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APPLICATION OF DEMING'S POINTS IN LOGISTICS

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This research has addressed the importance of Total Quality Management (TQM) for transportation organizations. In particular, Deming's 5th point has been presented for aiding TQM implementation. The principle states "Improve constantly and forever the system of production and service to improve quality and productivity, and thus constantly decrease costs" and how can it be applied in logistics [1].

The object of this research is logistics companies which strive to achieve competitive advantages through improvement of quality. An implementation model has been represented on examples of successful companies. The latest publications have been reviewed for the current research.

The quality –related issues in management have been explored by both foreign and local scientists such as Goltsev D.G., Ishikawa Kaoru, Kharlamova T.N., Gerasimov B.I., Zlobina N.V. Their researches were aimed at forming the right vision of the concept of quality, build and develop concepts to achieve new levels of quality.

As related to logistics, quality can be interpreted as satisfying customer demand at the lowest cost without ever compromising the service level. The key is to find the perfect balance between cost and service quality. The 5th principle has found its implementation in solutions associated with such innovations as warehouse on wheels, multi depot, reaching customers as quickly as possible, grooming the last mile associates, almost zero inventories, zero tolerance of customers, customer lounge with smart facilities and so on.

This principle experiences a further conversion into Kaizen philosophy which can be applied in practically every field including internal logistics, storage and transportation. Many management systems apply this approach as consistent application of simple rules which are converted into tangible results. Such companies as Honda, Toyota or Sony have worked in this system for decades. Though the philosophy went beyond the borders of one country and was implemented in the Polish Synthos Group ten years ago [2] and in many other Western companies.

Another successful implementation of this principle is the Toyota Production System, also referred to as TPS, which is a strategy that helps organize the manufacturing and logistical aspects of a business. The system helps bring improved organization efforts to a facility, reduces waste, and can improve the bottom line of companies that choose to adopt it. [3]

Conclusions

Deming's points for implementing quality improvement has a broad range of applications including logistics. The application of the 5th point in logistics resulted in adopting such innovations as warehouse on wheels, multi depot, reaching customers as quickly as possible, grooming the last mile associates, almost zero inventories, zero tolerance of customers, customer lounge with smart facilities and so on. It received international recognition and was adopted by different companies in a global scope.

List of references:

- 1. The W Edwards Deming Institute website. Dr. Deming's 14 Points for Management URL: https://deming.org/explore/fourteenpoints/(Last accessed: 17.04.2022).
- 2. Official website Synthos Group URL: https://www.synthosgroup.com/en/(Last accessed: 17.04.2022).
- 3. International Journal for Innovation Education and Research, Vol:-7 No-11, 2019 URL: https://ijier.net/ijier/article/download/1958/1347/5772/ (Last accessed: 17.04.2022).