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# ANALYSIS OF REVERSE LOGISTICS ON THE CROATIAN MARKET

### **ABSTRACT**

Although a new segment of logistics activities, reverse logistics activities in Croatia are improving customer satisfaction, ecological conscience and level of profit, but are in its very beginnings. Reverse logistics is characterized by the fact that returned products in Croatian companies are a problem that is solved as an issue at a time. The uniformed procedure very rarely exists and every product is handled differently, by different person and often just preceded to someone else to solve it. Development of reverse logistics uniformed systems based on researches could improve routing of different goods that entered reverse direction in a channel that will provide proper activity for each of those goods. The right decision and the right routing about every case (product) can be critical for the firm and affect amounts unnecessarily directed to landfills.

Key words: reverse logistics, logistics systems, business development, reverse logistics activities

### 1. INTRODUCTION

In year 2011 research conducted for the purpose of evaluating development of reverse logistics in Croatia, implicated that some activities, when compared with results from 2010., are on higher level. Conducted research in 2011 included 25 companies and 700 examinees, for the benefit of seeing the concept of reverse logistics from two different aspects, customer point of view and companies point of view. In 2010 results were indicating that the primer goal of reverse logistics in Croatian companies is to keep the profit inside the company and to avoid returns in any case. Also, companies mentioned that they are not interested in development of activities of reverse logistics, and that some of them already exist. As some basic barriers for implementation of new reverse logistics activities and reorganization of their current supply chain, in 2010, companies mentioned lack of financial resources and companies policies. Customers were not satisfied with strategies of reverse logistics chain (even 59% of examinees) and often mentioned that return policy should be more liberal. In developing logistics systems, customers are seen through the lance of end consumer, but not potential and equal subject in existing supply chain. Including consumer in activities of reverse logistics could result in fewer items unnecessarily directed to landfills because consumers are trying to make an impact to be sure that environment will be safe and healthy. The trend of ecological awareness connotes to properly dispose every product, but also could connote to return the used product to reverse logistics system for the benefit of re-using. Reusing the product or its parts can be observed from any aspect when directing it by a professional evaluator to any reverse logistics channel that will provide maximal added value for returned product.<sup>1</sup>

### 2. REVERSE LOGISTICS CONCEPT

The separation of logistics on forward and backward one has begun and is making a bigger distance for the benefit of providing reverse logistics activities with the same excellence. Although the priority in distribution logistics, tendency is to handle returns quickly and efficiently because of ability of returned products to lose value when unnecessarily retained in reverse logistics chain. The main difference between distribution and reverse logistics is that all the products in the reverse chain have to be individually manipulated because each of those products has specific reasons why it was returned and how it needs to be dispositioned. After returning a product in a company, the firm has many options, but depends which reverse logistics channel company included in their chains. Some of those channels are return to supplier, sell through outlet store, resell, remanufacture, refurbish, landfill, etc. Recapture value or proper disposal are two main channels in reverse logistics. When implementing reverse logistics activities, managers in companies often mistakenly believe that outbound operations can also handle returns simply by running everything in reverse. Reverse logistics operations must manage a number of unique functions that are not included in outbound operations: collection of outdated, unwanted or damaged products as well as packaging. Except perfectly organized activities that must be created based on the company's needs, a good and effective reverse logistics must provide information system that will follow existing program to reduce costs.<sup>2</sup>

Some of the strategic directions for the company are to develop a reverse logistics chain with uniformed procedures, educated employees, to consider a creation of a collection point, which is in ideal circumstances, for managing all products that entered reverse logistics chain a centralized return center.<sup>3</sup> Also, in planning a reverse logistics concept, company should also pay attention to implement activities that will support green logistics management.

### 3. REVERSE LOGISTICS ACTIVITIES ON THE CROATIAN MARKET

## 3.1. Implementation barriers

Many of Croatian companies (excluding multinational) did not implement advanced reverse logistics activities in their systems because they do not yet recognize them as strategic. Main barriers are the lack of interest, lack of systems, company's policies, management inattention, financial resources and lack of educated personal.<sup>4</sup> Figure below presents results of conducted research in year 2010. and 2011. It is visible that more companies are interested in development of reverse logistics processes, but even 40% of examinees are not implementing those activities because of company's policies. Although results present that awareness of importance is higher than in 2010., not implementing activities results in the fact that none of examinees think reverse logistics information system is not necessary.

Table 1 - Barriers for implementation of reverse logistics

Barrier	2010.	2011.
Activities exist, not interested for development	47%	54%
Company policies	25%	40%
Lack of system	2%	0%
Competitive issues	2%	10%
Financial resources	19%	27%
Personnel resources	1%	9%

Source: Authors

#### 3.2. Location for return

As uniformed procedures are not specific for reverse logistics systems in Croatia, consumers are often returning products to different locations. The most common one is to return a product to a location where it was bought. This location was a choice of even 76% of examinees (they returned a product to retail), while 10% returned it directly to official service. When asked, examinees specified that returning to retail location was a logical choice, although research implicated that 16,5% of those examinees were directed from retail to another location to claim the product. Redirecting consumers has a negative effect on disposition cycling time and also affects customer satisfaction. These redirected customers were unsatisfied with return policy and noted the occurred lack of information about return procedures.

### LOCATION FOR RETURN OF A PRODUCT

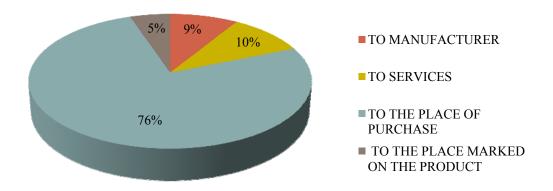


Figure 1 - Location for return of a product Source: Authors

# DIRECTING CONSUMER TO ANOTHER RETURN LOCATION

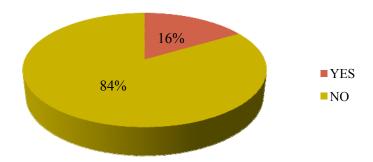


Figure 2 - Directing consumers to another return location Source: Authors

### 3.3. Disposition cycling time

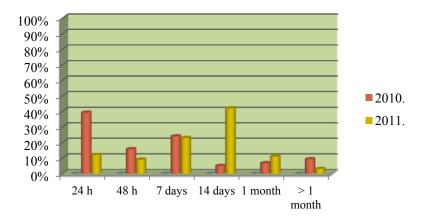
Disposition cycling time is a process that effects on service quality and possibility of enabling highest recovered value for the product. Extended DCT can result in unnecessary logistics cost, finance issues (poor management), extended decision making about the condition of the returned product, lost opportunities and business, inefficient warehousing and dissatisfied and lost customer.<sup>6</sup>

Reverse logistics operations in Croatia are on the base level where they exist and are operated as a current need that is solved by issue at a time. As whole reverse logistics system is in its very beginnings, disposition cycling time is unnecessarily prolonged. DCT can be shortened by providing uniformed procedures, educating employees and having well informed consumers.

Research implicated that returned product is in system on an average 7 - 14 days. Although consumers do not expect return in one day, the existence of a fact that some of the consumers waited for return over a month is an issue that should be solved.

Shortening disposition cycling time will be adjusted by globalization and increasing consumers and demands for a better service.

# DISPOSITION TIME FOR PRODUCTS IN RETURN



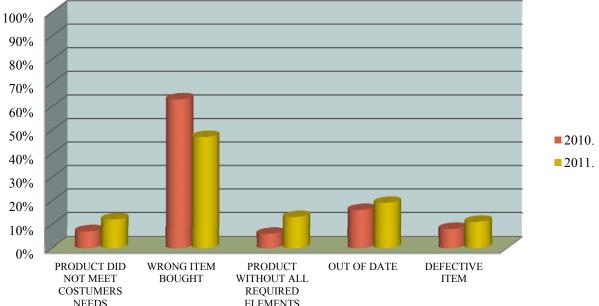
Graph 1 - Disposition cycling time Source: Authors

### 4. CUSTOMER AS A PART OF REVERSE LOGISTICS PROCCESES

### 4.1. Reason for return

Level of liberalization has a great influence and partly classifies the level of development of complete reverse logistics system. Figure presents the reasons for returning the products from the aspect of consumers, where the number of returned products, because of not meeting consumers need, implicates the level of liberalization. When liberalization is on higher level, consumer can return a product from any reason, even if he doesn't like it. The number of returned products that did not match consumers needs in 2010.was only 7%. As reverse logistics activities are starting to be strategically observed, companies are trying to slightly liberate possibility of return to have a locked consumer. From the other point of view, consumers are returning products more often and are more aware that possibility for return must exist. In 2011.conducted research implicated that the return of a product that did not meet customer needs increased on 12%. The classification for "wrong item bought" is specific for not liberal return, because it is determinate as an excuse for returning an item. In 2010.the amounts for this category were 63%, while in 2011. these amounts decreased on 47%.

REASONS FOR RETURN OF UNWANTED PRODUCT



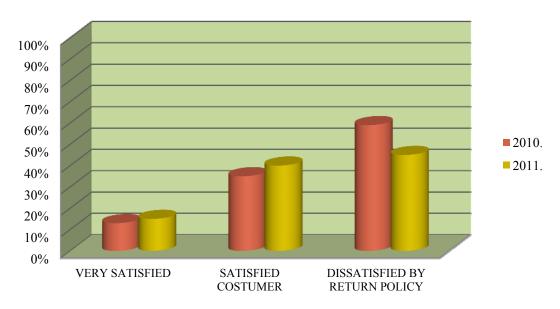
Graph 2 - Reasons for return of unwanted product in Croatia Source: Authors

### 4.2. Ecologically acceptable product

Conducted researches implicated that consumers in Croatia are not well informed about reverse logistics activities. Croatian companies based their reverse logistics strategies on keeping companies profit primer issue that automatically sets consumer satisfaction as secondary matter. In 2010 and 2011 very satisfied consumers counted 13% and 15% of total examinees. Also, as increase in level of consumers satisfactionis noted, conducted research implicated that consumers are ecologically sensitive, and in 2011 even 49% percent of examinees would rather purchase ecologically acceptable product over the cheaper one. Results of the questionnaire conducted on one hundred random examinees in 2010 implied

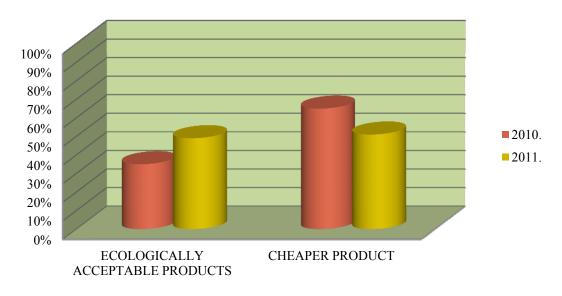
that even 35% of examinees would rather buy ecologically acceptable product than the cheaper one. Ecological purchasing is small step of everyday consumer, but it will make a difference when in a future 90% of purchasing is made with ecological thinking.

### LEVEL OF CONSUMERS SATISFACTION



Graph 3 - Level of consumers satisfaction with return policy Source: Authors

### PURCHASING ECOLLOGICALLY ACCEPTABLE PRODUCTS



Graph 4 - Purchase of ecologically acceptable products Source: Authors

### 5. CONCLUSION

Although reverse logistics processes in developed logistics systems has already established a concept of return that will provide a secure profit, image of know how company, satisfied customer, possibility of upgrading, etc., Croatian companies are just recognizing strategic variables of implementation of RL activities.

Returned products in Croatian companies are still a problem that is solved as an issue at a time. The procedure does not exist (or very rarely) and every product is handled differently, by different person and often just proceeded to someone else to solve it.

Activities that, according to the questionnaire conducted in 2010. and 2011. exist, are mainly only a fact that a customer actually can return a product. This return of a product will provide some kind of activity but not in a way that will result in a maximal added value of each product or proper disposal in every case. The positive aspect is a fact that in every researched segment of reverse logistics, in year 2011. is noted progress. Companies are more aware of the need to implement activities of reverse logistics and understand barriers for implementation. Croatian companies are tending to indulge consumers through liberating the return policy. Financial issues are noted as a barrier, as in companies while implementing activities, but also among consumers while purchasing ecologically acceptable products which are more expensive. Issues as prolonged disposition cycling time, unorganized flow of returned goods, not educated personnel and consumers are still present and typical for developing logistics systems as Croatian.

### **ENDNOTES**

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