувати, копіювати, наслідувати; 2) змагатися;
намагатися перевершити (випередити)
copier – копіювальний пристрій
to prompt – 1) підказувати; 2) спонукати, заохочувати, вселяти
(думку)
astonishing – дивовижний, вражаючий
comparison – порівняння, співставлення
target company – цільова компанія, компанія - об'єкт поглинення
to conduct – 1) вести; супроводити; 2) керувати (*справою, підприємством*)
ethical – моральний, етичний
sensitive – 1) секретний; який стосується безпеки; 2) чутливий, сприйнятливий; 3) нестійкий; 4) вразливий

Exercise 3. Put questions to the italicized words.

1. *The word “benchmarking” is borrowed from land surveying.*
2. *Land surveyors used the term to identify a fixed point.* 3. *Xerox was the largest manufacturer of copiers in the world.* 4. *Japanese manufacturers were making better copiers.* 5. *The company compared itself with its direct and best competitors to determine what it could do to increase productivity.* 6. *Comparisons between organizations, and the search for information about competitors, are not new.* 7. *There is often a high level of co-operation between the parties involved.*

Exercise 4. Memorize the basic terminology to text 1.

outstanding – видатний, знаменитий
essence – 1) сутність, істотність; 2) існування
excellence – 1) перевага; 2) висока якість; видатна майстерність
to set (out) – виставляти (*на показ*), викладати
to surpass – 1) перевершувати, переважати; 2) випереджати
eventual – 1) випадковий; можливий; 2) остаточний; кінцевий
award – присуджування (*премій, нагород*)
pioneer – 1) першовідкривач; 2) ініціатор; новатор
to institute – встановлювати, запроваджувати, засновувати
invention – винахід, фабрикація

non-value-added – що не створює додаткової вартості; що не бере участі у створенні вартості; що не дає економічного ефекту
to enable – 1) давати змогу (право) (*що-небудь зробити*); 2) робити можливим, полегшувати
boundary – межа; кордон
with respect to – щодо (чогось), що стосується
rigorous – 1) точний; 2) суворий; неблаганний; 3) ретельний, акуратний (детальний)
to convince (of) – переконувати (у)
credibility – достовірність, правдивість, надійність
gap – 1) глибока розбіжність; розрив; 2) пробіл, пропуск, прогалина; 3) брак (чогось), нестача
to perceive – 1) сприймати, розуміти, усвідомлювати; досягати; 2) відчувати; почувати, розрізнити
onetime – одноразовий
pitfall – 1) пастка; 2) помилка
finite – обмежений, що має межу
completion date – термін завершення

Exercise 5. Read and translate text 1.

Text 1. Benchmarking Concept

Benchmarking is a management tool for comparing performance against the organization which is considered to be outstanding in one or more areas in order to improve performance. Benchmarking is defined as measuring our performance against that of best-in-class companies, determining how the best in class achieve those performance levels and using the information as a basis for our own company's targets, strategies and implementation or the search of industry best practices that leads to superior performance.

Essence of benchmarking is the continuous process of comparing a company's strategy, product and processes with those of world leaders and best-in-class organizations in order to learn how they achieved excellence and then setting out to match and even surpass it. In other words, it is moving from where we are to where we want to be.

The concept of benchmarking is not new. In the early 1800s, Francis Lowell, a New England industrialist, traveled to England to study manufacturing techniques at the best British factories. Toyota's just-in-

time production system was influenced by the replenishment practice of US supermarkets. Modern benchmarking was initiated by Xerox, an eventual winner of the Malcolm Baldrige national quality award in 1989. IBM, Motorola and Xerox became the pioneers and instituting the benchmarking process.

A primary advantage of benchmarking practice is that it promotes a thorough understanding of the companies own processes i.e. the company's current profile (strength and weakness) is well understood. It involves limitation and adaptation of the practices of superior competitors, rather than invention, thereby saving time and money for the company practicing benchmarking. Intensive studies of existing practice often lead to identification of non-value-added activities and plans for process improvement. It enables comparison of performance measures in different dimensions, each with best practices for that particular measure. It focuses on performance measure and processes and not on products. It is not restricted to the industry to which the company belongs. It extends beyond these boundaries and identifies organization in other industries that are superior with respect to chosen measures. Benchmarking allows organizations to set realistic, rigorous new performance targets and this process helps convince people of the credibility of these targets. It allows organization to define specific gaps in performance and to select the gap between what they are doing and what best-in-class are doing.

The potential pitfalls of benchmarking include the failure to: involve the employees who will ultimately use the information and improve the process, relate process improvement to strategy and competitive positioning, define the firm's own process before gathering data for the purpose of comparison, perceive benchmarking as an ongoing process and not as a onetime project with a finite start and completion dates, etc.

Benchmarking is the fact that best-in-class performance is not a static but a moving target. Benchmarking is not an "instant pudding"¹. It will not improve performance if the proper infrastructure of a total quality program is not in place. It is not a panacea that can replace all other quality efforts or management processes that can improve the competitive advantage of a company.

¹ instant pudding – дослівно: «миттєвий пудинг» (вираз, що використовують, щоб підкреслити неможливість швидких змін рівні якості без постійних (невплинних) систематичних зусиль та навчання)

Specific areas to benchmark at the operating level might include the following: customer services levels; inventory management; inventory control; purchasing; billing and collection; purchasing practices; quality process; warehousing, distribution and transportation.

Benchmarking is a process of discovering and adapting new and innovative practices to improve overall organizational effectiveness. It is also a learning process – learning and adapting new practices by establishing new goals and introducing new ideas.

Exercise 6. Answer the questions on text 1.

1. What are the definitions of benchmarking? 2. What is the essence of benchmarking? 3. What took place in the early 1800s? 4. Whom was modern benchmarking initiated by? 5. Who became the pioneers in the benchmarking process? 6. What are the advantages of benchmarking practice? 7. What does benchmarking enable organizations to do? 8. What do the potential pitfalls of benchmarking include? 9. Is benchmarking an “instant pudding” or a panacea? Why? 10. What are specific areas to benchmark at the operating level?

Exercise 7. Give English equivalents.

Вищої якості; присуджувати (премію, нагороду); еталонна оцінка; перевершувати; видатний; першовідкривач; винахід; межа; вимірювання; виставляти (на показ); сутність; запроваджувати; давати змогу (право); точна мета; одноразовий; достовірність; термін завершення; що не створює додаткової вартості; ідентифікація; кращий у своєму класі; перевага; розрив; обмежений; універсальний засіб; переконувати; сприймати; геодезія; який стосується безпеки; продуктивність; передова практика; копіювати; порівнювати з еталоном.

Exercise 8. Translate the following blocks of sentences paying attention to the words in italics. Make use of a dictionary.

1. *Benchmarking* is used to measure performance using a specific indicator. It may be a one-off event, but is often treated as a continuous process in which organizations continually seek to improve their practices.
2. If we were to *benchmark* "world conquest", what objective measure would we use to compare Julius Caesar to Adolph Hitler; Genghis Khan to Napoleon? We do the same thing in business. What is the best sales

organization? The most responsive customer service department? The leanest manufacturing operation? 3. You know you need to *benchmark*, but you are just too busy. Well if you don't *benchmark*, and then implement improvements based on it, you will find yourself out of business. 4. *Benchmark* is a measured, "best-in-class" achievement and a reference or measurement standard for comparison. This performance level is recognized as the standard of excellence for a specific business process. 5. Best practitioners are identified and analyzed elsewhere in the world. There are too few *benchmarking* partners within the same country to produce valid results. 6. A company's growth in revenues might *be benchmarked* against the growth experienced over the same period by other companies in the same industry. 7. *Being successfully benchmarked* the *benchmarkee* was satisfied with the level of services rendered by our company. Any *benchmarker* doing the *benchmarking* project should determine who is the very best in a given industry sector, who sets the standard, and what that standard is.

Exercise 9. Read dialogue 2 and translate it using the notes below then reproduce the dialogue in pairs.

Dialogue 2

A: What are "benchmarks"?

B: Benchmarks are fixed pieces of information that can be used to make comparisons with other similar fixed pieces of information.

A: Are there any types of benchmarks?

B: There are three main types of benchmarks: internal, sector and functional (process) benchmarks. Here may be other organizations from different sectors but with similar operational functions that can be compared.

A: What do you mean?

B: For example, airlines and railways are similar in the ways they manage the turnaround and dispatch of aircraft or trains; administrative processes, customer service response times, and staff appraisal performance will have similarities in all organizations.

Notes

turnaround – робочий цикл

appraisal – атестація, ділова оцінка (*штатного працівника*)

similarity – схожість, подібність

Exercise 10. Match the definitions with proper terms.

Definitions	Terms
1. A system of establishing standards or best practice (or comparing standards from other firms or industries) against which future operations are measured	a) benchmark
2. A standard or point of reference used in measuring and judging quality or value	b) benchmarker
3. Indicators of the work performed and the results achieved in an activity, process, or organizational unit	c) performance indicator
4. A predetermined factor of performance (standard) against which actual performance is measured to see whether the actual is above or below standard	d) benchmarking partners
5. (The host) Those doing the benchmarking	e) benchmarking
6. (The partner) Those being benchmarked	f) benchmarking gap
7. The difference in performance between the benchmark for a particular activity and other companies in the comparison; the measured leadership advantage of the benchmark organization over other organizations	g) performance measures
8. The comparative companies considered in the benchmarking project, who are willing to exchange information openly and thus to enter a mutual learning process.	h) benchmarkee

Exercise 11. Translate the following sentences into English:

1. Бенчмаркінг – це інструмент управління для порівняння діяльності з організацією, що вважається видатною в одній або більше галузях. 2. Сутністю бенчмаркінгу є постійний процес порівняння стратегії, продукції та процесів компанії зі стратегіями, продуктами та процесами світових лідерів. 3. Сучасний бенчмаркінг не є новою концепцією, він був започаткований компанією-виробником

копіювальних пристроїв у 1970-х роках. 4. Головною перевагою практики бенчмаркінгу є ґрунтовне розуміння власних процесів компанії, її вад і переваг. 5. Компанія має визначити специфічні недоліки в діяльності та виявити розбіжності між тим, що вона робить, та тим, як працює організація з найкращими показниками. 6. Однією з пасток бенчмаркінгу є неспроможність визначити власні процеси компанії перед збиранням даних з метою порівняння. 7. Специфічними чинниками для здійснення бенчмаркінгу можуть бути рівень обслуговування клієнтів, управління запасами, складування, практика здійснення закупівель, збут та перевезення.

Exercise 12. Match the synonyms.

- | | |
|------------------|----------------------------------|
| 1. best-of-breed | a) divergence |
| 2. excellent | b) universal remedy |
| 3. gap | c) best-in-class / best practice |
| 4. finite | d) outstanding |
| 5. panacea | e) innovator |
| 6. pioneer | f) limited |

Exercise 13. Memorize the basic terminology to text 2.

high-performer – 1) фірма з високими показниками (діяльності);
високоєфективна / високопродуктивна організація; 2) дуже
цінний працівник компанії

to be keen – дуже бажати, прагнути чогось

remotely – з відстані; дистанційно

confidentiality – таємність, конфіденційність

invariably – постійно, незмінно

comparability – співставність, порівнянність

finding – знахідка; знаходження

Exercise 14. Read and translate text 2.

Text 2. Types of Benchmarking

There are several different types of benchmarking and the choice of the most appropriate one will depend on the nature of business and organization and the specific process to be benchmarked.

Strategic Benchmarking where businesses need to improve overall performance by examining the long-term strategies and general approaches

that have enabled high-performers to succeed. It involves considering high level aspects such as core competencies, developing new products and services and improving capabilities for dealing with changes in the external environment. Changes resulting from this type of benchmarking may be difficult to implement and take a long time to materialise.

Performance or Competitive Benchmarking. This will give a direct comparison with competitors, but competitors are less than keen to share their secrets. This type of benchmarking is most often done remotely, rather than by visit. Research has to be done through material that is freely available and published. Businesses consider their position in relation to performance characteristics of key products and services. Benchmarking partners are drawn from the same sector. This type of analysis is often undertaken through trade associations or third parties to protect confidentiality.

Process Benchmarking focuses on improving specific critical processes and operations. Benchmarking partners are sought from best practice organizations that perform similar work or deliver similar services. Process benchmarking invariably involves producing process maps to facilitate comparison and analysis. This type of benchmarking often results in short term benefits.

Functional or Parallel Benchmarking. This is where the function of the process has many parallel examples in many thousands of other organizations. Often these processes are those that nearly every organization needs to carry out to perform effectively, e.g. recruiting people, paying bills, etc. and they are usually the supporting processes in the organization. This sort of benchmarking can lead to innovation and dramatic improvements.

Internal Benchmarking involves benchmarking businesses or operations from within the same organization (e.g. business units in different countries). The main advantages of internal benchmarking are that access to sensitive data and information is easier; standardized data is often readily available; and, usually less time and resources are needed. There may be fewer barriers to implementation as practices may be relatively easy to transfer across the same organization. However, real innovation may be lacking and best-in-class performance is more likely to be found through external benchmarking.

External Benchmarking involves analyzing outside organizations that are known to be best-in-class. External benchmarking provides opportunities of learning from those who are at the "leading edge". This

type of benchmarking can take up significant time and resource to ensure the comparability of data and information, the credibility of the findings and the development of sound recommendations.

International Benchmarking. Best practitioners are identified and analyzed elsewhere in the world, perhaps because there are too few benchmarking partners within the same country to produce valid results. Globalization and advances in information technology are increasing opportunities for international projects. However, these can take more time and resources to set up and implement and the results may need careful analysis due to national differences.

Generic Benchmarking is the most abstract form of benchmarking, in that it involves comparison of a particular function or process with similar features at two or more companies independent of their industries, but processes which are on the surface can seem very different.

Product benchmarking, results benchmarking, best-in-class benchmarking, operational, energy benchmarking and global benchmarking are also to be mentioned as types of benchmarking.

Exercise 15. Choose a, b or c to complete the sentences.

1. The choice of the most appropriate type of benchmarking depends on
 - a) the type of organization
 - b) the nature of business and the specific process to be benchmarked
 - c) the specific function to be benchmarked
2. Strategic Benchmarking involves considering
 - a) new trends and strategic thinking
 - b) changes in the external environment
 - c) core competencies, developing new products and services
3. This types of benchmarking involves producing process maps to facilitate comparison and analysis
 - a) Internal Benchmarking
 - b) External Benchmarking
 - c) Process Benchmarking
4. The type of benchmarking which is most often done remotely, rather than by visit is
 - a) Functional or Parallel Benchmarking
 - b) Performance or Competitive Benchmarking
 - c) Generic Benchmarking

5. The type of benchmarking which involves benchmarking businesses or operations from within the same organization is

- a) Internal Benchmarking
- b) Generic Benchmarking
- c) External Benchmarking

6. This sort of benchmarking can lead to innovation and dramatic improvements

- a) Strategic Benchmarking
- b) Functional or Parallel Benchmarking
- c) International Benchmarking

7. External Benchmarking involves analyzing outside organizations that are known to be

- a) best in class
- b) best of the best
- c) best practice

8. Globalization and advances in information technology

- a) are popular as never before
- b) help benchmarking partners to communicate valid information within the same country
- c) are increasing opportunities for international projects.

Exercise 16. Find English equivalents in text 2.

Основна компетенція, базова кваліфікація; конкурент; доречний; підприємство, компанія, фірма; доступ; довгострокова стратегія; короткострокова перевага; найкращий практик, професіонал; дослідницька робота; карта процесу; зовнішнє середовище; здійснюватися; ділитися секретами; внутрішній бенчмаркінг; зовнішній бенчмаркінг; істотне покращення; ґрунтовні рекомендації; дійсні результати; поверхня; подібні властивості.

Exercise 17. Translate the following sentences into English:

1. Бенчмаркінг – це метод або інструмент підвищення ефективності роботи та досягнення високої якості через прагнення стати кращим у своїй галузі. 2. У кожного типу бенчмаркінгу є свої переваги та недоліки, кожен може виявитись корисним в одній ситуації та менш корисним – в іншій. 3. У діловій літературі існує велика кількість визначень бенчмаркінгу. 4. Типів бенчмаркінгу майже так само багато, як і його визначень. 5. Тип бенчмаркінгу обирається залежно від того, що саме організація має намір порівнювати із стандартом. 6. У

конкурентному бенчмаркінгу партнери з бенчмаркінгу залучаються з однакового сектору. 7. Бенчмаркінг процесів включає постійне виготовлення карт процесів для полегшення порівняння та аналізу. 8. Функціональний або паралельний бенчмаркінг може посприяти інноваціям та істотному зростанню продуктивності. 9. Внутрішній бенчмаркінг включає порівняння з еталоном операцій у межах тієї самої організації, а зовнішній – аналіз зовнішніх організацій, відомих як найкращі в своєму класі.

Exercise 18. Match the definitions with proper terms.

Definitions

Terms

1. It is a process of designing new products or upgrades to current ones, sometimes involves reverse engineering which is taking apart competitors products to find strengths and weaknesses

2. Type of benchmarking that involves studying the leading competitor or the company that best carries out a specific function

3. Type of benchmarking that embraces everything from staffing and productivity to office flow and analysis of procedures performed

4. The process of collecting, analyzing and relating energy performance data of comparable activities with the purpose of evaluating and comparing performance between or within entities

5. The extension of strategic benchmarking to a global scale

6. Conducting research only in a whole industry to obtain baseline information, e.g. hotel industry

7. A part of the American Productivity and Quality Centre (APQC) that specializes in networking services, information searches, and databases for benchmarking.

a) operational benchmarking

b) industry benchmarking

c) global benchmarking

d) best-in-class benchmarking

e) international benchmarking clearinghouse (IBC)

f) energy benchmarking

g) product benchmarking

Exercise 19. Translate into Ukrainian paying attention to the Subjunctive mood. Explain its use in the sentences.

1. I wish I knew what to benchmark. 2. We all wished that we had undertaken the implementation of benchmarking results. 3. I wish I had not told you about the survey. 4. I wish we would benchmark against 15 companies. 5. I wish you had realized dramatic results from our benchmarking strategies. 6. I wish our benchmarking partners could give all necessary information. 7. If only he benchmarked successfully! 8. If only it could always be productivity in all processes! 9. If you had been there at that time, our logistics consultant should have seen you. 10. If I were you, I would consider all recommendations on strategic benchmarking. 11. If you had selected a benchmarking gap you would have improved the performance of your business organization.

Exercise 20. Memorize the basic terminology to text 3.

background – 1) задній план, тло, фон; 2) передумова, підґрунтя;

3) історія питання; вихідні дані; 4) походження; 5) підготовка, кваліфікація

networking – налагоджування тісних (постіних) зв'язків; взаємодія; створення мережі контактів

key performance indicator (KPI) – ключовий показник (індикатор) продуктивності (*праці*)

synonymous – синонімічний

timeframe – часові межі; терміни

Exercise 21. Read and translate text 3.

Text 3. Benchmarking Performance with Best Practice

Benchmarking is an improvement technique that considers how others perform a similar activity, task, process or function. As an improvement technique it provides a background of what to benchmark and the selection of benchmarking partners. A methodology for defining supply chain management best practice is explained as well as the marriage¹ between benchmarking and networking to provide an ongoing improvement focus.

¹ marriage – тісний союз

By comparing your firm's operations to those of other organizations, there is a potential to learn and improve performance. Benchmarking is not only a comparison of key performance indicators (KPIs) although benchmarking uses KPIs to compare operations. The use of KPIs as a management tool has wider application. But many organizations see KPIs and benchmarking as synonymous. The focus of the benchmarking process should be on improvement and the use of KPI's to facilitate this process.

Benchmarking should be more about qualitative or process discussion where the benchmarking partners learn about a particular activity of another operation. The networking and discussion that occurs ensures that the quantitative comparison of KPI's is valid and similar things are being compared. Without the networking and process discussion, the benchmarking partner is never sure that the quantitative comparisons are valid. It is dangerous to form conclusions and develop improvement strategies on quantitative comparisons without understanding the processes and the definitions behind these performance comparisons.

Benchmarking does not have to include performance measure comparison. For example benchmarking could be used to develop a performance measurement system. This process would involve analyzing your current performance measurement system and then comparing that to other organizations.

The benchmarking process should include the following steps:

- defining where you are in the activity to be benchmarked;
- determine the level of performance that is wanted in the given activity; - determine how and what type of improvement is implemented to achieve stated targets, and in what timeframe.

Management can identify best practice through benchmarking. They can consider the gap between current and best practice performance and develop a timeframe for improvement. The best practice benchmark is simply the best KPI in the relevant area. This is a moving target because organizational improvement is a dynamic process.

There is no one company who is best practice in all activities. Best practice must be considered across a range of operational and functional

areas. The challenge for any management team is to achieve best practice in the areas critical to the success of the organization.

Exercise 22. Answer the questions on text 3.

1. What is benchmarking? 2. What does benchmarking use to compare operations? 3. What is KPI? 4. Why are networking and process discussion so important? 5. What would the process of developing a performance measurement system involve? 6. What steps should the benchmarking process include? 7. How can management identify best practice? 8. What is the best practice benchmark? 9. How must best practice be considered? 10. What is the challenge for any management team?

Exercise 23. Give English equivalents.

Ключовий показник продуктивності; одиниця вимірювання продуктивності; часові межі; налагоджування тісних постійних зв'язків; доречний; якісний; кількісний; синонімічний; вдосконалення; одиниця виміру; обіговий капітал; продуктивність; починати; життєвий досвід; зворотний зв'язок; експертиза.

Exercise 24. Fill in the blanks with the following words and word combinations from the box. Answer the questions below.

<i>components, measurement, benchmarks, input item, unique characteristics, art, manage, critical, indicators, procedure, position, select</i>
--

Every ... success factor (CSF) has various performance indicators that affect it. Since management can only ... a limited number of items, it is important to ... the most important performance ... for each CSF, called key performance indicators (KPIs). KPIs have ... that management must consider when selecting them. Each indicator: relates to a specific ... or process; is an ... for a specific performance indicator; must have consistency of The ... of selecting KPIs requires that management understand how the CSFs and their KPIs are significant ... of the company's corporate strategy. If the KPIs or ... do not support the

strategy, management will not be effective in advancing the company's market ... , ROE¹, cash flow, or resulting value.

Exercise 25. Answer the questions.

1. What does every critical success factor have? 2. What indicators should be selected for each critical success factor? 3. What unique characteristics do key performance indicators have? 4. What does the art of selecting key performance indicators require? 5. What won't management be effective in, if benchmarks do not support the strategy?

Exercise 26. Decipher the abbreviations using a dictionary.

KPIs, CSF, APQC, IBC, ROE, SMART.

Exercise 27. Translate the following sentences into English:

1. У контексті бізнесу бенчмаркінг швидко стає дедалі більш популярним і використовуваним інструментом підвищення якості менеджменту. 2. Розрізняють бенчмаркінг ефективності (результатів) та бенчмаркінг процесів. 3. Бенчмаркінг ефективності порівнює ефективність результатів діяльності для того, щоб виявити, які види діяльності є перевагами організації. 4. Бенчмаркінг процесів вивчає методики та процедури, що використовуються в організації, і порівнює їх із прикладами кращої практики. 5. Зазвичай, процеси складаються з кількох під-процесів, які створюють загальний підхід чи процес. 6. Бенчмаркінг – це методика покращення, що розглядає, як інші, займаючись подібною діяльністю, виконують завдання, процеси або функції. 7. Бенчмаркінг – це не лише порівняння ключових показників продуктивності; він має ширше застосування як інструмент управління. 8. Багато організацій розуміють бенчмаркінг та ключові показники продуктивності як синонімічні поняття. 9. Без налагоджування систематичних зв'язків партнер із бенчмаркінгу ніколи не буде впевненим, що кількісні порівняння буде достовірними. 10. Керівництво може визначити найкращу практику через бенчмаркінг та усунути розбіжності між поточною та найкращою практикою. 11. Найкраща еталонна оцінка – це найкращий показник продуктивності у відповідній галузі. 12. Не існує жодної компанії з найкращою практикою в усіх видах діяльності.

¹ ROE – return on equity – рентабельність власного капіталу

Exercise 28. Match the definitions with proper terms.

Definitions

Terms

- | | |
|---|--|
| <p>1. A specific process or group of processes which have been recognized as the best method for conducting an action</p> <p>2. An organization, usually within a specific industry, recognized for excellence in a specific process area</p> <p>3. A measure which is of strategic importance to a company or department</p> <p>4. A performance measurement tool used to capture a summary of the key performance indicators / metrics of a company</p> <p>5. The quantified effect of implementing the practices; Specific areas of measurement: quantitative and supporting benchmarking, and based on broad, statistically valid data</p> <p>6. A structured measurement system developed by David Norton and Robert Kaplan of the Harvard Business School; a list of financial and operational measurements used to evaluate organizational or supply chain performance</p> <p>7. Quantitative measures for effectiveness, economy, and efficiency; those few areas where satisfactory performance is essential in order for a business to succeed.</p> | <p>a) key performance indicators</p> <p>b) critical success factors (CSFs)</p> <p>c) metrics</p> <p>d) best-in-class</p> <p>e) balanced scorecard</p> <p>f) best practice</p> <p>g) scorecard (or dashboard)</p> |
|---|--|

Exercise 29. Make up sentences from each table and write them down.

<p>In your place But for her But for the bad visibility of a process</p>	<p>I he she we you they</p>	<p>should would</p>	<p>know more about the history of benchmarking. begin a benchmarking project. implement benchmarking. determine the issue of confidentiality within the benchmarking project. find best-in-class organization. take part in logistics conference.</p>
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I	would have used a facilitator	tomorrow.
he	would have benchmarked the company's	long ago.
she	results	yesterday.
we	should know the best of breed	this evening.
you	would go to logistics consultancy bureau	last summer.
they	should visit your benchmarking partner	next week.
	would have achieved stated targets	

But for the pitfalls	I	would	been benchmarked on Monday.
In his place	he	have	lost the opportunity to be benchmarked.
But for them	she	should	found the best methodology.
		have	identified best practice through benchmarking.
			tracked our processes against strategic plan.
	we		benefited from benchmarking our firm's performance with best practice.
	you		
	they		

Exercise 30. Translate into English using a) Subjunctive I and b) Subjunctive II.

a) 1. Необхідно, щоб усі ключові показники продуктивності відповідали загальному стратегічному плану вашого бізнесу. 2. Дуже важливо, щоб ви ознайомилися з усіма типами бенчмаркінгу. 3. Компанія вимагає, щоб ключові показники продуктивності були головним (провідним) інструментом управління діяльністю бізнесу. 4. Консультант запропонував, щоб усі взяли участь у підготовці до здійснення внутрішнього бенчмаркінгу. 5. Неможливо, щоб бенчмаркінг здійснювався без урахування ключових показників продуктивності. 6. Ми хвилювалися, аби не втратити всі переваги бенчмаркінгу для нашої галузі. 7. Прикро, що діяльність нашої компанії не відповідає діяльності видатних компаній із кращими практиками.

b) 1. Якби ви знали, що бенчмаркінг не панацея, ви б звернули увагу на інші якісні зусилля та управлінські процеси, що можуть покращити конкурентоспроможність. 2. Ця компанія здійснила б бенчмаркінг минулого року, але на той час у неї не було достатніх

даних щодо діяльності компаній з кращою практикою. 3. Хотілося б, щоб у процесі бенчмаркінгу не існувало жодних пасток. 4. На жаль, бенчмаркінг не можна назвати «миттєвим пудингом». 5. Прикро, що ви не можете відрізнити конкурентний бенчмаркінг від міжнародного. 6. Ви так добре знаєте всі етапи бенчмаркінгу, наче проводили його для своєї власної компанії. 7. Він так говорить, ніби нічого не знає про наш логістичний план.

Exercise 31. Comment on two problem situations. Suggest a solution to each of the problems.

1. Routine maintenance on aircraft between flights such as refueling, cleaning, tire checks is taking too long. Plane on the ground means more planes and personnel are required to maintain high level of service and schedules. Need to reduce ground time required in between flights without sacrificing quality or safety of passengers.

2. Customer surveys indicate long wait times for hotel rooms, especially for repeat Customers.

Exercise 32. Speak on:

1. Benchmarking as a concept.
2. Types of benchmarking.
3. Benchmarking performance with best practice.
4. The importance of key performance indicators.

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