



MICRO-LOGISTIC MODEL OF TRADING- DISTRIBUTION COMPANY

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Abstract: The article deals with the proposal of micro-logistic model of trading-distribution company, with definition of logistic activities acting in it, focusing on the area of distribution, as well as with differences between the designed micro-logistic model and cross micro-logistic model of the manufacturing company.

Key words: logistics, distribution, micro-logistic model, trade and distribution companies.

1 INTRODUCTION

Logistics as the science goes through continuous development and therefore different authors, whether domestic or international, defining logistics activities differently. However, in the literature, the most frequently we encounter with their presentation in the form of a classical list of their specifications, as for example in the literature by authors Johnson & Wood 1996 or Pernica 1998.

Inside the company we can also find logistics activities, which form chains interlinked. Malindžák 2007 defines and describes the internal logistic activities by cross micro-logistic model. In this model the horizontal axis represents the basic logistics chain company, which is shown in Figure 1.

From this picture is therefore clear that the distribution is one of the main logistics activities of the enterprise. Because the above cited model represents logistics operations in particular large, manufacturing companies, we will try to define this model for a small, trading- distribution company and within it to focus on the position of distribution. Then it will be possible to describe differences between these two models.

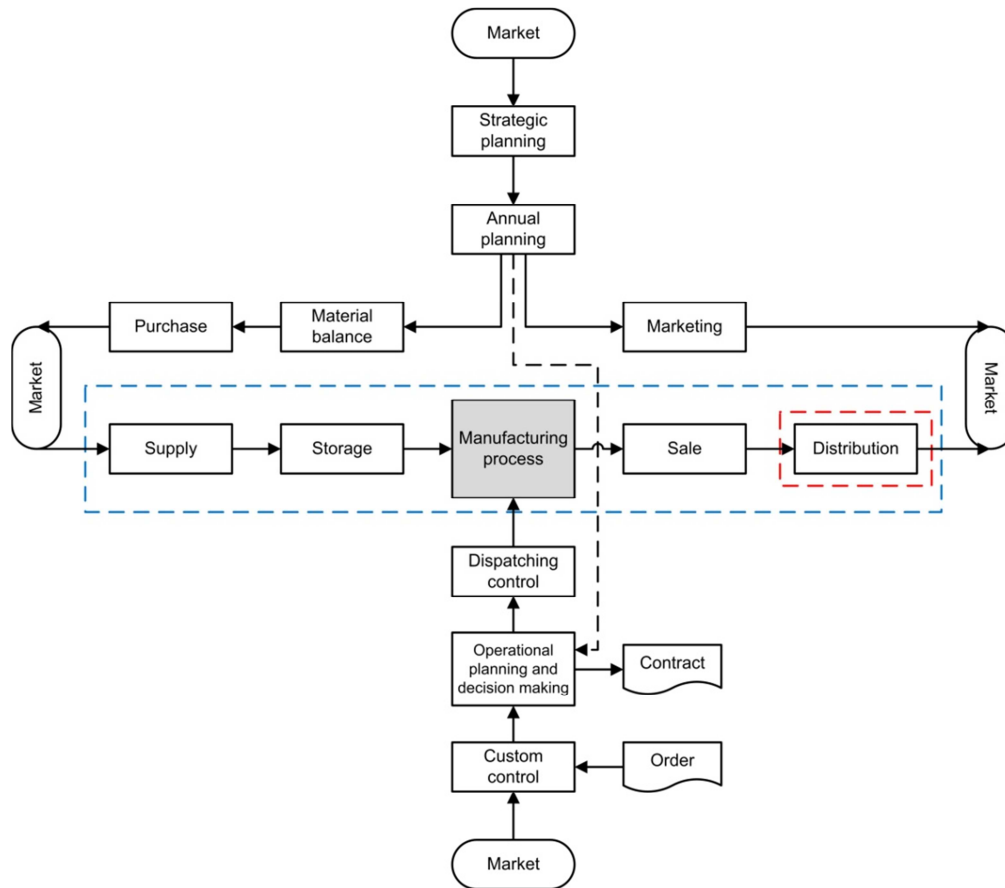


Fig.1 The main cross micro-logistic model of the manufacturing company

2 DISTRIBUTION, TRADING-DISTRIBUTION COMPANY

Malindžák 2007 defines distribution as the set of all activities associated with implementation of the flow of goods, starting with the manufacturer's warehouse and ending with the final consumer. But in order to realize the distribution itself, it is necessary the existence of distribution entities (manufacturer and customer). If in the chain of corporate and business activities act only two parties we are talking about direct distribution. However, in the above mentioned chain enter a third party or other parties, we are talking about indirect distribution. (Fig. 2)

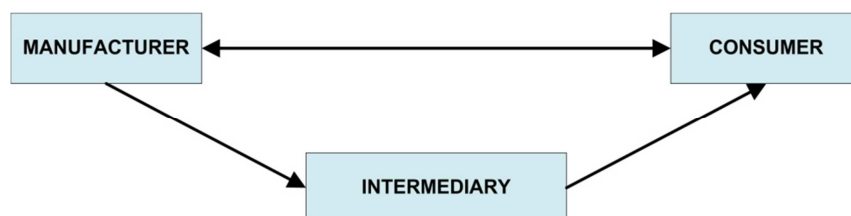


Fig.2 Selling through intermediary

In this case, the manufacturer involved in the implementation of their products to the market one or more intermediaries, which in itself partially or completely take over the activities associated with the distribution, cost and risk. [4] Such companies are called trading-distribution companies.

We characterize them as follows: Trading-distribution company is such a company to which main activity is buying goods in their own name, on their own account and selling and distributing them with own distribution system to the final consumer reliably, safely, efficiently and profitably.

3 MICRO-LOGISTIC MODEL OF TRADING-DISTRIBUTION COMPANY

As with any company, also trading- distribution companies have their logistics activities. Their structure can also be displayed using micro- logistic model based on the analogy of of cross-structure model micro- logistic Malindžák 2007.

Micro-logistic model trading- distribution company has also in the graphical form two axes. The horizontal axis consists of the elements, activities to create an implementation character and tangible flow. They result in particular change the owner of products, change the position of goods in the time, allow the practical implementation and application of productson the market.

The vertical axis is formed by elements, activities that have the nature of control, respectively. informative, have no direct impact to change the owner of the goods, but without them would not run function implementation, market research, sales support, make new contacts.

Building on the analysis of trading- distribution companies (such as companies for trade and distribution of food, textiles and medicines) micro- logistic model is created from the elements and activities shown in Figure 3.

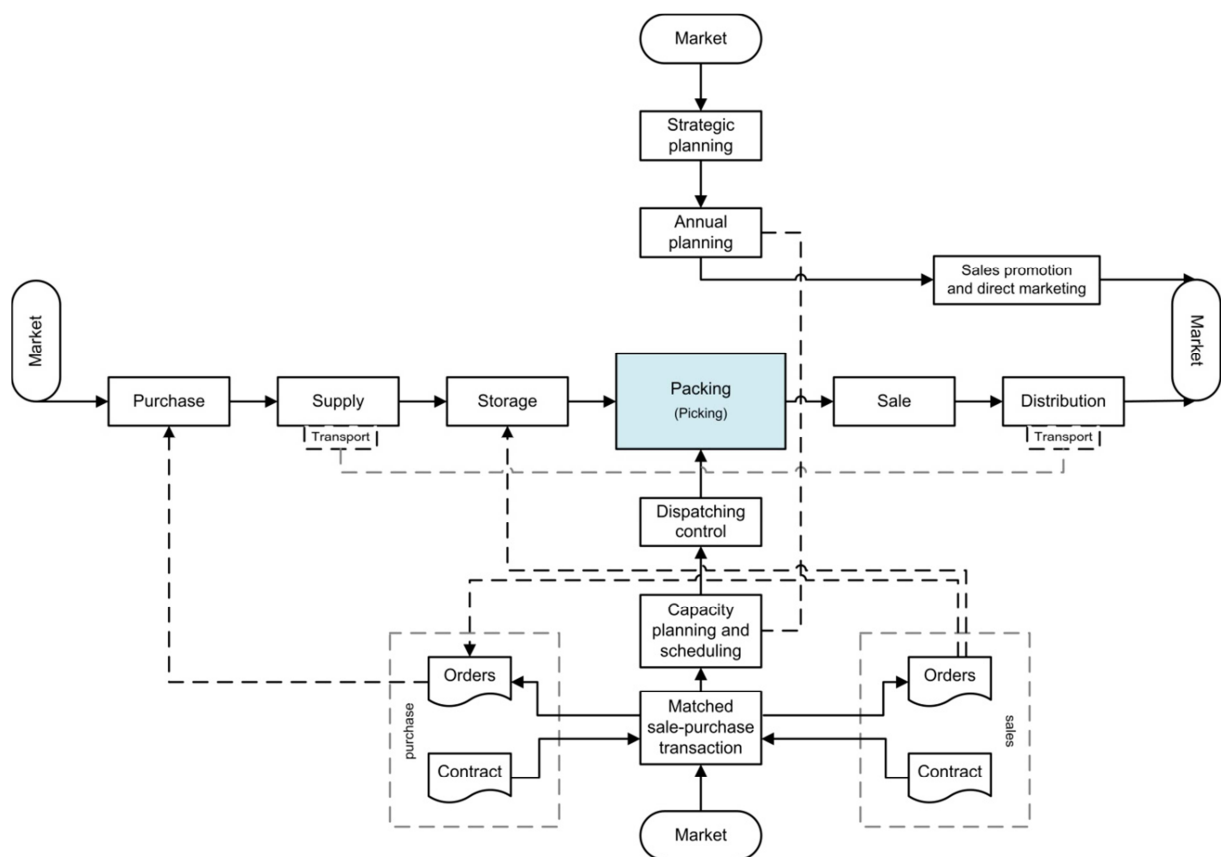


Fig.3 Micro-logistic model of trading-distribution company

In the model are defined these elements, activities:

Strategic planning

Currently for the company is important to develop a strategic plan with market analysis, competition, economic trends and a compilation of information from the business. The aim of this plan is an objective view of the real status of the company, which is possible through the activities and products to achieve the reasonable and profit growth. Within the strategic plan the company is trying to focus its business activities and conduct in order to become one of the at least dominant distributors on the domestic market.

The main areas on which it is needed to focus in the strategic planning are:

- build their own structures,
- the very structure of the distribution network,
- selection of partners according to established criteria,
- locating potential partners,
- distribution network topology,
- distribution region,
- distribution channels,
- the purchase transport vehicles.

In the case of newly established companies:

- area of operation,
- allocation, type and structure of the distribution system;
- warehouse layout
- organization of society and so on.

Annual planning

It is a company plan for a period of 1 year, involving the detailed planning of individual sources in the company, such as finance, technology, people, assets, and others. Also is known as an executive plan. This includes planning of product groups volumes in order to fulfill the business plan.

Sales promotion and direct marketing

Sales promotion and direct marketing are appropriate tools to dispose of the products and for building and maintaining direct relationships with customers not only in the recessions. For the company is advantageous if also has developed marketing plan.

Purchase

The company tenders enter into contracts for the purchase and delivery of goods based on pre-selected criteria, with regard to financial possibilities according to plans assembled.

To ensure the ongoing course of orders by customers, the company continuously purchases goods from their suppliers in the volume of warehouse levels specified. Purchases of goods from suppliers are usually realized promptly after receipt of orders from customers, and thus is achieved a reduction of the cost in storing and maintaining stocks.

Employee of the distribution company responsible for ordering and purchasing goods continuously receives and summarizes the telephone, fax, mail and by post sent customers requirements for a specific with the required number of packages for the specific period. Based on the evidence of sales for the preceding period (1-2 weeks) obtained from the information system and warehouse management of the company and from the requirements of the individual customers, staff prepares an order. Order is always prepared individually for each supplier especially by agreed previously and defined terms that are usually set on a

particular day of the week for scheduled delivery week intervals, eventually to a precise calendar day delivery for irregular intervals.

Supply

The supply is the process of receiving goods starting with his transport, assuming (from the supplier, transporter or an internal driver), checking and confirmation of accuracy, until his acceptance to warehouse and registration the information system.

Employee makes an examination of the warehouse of the items, checks the quantity, type of the goods and expiration date. If this does not match with expenditure on accompanying documents (invoice, respectively. delivery note), prepare about this fact reclamation or other record. If all necessary documents are ready to process shipment in the information system, passes them to charged employee for a computer acceptance to the warehouse of the goods.

Storage

Storage of goods is carried out by of the warehouse employees based on predefined criteria, for example, in a way that at the subsequent dispatch of goods will be able to follow by the system EEFO (Earliest expiry first out), that is priority dispatching of the goods with an earlier expiration date, respectively for goods without expiry by the system FIFO (first in - first out). It is necessary to ensure compliance with the storage conditions specified by the manufacturer of the goods, especially temperature, humidity and position.

Packing (picking)

Based on the order are in the warehouse being prepared and picking individual items of the order or a batch of orders on appropriate parts of warehouse under the possibilities, technical and technological equipment of the store. To ensure the faultlessness is appropriate prior to imposing the items of the order in shipping containers and the final packing to provide by other workers of the warehouse cross-checking of compliance the order with picked goods.

Employee who is expediting the order after the packing goods in compliance with all terms carefully closes container, identify with data of the supplier and the customer. Thus prepared shipment is placed to dispatch part of the warehouse, or passed directly to the driver of the transport vehicle (whether external or internal), along with supporting documentation.

Sale

Sales are made on the basis of long-term and short-term contracts, which are compiled at the annual plan and specific orders from customers. Before the actual sales, the contracts are made, creation and approval of orders, which form the basis for picking, packaging and subsequent distribution of the goods. The result is the sale of actual physical delivery of the goods to the customer and invoicing.

Distribution

Distribution is the main activity of the distribution company, whereas it fails to implement the production process, so it is necessary to sure on meet all the requirements of customers. The very transport is for the distribution company criterion for creating value-added of the goods, and thus the criterion for increasing profits and prosperity of society.

It is an important part of the logistics chain, as it allows the final product distribution to large numbers of end customers.

Within the transport is also realized transport solutions that meet customer requirements with regard to minimizing the cost and the optimal setting flow of the goods transported.

Using extensive experience, planning software, satellite navigation and information systems affiliated with the customer, are created unique transportation solutions "turnkey".

Distribution company implements transport with capacities of its vehicle fleet. On the distribution of capacity of small shipments, cost unfavorable or such, which are not under their distribution channels and networks can use another distribution company-so. outsourcing.

Matched sale-purchase transaction

A company enters into contracts with customers to ensure a sufficient number of orders:

- a) an order-processing according to customer requirements and availability of stock, sending it on picking,
- b) contract.

Capacity planning and scheduling

According to the location and the required date of delivery, and after the assessment and evaluation of effectiveness is selected the optimal type and means of the transport and set up a schedule of delivery of the goods with respect to the maximum possible returns. The expedition of picking order is depended on the amount of all picked orders disaggregated by distribution routes and from the capacity transportation options of vehicles. When scheduling, it is necessary to take into account the amount of imported goods, if a distribution company provides it by own transport.

Today the information market is saturation of information technologies with the different character and also within the gains in business efficiency use for the route planning distribution the latest technologies that can take into account the immediate situation.

Dispatching control

Using GPS monitoring system can be any vehicle of the distribution company tracked which enabling control, management and allocation of vehicles to ensure compliance with fixed schedule of distribution routes.

4 THE DIFFERENCES BETWEEN MICRO-LOGISTIC MODEL OF TRADING-DISTRIBUTION COMPANY AND MANUFACTURING COMPANY

- 1) In the trading-distribution company predominate logistics activities; it is typically a logistics company in its entirety, which implies in relatively short cycle of delivery in buying and selling, so procurement is made mainly from the capacity plan, not from the annual plan, as it is for manufacturing companies. Thus the planning period is shorter (maximum week + week) and scheduling is already for specific days and change.
- 2) The essential difference, as it is a non-manufacturing company, is removing logistics activity *production*. This main activity is in the micro-logistic model of trading-distribution company represented by the same degree of importance *packing, picking*.
- 3) As in the model is not located production, is not required material balance and the respective purchase. Purchase is in the micro-logistic model of trading-distribution company realized operatively- on receipt orders from the market demand or because of the fall in a predetermined amount of stock levels. His position is therefore moving in the material flow between market supply and activity supply.

- 4) In the manufacturing company represents *distribution, transport* compared with production a negligible part, while in the model of trading- distribution company represents at least as important portion as packing and picking and its belong a special attention.
- 5) Typical for trading-distribution company is joining *supply and distribution*. Distribution is dealt with internal transport (core business) and thus the distribution planning should be integrated with the planning of supply in a single operation in order to make maximum use of vehicles.

6 CONCLUSIONS

This article describes a possible design of micro- logistic model for trading- distribution company. As there are many different types of manufacturing companies, both in the trading-distribution companies we distinguish several types and for each of them can be designed a specific micro- logistic model of internal activities, chains and flows.

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