



New logistics technologies in improving customer value in retailing service

Sanda Renko^{a,*}, Dejan Ficko^b

^a Trade Department, University of Zagreb, Faculty of Economics & Business Zagreb, J. F. Kennedy 6, 10000 Zagreb, Croatia

^b Sjemenarna Zagreb, Žitnjak b.b., 10000 Zagreb, Croatia

ARTICLE INFO

Keywords:
Logistics
Retailing
Technology
Internet

ABSTRACT

Today's business success to a great extent depends on logistics and supply chain performance. The role of logistics has never been as critical as it is today. This paper identifies a series of market trends and technological advances which are likely to affect Croatian retail logistics over the next 10–15 years. The results of the study conducted on the sample of Croatian retailing managers reveal that Croatian retailers have not yet recognized the importance of new logistics technology and that they do not use them sufficiently. Although retail sector is facing significant pressures to offer high level of service, knowledge and skills of their employees and to reduce cost as well, Croatian retailers do not see the opportunity of Internet based technologies to improve the knowledge of their employees as the most important source of the company. They use some Internet technologies mostly in advertising, the process of ordering and all transactions with suppliers, and the communication with other business entities.

© 2010 Elsevier Ltd. All rights reserved.

1. Introduction

Globalization and changing industry dynamics forced retailing companies to implement new technologies and to update their business strategies in order to improve the companies' value to the customers. Moreover, savings achieved through the increasing use of technologies are among the most important competitive tools. An excellent measure of the soundness of existing logistics policies or practices is the speed with which they can be adapted to meet changes in the environment. Specifically, as competition has grown rapidly large number of competitive retailing formats has now expanded into many market areas. Retailers must improve both inventory turnover and customer service. They must keep enough products on hand to avoid stockouts or they will lose customers. A major area that retailers are turning to in support of their increased customer service goals, and to track and improve supply chain performance, is technology (Ellram et al., 1999). Much of the technology that retailers are using and proposing to use is information based technology. Therefore, retailers' competitive advantage can be obtained in the area of background functions or in «the economy's dark continent» (Drucker, 1962) as Drucker described logistics. Kotler (2003) agrees with this statement suggesting that competitive advantage over the competitors could be achieved in managing all materials flow and physical distribution, abetted by information technology in an effective manner. Colla and Dupuis (2002) point out that one of Wal Mart's great strengths is its sophistication in real-time data

gathering from its network, which has helped it to develop sophisticated data warehouse tools and computerized data exchanges with suppliers, thus providing impressively accelerated stock turnover. For retailers it is no longer a question of buying from companies or of placing orders with shippers, it is rather a question of managing a process which covers everything from the sources to the delivery to the stores. The main competitive advantage is that the retailer is able to use new information technologies to systematically lower costs, and by extension margin rates and prices. They help them to obtain productivity results greater than those of its competition.

The main purpose of this paper is to find the answers on the following questions: 1. to what extent Croatian retailers use new logistics technologies and 2. do Croatian retail companies really consider Internet technologies as an important factor to overall company's performance. The paper presents results of the field research carried out on the sample of 31 retailing managers (out of 377 contacted managers).

The research instrument used in the current study was created in order to realize main goals of the study and to test the following hypotheses:

- H1.** The implementation of new logistics technologies will lead to the reduction of procurement as the traditional operational business unit in Croatian retail companies.
- H2.** Croatian retailers have not yet recognized the importance of new logistics technology and do not use them sufficiently.

The paper begins with the short theoretical background where relevant work on logistics and its activities, as well as new trends in logistics is briefly discussed. This is followed by a literature

* Corresponding author. Tel.: +385 1 238 3374.
E-mail address: srenko@efzg.hr (S. Renko).

review on logistics technologies in Croatian retailing. Then the methodology of the research study, with the data and the questionnaire description is given. Finally, the results of the study are presented and discussed with an emphasis on fourth investigated areas: the legal status and the size of the investigated companies, companies' business performance indicators, and the impact of new market trends on logistics activities and the frequency of usage of new technologies in logistics.

2. Theoretical background

Logistics is responsible for the flow of materials and other components to a manufacturer, and also for the movement of finished goods from the manufacturing company to the final consumer. Thus, logistics incorporates all the actions that help to move the product from the raw material source to the final customer (Bloomberg et al., 2002). But we have to point out that this approach means to implement the best solution in the specific moment in order to maintain the flow of materials continued, effective and prompt.

The success of every company depends on customer satisfaction. The overall aim of logistics is to achieve high customer satisfaction. It means that high quality services with low costs are valued. Waters (2003) says that logistics adds value by making products available in the right place and at the right time. Kotler (2003) will supplement this notion as follows: "the objective is to get the right goods to the right place at the right time for the least cost". Shapiro and Heskett (1986) emphasize the importance of logistics saying that without logistics, no materials move, no operations can be done, no products are delivered, and no customers are served. Shapiro (1984) points out that differentiation which is based on logistics has been shown to provide a competitive advantage that is difficult to duplicate. According to the definition of the Council for Logistics Management (Gopal and Cahill, 1992), 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 conforming to customer requirements.

2.1. Integrated logistics activities

Although, it is a single function, logistics consists of a series of related activities. As a result, logistics is very expensive and it is identified as a high cost function where one company can make significant savings (Waters, 2003). The literature review of logistics definitions (e.g. Bloomberg et al., 2002; Gopal and Cahill, 1992; Kotler, 2003; Segetlija and Maronic-Lamza, 2002) shows that some activities could be termed as primary activities including transportation, facility structure, inventory management, material handling, communication and information. Table 1 shows the logistics activities with their components.

Fig. 1 summarizes Walters's view of logistics (2003) within an organization where a series of related activities add value to the final product. Traditionally, all the activities have been managed separately. However, fragmented logistics causes many problems because in practice each business function wants to achieve its objective causing duplicated effort and reduced productivity. For example, warehousing wants to save the money by reducing the stock of raw materials, but this leads to more frequent shortages and raises the costs of expediting for purchasing and emergency deliveries for transport.

To avoid such a problem all the logistics activities must work together to get the best overall result for the company. Thus the literature calls for integrated logistics (Kotler, 2003). In such an

Table 1
Functional logistical grouping of activities.

Components	Activity Groups
Inbound traffic Outbound traffic International traffic Carrier selection Mode selection Public versus private carriage	Transportation
Warehouse management Warehouse planning Distribution centre management Distribution centre planning Plant site selection	Facility structure
Purchasing Raw material inventory Work-in-process inventory Finished goods inventory Parts/service support Return goods handling	Inventory management
Salvage/scrap disposal Material handling Packaging	Material handling
Order processing Demand forecasts Production scheduling	Communication & information

Source: Williamson et al. (1990), p. 72.

integrated logistics system, *transportation* deals with the movement of goods between some points in the supply chain. *Inventory decisions* comprise the knowledge when to order and how much to order. Bloomberg et al. (2002) state that in the situation when every activity work perfectly (if there are no variation in transit time, no variation in processing time, no loss and damage, no volume discounts for transportation, no volume discounts for products, and if firms could forecast demand accurately) there would be no need to store products. Just-in time production methods (JIT) have changed inventory-planning practices because it organizes all activities so they occur at exactly time they are necessary.

Material handling deals with the efficient movement of materials and products inside plants and warehouses. The movement of items costs money, takes time and offers an opportunity for damage or mistake. The fourth logistics activity is *communication and information* which holds the entire integrated logistics system together. Gopal and Cahill (1992) state: "as the relative importance of physical assets to the company is decreasing, the importance of information, processes, and people is rapidly increasing—a source of competitive advantage and management focus". Without ready access to accurate data, logistics operations lose their efficiency and effectiveness. Also, logistics approach requires adequate knowledge and expertise from the employees. *Facility structure* refers to the strategic placement of warehouses, service centers and plants throughout the supply chain (Bloomberg et al., 2002). It includes decisions about the number and types of warehouses, their location and operation. Facility structure is concerned with the management of warehouses and distribution centers. Johnson et al. (1999) state that rising customer expectations about service have induced some firms to use smaller, regional distribution centers and this allows each center to be located closer to the market and provide superior service.

Some authors (Brčić-Stipčević, 1997; Gopal and Cahill, 1992, Waters, 2003 etc.) point out several trends that forced companies

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات