

THE VALUE CREATING RELATION BETWEEN E-COMMERCE AND E-LOGISTICS

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Abstract

One of the greatest challenges of our days in the field of logistics is the effect of E-logistics and E-commerce on each other, and the discovery of possibilities deriving from their relationship. In parallel with occurring internet in our daily life, the habits and expectations of customers have fundamentally changed. Traditional forms of commerce gradually lose their former roles, and as an effect of a modified/ changed technical environment it is getting more and more difficult to address the customers through conventional channels. Nowadays only those companies are able to produce real value-added products which know the needs of customers and are able to immediately react/ adapt to the modified needs and the challenges of changing economic environment as well. In order to know the expectations of customers it is important to 'map' the needs and categorize the customers themselves. The efficient relation between E-commerce and E-logistics give proper answer on this as well. The results in my field of research support the fact that companies do not pay enough attention on the value-added processes of E-logistics because they think that the competing parties will fall behind. Nevertheless this false comfort zone may endanger their position.

Keywords: *E-logistics, E-commerce, Supply chain management*

Applied methodology

This study used technology-based evaluation for answering the raised question. In this study I deal with the defining moments of the relationship between E-commerce and E-logistics in details, and with their value creating relations. Using this study I wish to draw those conclusions that may help logisticians today to prepare for the future, giving answers for actual questions in the field of logistics.

The e-commerce

Nowadays e-commerce has become one of the most dynamically growing forms of commerce worldwide which had, has and will have a significant role in the development of e-logistics. e-commerce means the trade, procurement and change of goods and services through the internet or IT channels. One of the most specific forms of e-commerce is the webshop which is established basically for selling goods and giving information on them. One of the important features of the system is that the maintenance costs are low because there is no need to spend on expensive advertisements. Moreover it is easier to address more people that can become target customers. This process helps value-added capability.

I have spent 15 years in sale and my experience is that people don't like when somebody wants to sell them something.....on the other hand they like shopping. The greatest challenge of E-

logistics is to support the process that establish the demand on the basis of customers' needs, and at the same time offer is converted into need and demand.

'Today the need to rise up to the customers' expectations also stands in the focus of quality and logistics ...' and factors defining competitiveness of products and services became equal factors, too (price, quantity, delivery accuracy, assortment, additional services connectde to the product, marketing functions, customer satisfaction)...' (GYENGE-KOZMA, 2005).

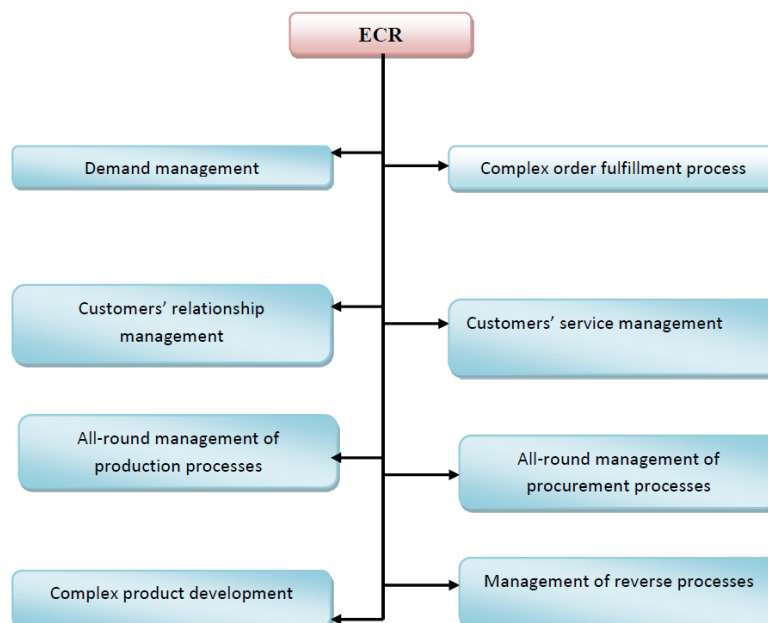
The IT background of e-commerce

EDI in other words Electronic Data Interchange is the supporting frame system of E-commerce. It involves the exchange of messages without human intervention and is strictly regulated between computer networks.

ECR, the efficient solution in the service of value-added process

The translation of ECR abbreviation: efficient answer for the customer which basically involves a supply chain management technique. Its aim: value creation for customers. In the supply chain applying ECR the common aims of the cooperating companies must be indicated from the aspect of value creation (Nagy J. 2008).

In the ECR Lambert és Cooper (2000, cites Gelei, 2008) identifies the following processes in the supply chain, the ECR is able to manage these processes:



E-logistics

E-logistics is the totality of those activities that support the information flow in connection with commerce and logistic activity between the players of supply chain. The activity on the other hand is done for the sake of facilitating logistic processes with the help of internet IT background (Körmendi-Pucsek, 2008). E-logistics fulfills the role of electronic intermediary for E-commerce and E-business using the internet and IT background, controlling the flow of products, services and information, and supporting the value creating processes.

While previously the practise was that products and companies were competing with each other, today fierce competition takes place among many distribution channels. That is why a serious need occurred from the part of the companies to use updated data provided by modern logistic systems, and to establish their own distribution channels. International and domestic researches support the fact that by using E-logistics companies may achieve significant cost reduction. Moreover the quality of service may intensely improve which has a significant effect on strengthening the competitive advantage of the companies. Satisfaction of the customers' needs is realized when a product or service meets the customer in time and space. E-logistics can provide efficient solution for managing processes interrupted in time and space, so it provides the end users with the desired product then and there, and in the quality and quantity when it means value for them (Földesi P. 2006). The task of e-logistics to support the value creating processes and managing the supply chains overarch the companies, supply chains, countries, and ultimately between the continents.

Problem of the last mile

E-commerce activity raises a specific problem, which is the problem of the last mile. This term comes from the fact that the transporting activity connected to the commercial activity forms a significant proportion of costs. While in the traditional retail system the customer can be perceived as a 'logistic worker' having a role in the process unintentionally (Duma, Nemeslaki 2004), in the e-commerce it can not be solved. The task of e-logistics will be in the future to be an intermediary between the virtual and real world. A survey by E-tailing Group (2004) describes it well that as an average only 3,67 minutes and 4,6 clicks are needed to order a product online, and it takes 4,4 days until the customer receives the same product. It means a heavy extra cost for the participants of the chain because the cost can not be devolved to only one participant, let's say the customer. The IT systems of E-logistics could give an efficient solution for this problem, which serves the value creation for the specific supply chain in the long run.

The Logistics Information System, the LIS

The LIS (Logistics Information System) are the logistics information systems which support the logistics company processes and serve the supply chain from the aspect of information technology in favor of reaching the customer satisfaction. The system provides retrievable and up to date information from various data, so it has significant value while making the right strategic and operational decisions for leaders who want to find the optimal combination of logistics cost and customer service standards (Szegedi-Prezenszki, 2003).

The value creating processes could not be established without the modern logistics information systems since the flow of information could not be resolved efficiently between the members of supply chain. While using e-logistics such additional added values appear like promoting the whitening of the economy as a result of the IT system can store the transitions and all of the processes in the related companies. All of this has significant impact regarding the taxing moral.

The effect of e-logistics on the processes of storage and delivery

As a result of storage examination the e-logistics mean solution in the following fields, contributes to the value creating processes:

- higher picking accuracy
- higher picking productivity

- accurate inventory data
- less administration
- less storage size needed

The problem of last mile mentioned before means a particular problem which adds up to significant part of the entire costs, so e-commerce activity is also causes significant costs for companies in the field of transportation because the transportation activity can be economical only in case of transportation large items (Duma L. 2002). The solutions of e-logistics provide support during the planning the free-capacity means of transport according the order areas which helps the economic planning of delivery. Owing to the forecast of the arrived items the delivery can be planned more accurately, which corrects the efficiency and the utilization level of the means of transport.

Tracking of items

The modern RFID tools which are responsible for electronic identification are able to provide information from items ordered by customers. Using RFID technology the companies can oversee the produced items, so they can provide accurate data from the ordering sections of the items during the whole day throughout the value creation processes. In my opinion it can be the added value in the process because of the decreased uncertainty.

E-inverse logistics

The e-inverse logistics is the part of the key company processes and at the same time one of the most important tool in order to keep the competitiveness of the company. The e-inverse logistics monitors the parts all of the supply chain processes, the evolution of the certain product, the feedbacks of the customers, and helping to prepare the decision making which is responsible for the value creation process.

Owing to the activity of e-logistics the companies can gain important information from the experiences in connection with the products which can be the following:

- reason of reverting (aging, guarantee, tired of product, etc.)
- status of the product when reverting
- point of sale of the product, place of origin
- manufacturer of the product
- time of reverting
- name of the returnee
- remarks of the returnee
- suggestions, advices, experiences of the user of the product
- age of the product
- type of the product

Further effect of e-inverse logistics reflected in the improvement of environmental efficiency and I think that in the future many new development will appear in connection with this field.

The e-supply chain management, the e-SCM

The e-SCM means managing all of the value creating processes which are supported with IT systems technology between the participants of the value creating chain. The cooperation of the

value creating chain members can be achieved with digital technology and taking advantage of the internet given possibilities in favor of common advantages. The solutions of e-logistics causes increased incomes regarding the taxes, road fees, and business taxes since the spread of electronic systems can improve the whitening of the economy.

The improving efficiency of surveying the customers' needs by e-logistics

E-logistics occurs – as a further effect – for the satisfaction of customers since by simplification of the ordering processes they spare time and money, and they can continuously track the way of the ordered product until the point of delivery. It is very easy to handle the electronic feedback received after ordering because clients can not lose it, it is always at disposal. Further argument on the side of e-logistics is that it has positive impact on inverse logistic processes since previous data can be retrievable at any time, and re-ordering can also be solved in a few moments.

My experiences support the fact that at the end of a life cycle of a product the customers – in case of re-purchase - don't even know where they bought the previous product so as a result of it they don't even know where to procure the next/ new one. How can we expect from our clients to remember us when we do not do our best to make our satisfied buyers loyal clients in the long run? My researches support that the processes of e-logistics contribute to the value creating processes more than the traditional logistic systems, or any other process of the activity of a company.

Nowadays those companies can satisfy the customers' needs in the most efficient way which are familiar with their needs and are able to immediately react on the immediately occurring demands/ needs, and the changing economic environment too. However in order to get to know better the expectations of the customers the needs have to be discovered and the customers have to be categorized by the company offering modern, e-logistic services (Olach Z. 1996).

The data provided by the IT system used by the members of the supply chain are capable of giving exact image on customers' needs after analysis. After discovering the customers' needs the members of the supply chain have the possibility to jointly analyze those possibilities that will be used in favor of the common aim. This will mean the satisfaction of the client which will contribute to the competitive advantage for the whole chain in the long run. Without the presence of e-logistics it will not be possible to operate the system effectively because there will be a lack of those capabilities that manage the chain processes.

E-logistics can influence the ordering processes of the companies in a way that the IT systems of the companies included in supply chain provide those pieces of information in cooperation that can be important for customers. They can be the following:

- stockpile
- delivery time
- availability of replacement items
- delivery tracking

Previous informations were not available in methodized format, customers did not get precise information, but with the appearance of e-logistics everything has changed. The internet based services are needed in full length of value chain which provides real time overview from delivery time, so we can easily plan the warehouse processes. The real time overview support the quick service which is the way towards the satisfied customers (Duma L, 2002).

Suggestions, conclusion

The conclusion of my research, is that the e-logistics and e-commerce is the efficient way towards the value creating processes and the success of the whole supply chain. The apply of e-logistics can provide solution in the following areas:

- improvement of distribution processes
- accurate determination of customer needs
- value creation
- cost reduction
- added-value production
- improvement of customer satisfaction indicators
- optimized company processes
- GDP increasing effect
- bleaching of the economy
- Win-Win based two party experience

Beside the acquisition of new clients the logistics companies are able to optimize their utilization, they can reduce costs and the indicators of customer service will change for better. The one of the most important advantage that using e-logistics the companies can become to a 4PL logistics service company.

I made the following proposals:

- E-commerce and e-logistics should be a part of modern company strategy because their value creating capabilities blaze a trail for success in the long run
- In K+F processes we should pay more attention to electronic solutions which may define the development of value creating processes in the long run
- A significant role of state engagement must be achieved in order to make it possible for companies to introduce and realize e-logistics solutions in wider circles/ areas through which further GDP growth and industrial development can be achieved. This will have a value creating effect on the whole country as well

“In conclusion, the global e-commerce market is growing. In fact, according to eMarketer, global B2C e-commerce will reach \$2.3 trillion by 2017. This explosive growth brings about new opportunities, new customers, and new challenges. One of the biggest challenges will be controlling the last mile. Logistics infrastructure, economic and political regulations, and competition have proven to be roadblocks for many companies. But as the market grows, the solutions will too. (Logistics viewpoints: E-Commerce growth brings last mile headaches, 2015)

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