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PURCHASING LOGISTICS MANAGEMENT

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Abstract

The purchasing of an industrial company or an organization of tertiary sphere is one of the functional management fields. The effective functioning of the purchasing systems is the important presumption to reach high level of the competitive advantage of the organizations. The foundation for the right managerial decisions at purchasing department should be the accurate forecasts of future demand or consumption. Through a design or an optimization of a logistics purchasing management system, it should be proceeded with the usage of system analysis and process management principles. The article deals with the issue of purchasing logistics management system design, when for the design purposes of these systems in an industry or a tertiary sphere, the general methodics has been created.

Keywords: Logistics, logistics management, purchasing, industry, methodics

1. INTRODUCTION

Contemporary global business market environment put high demands on the companies or on the tertiary sphere organisations. If the companies or the organisations want to be competitive they should have developed progressive systems of purchasing management. The effective process of purchasing management leads ultimately to fluent material flow ensuring at the company's or organisation's entrance, to cost reduction and to a reduction of negative externalities to living environment. Due to the fact, that at current time there's occur the rising of the material flows volume of the supply chains, so it's suitable to apply the logistics management principles during progressive systems of purchasing management design. Thus, effective purchasing management is represented not only by accurate inventory replenishment plans but also by accurate plans of all logistics activities, which are necessary to realize to ensure the inputs into the company or the tertiary sphere organisation. [15, 16, 17]

2. LOGISTICS MANAGEMENT OF A PURCHASING

The logistics management of a purchasing is represented by effective management of the input company's or organisation's flows, when there's about mainly the material flows. The purchasing logistics deals with the planning, management and control of the input flows - the raw materials, the materials, the energy, the semi-finished products, the final products, the services or the information. The aim of the purchasing logistics is to deliver a right amount of the inputs, in the right quality, to a right place and that in right time.

The logistics management of a purchasing is engaged in the questions such are:

- the consumption forecasts,
- the inventory levels at the warehouses,
- a purchasing plans creation - short-term, medium-term and long-term,
- a selection and an evaluation of the suppliers,
- a relationships management with the customers,
- a way of the delivery realization,

- a selection of the supply ways,
- a business and a transport documentation of a purchasing,
- a setting of a supply regime - a delivery volume, a delivery frequency,
- a delivery realization logistics - a carriage type, a manipulation, a packaging, a warehousing, a handling equipment size,
- the logistics technologies (exact management methods) and technical equipment on the side of company's or tertiary sphere organisation entrance,
- a setting of logistics processes - a taking delivery, a control process, a packaging, a transportation, a warehousing, a dispensing to a consumption, in-house transport,
- a financial stimulation of the employees of the purchasing department,
- a training and further workers education,
- an optimization. [2]

The logistics management of a purchasing it's possible to define as a time, capacity, technological, organizational and information reconciliation of all logistics - purchasing activities with the aim of minimization of costs associated with these activities. Further there's about the aim to reach an optimal level of provided purchasing services for the other departments in an organisation and the aim to minimize the negative impacts on the living environment.

Whereas the industrial logistics includes above all material management, the business logistics covers physical distribution management. [2]

3. METHODICS TO CREATE LOGISTICS SYSTEM OF PURCHASING MANAGEMENT

The logistics system of purchasing management (LSPM) is the management system, which uses logistics principles of flows management, particularly material flows, which come into company's systems or if you like into tertiary sphere systems.

The logistics management system of a purchasing is composed by following sub-systems:

- a. data,
- b. forecasting,
- c. planning,
- d. inventory management,
- e. suppliers and deliveries,
- f. setting of the logistics processes,
- g. personal,
- h. economic,
- i. purchasing administration,
- j. control.

a. Data sub-system - the function of this part of management system is to gain data on consumption or if you like on a demand at production department or other departments demanding given items or services.

b. Forecasting sub-system - the main function is to forecast a consumption or a demand of purchased items or energies, further a calculation of created forecasts accuracy and pertinent actualizations.

- c. **Planning sub-system** - the function of this part of management system is to create the purchasing plans, the inventory plans, the plans of logistics activities and the plans of performed controls.
- d. **Sub-system of inventory management** - the function of the sub-system is to set optimal inventory levels of the particular purchased items in connection with the costs and provided service level.
- e. **Sub-system of suppliers and deliveries** - the sub-system function is a selection and an evaluation of the suppliers, a determination of delivery realization way, a delivery channels selection and a selection of deliveries regime.
- f. **Sub-system to set the logistics processes** - the function of the sub-system is a creation of logistics activities plan with the frame of purchasing process realization inclusive their quantification.
- g. **Personal sub-system** - the function of this management system part is personal management of the purchasing department.
- h. **Economic sub-system** - the function of the sub-system is financial flows management, which are related to the purchasing department.
- i. **Purchasing administration sub-system** - the function of the sub-system is an administration of business and shipping purchasing documentation.
- j. **Control sub-system** - the sub-system function is to perform the controls of the inventory levels, the forecasts accuracy, the plans, the efficiency of performed logistics and purchasing activities - an efficiency indicators evaluation. In this sub-system is done an evaluation of the plan fulfilment of the purchasing and logistics - purchasing activities.

Within the scope of 10 above stated and briefly described sub-systems or if you like the logistics management system of a purchasing is realized the process of purchasing logistics management, which consists of 11 phases, see Fig. 1.

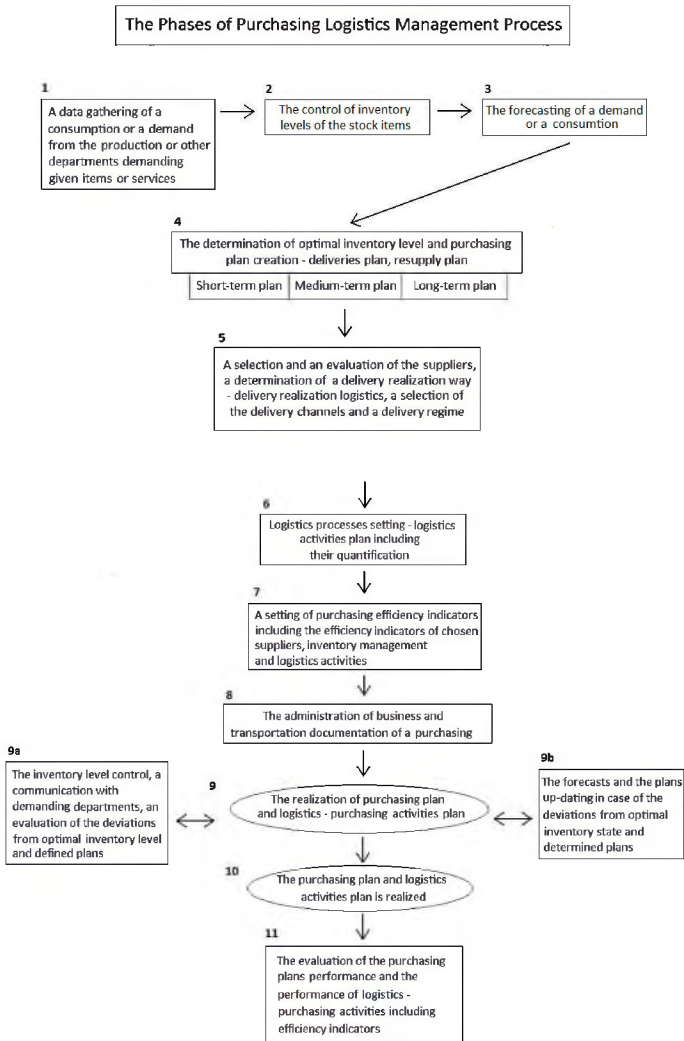


Fig. 1 The scheme of particular phases of purchasing logistics management process [Hart, M., 2015]

The methodics of purchasing logistics management system creation it's possible to describe into following points:

1. The analysis of current state of purchasing management

2. The creation of particular sub-systems
 - a. Data sub-system
 - b. Forecasting sub-system
 - c. Planning sub-system
 - d. Inventory management sub-system
 - e. Sub-system suppliers and deliveries
 - f. Sub-system to set the logistics processes
 - g. Personal sub-system
 - h. Economic sub-system
 - i. Sub-system of purchasing administration
 - j. Control sub-system
3. The integration of created sub-systems
4. The putting into operation [2]

The analysis of current state of purchasing management - there's about the description and the analysis of purchasing management ahead of the creation of purchasing logistics management system. The aim is gain the basic information, how the purchasing is realized in a company or a tertiary organization. Further, it's concerned to gather essential information on purchased items volume, purchasing frequency and inventory management system. One of the outputs should be clear specification of purchasing importance in a company or a tertiary sphere in context of the operation ensuring and an ensuring of purchasing continuity to the other departments.

The creation of particular sub-systems - within the frame of purchasing logistics management system creation, it's created its particular sub-systems in succession from a to i.

The integration of created sub-systems - the particular parts of management system LSPM it's necessary to integrate with the aim of mutual sharing of information and proper functionality of entire management system.

The putting into operation - as soon as there are realized all 3 points of described methodics, so it's just left to put created logistics management system into operation, which is the last 4th point of given methodics.

4. CONCLUSION

The purchasing strategy, thus also purchasing management system should be at present time the one of the chapters of whole-company strategy or if you like tertiary sphere organization strategy. The effective purchasing management, at current time of global supply chains, becomes the one of the basic presumptions to reach high level of competitive advantage in context of long-term sustainable growth and living environment protection. The purchasing activities are very closely connected with the logistics activities therefore the purchasing logistics management systems creation is topical issue of company's or tertiary sphere organization management. High-quality management of entrance flows has got an impact on the running of entire company or an organization. For the creation purposes of progressive purchasing management system in a company or in an organization of tertiary sphere, there has been developed the methodics to create purchasing logistics management system, which is universally applicable.

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