

METHODS TO INCREASE EFFICIENCY OF THE LOGISTIC SYSTEMS

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Consequence of increasing competition in the market for goods and services is to improve the customers' requirements. Under such conditions, the development of the logistic company focused on service and maintenance of a large number of consumers, must be very dynamic. Its purpose is to provide logistic services, the quality and extent of which will meet the expectations of customers. Sure, low price and high quality of the goods are still the most important in the list of improving the efficiency of the logistic system, but they are no longer just desirable, but rather are required for competitive services. Customers pay attention to the additional criteria, such as delivery time, availability of the ordered goods within a certain time, as well as qualitative information support to the process of implementation of the order. These are the main tasks to be pursued by logistic companies. However, it is clear that service standards become more stringent, and position of the companies on the market will depend on the ability to comply with them. Analyze and determine the factors that affect the timing of a customer order, we can suggest ways to improve the processes involved.

Reducing the cycle "order-delivery". Determining the duration of the cycle "order-delivery" interests of different departments of companies could be conflicting. In this context it is particularly acute problem of the interaction of the transport division and the consumer. Supply departments managers of the consumer are interested in delivery of goods from the supplier to the warehouse and from the warehouse to customers as soon as possible. At the same time, transport companies try to organize the most economical route and tend to wait for the moment when the vehicle is filled completely. Obviously, it is necessary to consider the opinion of both parties. The success of supply depends on the well-being of the whole company, and competent management of transport costs can significantly affect the final cost of the product. Of course, success also depends on the sales price of the goods. It is known that the production costs of some goods account for only about 10% of their value, while the share of the cost of shipping can reach 50%, and in some cases even more. An increase number of transport vehicles is the natural consequence of the contraction cycle "order-delivery" due to lengthening the distance to each of the customers, the high probability of a consistent sending several cars in the same point and the underutilization of resources. If you do not optimize the use of vehicles, the costs can increase dramatically, which would negate the positive effect of increasing the level of service, and only modern logistics approaches allow us to find the right solution to this complex two-criteria problem.

For each company, at a particular stage of its development there is an optimal response time to incoming orders, depending on the scope of allowable costs for execution, organizational features of the enterprise and other factors. In particular, the terms are determined by the balance of external and internal parameters of specific company's business and its technological capabilities. Some parameters affecting the intensity of the logistic system:

- the number of applications
- diversity of product range
- the standard unit of shipment and the level of service.

The number of orders per day, and average order size are the key parameters to determine the duration of the cycle "order-delivery". Obviously, the bigger orders and the more applications per unit time comes, the shorter the optimal cycle, because it reduces the number of points in the route. This reduces the unit cost and delivery through effective use of resources vehicles.

Selecting the standard unit shipment (wagon, container, pallet, factory packaging) significantly effects on the level of service and the cost of transport and storage technology. Wagons or containers usually do not require storage processing and in most cases can be delivered

to the customer directly from the supplier. In this case, the cycle time depends on the quality of data communication in the supply chain. A set of measures to improve the productivity of delivery depends primarily on the complexity of the task and may include both organizational measures that reduce the human impact on all stages of order processing, and virtually fully automated operations route planning, monitoring and control of vehicles dispatching service.

The boundaries and service area locations are defined by standards such as ease of movement on the road network and dimensions depend on the maximum number of orders that can be served by a single vehicle. Task of managers while using this method is to update zone settings, not planning routes. Moreover, in practice, the possible underutilization of capacity and number of vehicles are offset by an increasing number of clients who the goods have been delivered and by reducing the distance between the points of the route. However, the problem of part-load cars can be solved by adding orders from adjacent areas. Logistic system consists of three main blocks of the production process: procurement, production, supply.

Initiative to improve the performance of logistic system aimed at the reduction of supply and demand by reducing costs and better customer satisfaction. It sets requirements for reducing uncertainty in the supply system, ensure predictability of demand for the early phases of logistic system. Nevertheless, sometimes it is difficult to avoid the uncertainty due to the characteristics of the product. For example, if demand for the product is very susceptible to fashion trends and less dependent on the internal usefulness of the product, it is less predictable. Therefore, the system must accept the uncertainty, but at the same time, it is needed to develop a strategy that will still allow optimizing the supply and demand for the company.

Increase employee engagement involves motivation for best execution. It is important to create a normal life and business climate, facilitated by job satisfaction, encouragement for the originality of the taken decisions, for hard work and dedication to the company.

Using analytical tools allows you to simulate processes - economic (which took place earlier in the company, as well as the experience of other companies), simulation (a situation that may arise in the future, and options out of these situations). These programs should be available for employees and developed in the form of computer programs.

In the improving logistic process in the company compliance with standards plays an important role. By comparing those with the actual results contribution of employees to logistic services could be evaluated.

Management should determine the responsibility for the information system and improve the quality of services.

Preparation of the result measurements and the service functioning will be provided by:

- supplier evaluation (including quality control);
- assess the consumer (including consumer response, his complaints, as well as the requested information feedback)
- inspections (audits) quality.

Analysis of these results will measure the achievement of service requirements, identify opportunities to improve its quality as well as the effectiveness and efficiency of services provided.

In order to ensure the effectiveness and efficiency data collection and analysis should be planned operations, excluding the possibility of accident or haphazard actions.

Identification of systematic errors and their causes, and their prevention should be the main purpose of data analysis. The main reason for the error may not always be obvious, but it should seek to identify. It includes the potential for human error that is rarely seen in an arbitrary way. Much more often hidden reason takes place here. Very often, the error attributed to the employees of supply chain, in fact, arise due to defects in logistic services for complex operations or inadequate procedures, environment, working conditions, training, instruction or resources.

Modern statistical methods can help in the majority of data collection process, whether it is achieving a better understanding of consumer demands (in the process of monitoring, research opportunities, forecasting), or the measurement of quality in order to facilitate decision-making.

It is needed to develop a program aimed at continuous improvement of the quality of logistics services, as well as to achieve efficiency and effectiveness of the system, including an effort to determine:

- characterization, while improving the value of which the consumer and the company would get the most profit;
- any changes in the environmental factors that may have an impact on the level of service provided;
- any deviations from the agreed quality of service that occur due to inefficiency or lack of control provided for in the system;
- opportunities to reduce overall costs in the process, improve the quality of services provided. This requires a systematic apply of methods to quantify the costs and benefits.

Activities to improve the quality of logistic services should be directed to the implementation of both short-term and long-term goals to improve the quality and include:

- definition of the relevant data to be collected;
- analysis of the information received and to give priority to those activities that have the greatest impact on the required level of logistic services;
- the transfer of the results of the analysis to the head of logistics services with a recommendation for immediate improvement of the quality;
- periodic report for management company for analysis of recommendations for long-term quality improvements.

Employees of various functional departments, working together, can offer fruitful ideas to improve quality and reduce costs. Management should encourage employees at all levels to contribute to the program of improving the quality of services, encouraging for the effort and participation.

Developed, documented, implemented and maintained in working process system of logistic services is the key to achieve results. The system of logistic services is defined as a set of organizational structure, procedures, processes and resources needed for improving quality control service.