

# REVERSE LOGISTICS AND THE RELATION BETWEEN INDUSTRY AND RETAIL IN THE AFTER-SALE REVERSE FLOW MANAGEMENT

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## **Abstract:**

The capacity of managing returns has been considered as an important competitiveness factor of companies. This is especially important for the food industry given the high perishability of its products and the complexity of its distribution channel. These factors combined make critical the relation between the members of the distribution channel. This paper intends to analyze, under the perspective of the manufacturer, the relation between the links industry and retail in the after-sale reverse flows management, emphasizing the existence of conflicts in the food distribution channel. Through a qualitative exploratory research in two major companies of the food sector it was possible to evaluate a few dimensions of the conflict and its consequences in the performance of these companies.

**Keywords:** reverse logistics, food distribution channel and conflict.

## **1 Introduction**

Traditionally, the products flow in a distribution channel happens from the industry towards the final consumer. However, some factors such as defective products, or damaged, date expired, recyclable, order errors, among others, cause a flow in the opposite sense, what generates the need for a logistics operation called reverse. According to Rogers & Tibben-Lembke (2001, p. 129), the reverse activity manages both the physical flow and the information flow of little use or none (after sale) product

returns, or of used products subject to reuse which return to the productive or business cycle.

The raise of efficiency and competitiveness of companies, as well as legal and environmental aspects, and the change in the consumption culture of consumers have stimulated the growth of reverse logistics. In big American companies, the activity accounts around 4% out of the total logistics costs, an estimated value of 35 to 42 US\$ billions a year (Norek, 2003; Rogers & Tibben-Lembke, 2001).

In many cases, the existence of a well managed reverse logistics system is essential in the decision of purchasing products or services. Clients prefer suppliers that can operate in a close relation with their teams, to improve products and processes, and that cooperate in the solving of problems which may come off. To those clients, the sale is just the beginning of a relationship.

This way, it is evidenced the need of a new standard in the relationship between companies, with a wider partnership view, replacing the present opportunist behavior. According to Levy (2000, p. 366), companies that promote strategic partnerships "share goals, accord on the way of reaching those goals and are willing to assume risks, to share information and to make significant investments for the relationship's own good".

However, although how notorious are the growth and the relevance of the reverse flow management regarding companies, and their influence on the relationship between the links of the distribution channel, the scarcity of studies concerning the subject makes it difficult to visualize the advantages respecting reverse logistics. In the food sector, due to the eminent perishability of the products that demand an efficient logistics system, summed to the low aggregate value of these products, the cooperative relation between the distribution channel links becomes essential for the logistics efficiency.

Therefore, this paper has as main purpose to evaluate the relation between the links industry and retail dealing with the after sale products flow management, with emphasis on the existence on conflicts in the food distribution channel. Basically, the conducted research intends to answer: how reverse logistics influences on the relation (conflicts) between the links industry and retail of the food distribution channel?

The present paper is divided into seven sections. Besides this introduction, the second section gives the concept and the characterization of reverse logistics. The third section provides a brief review over the conflicts of the distribution channel. The methodology used in this study and the outcomes of the research are described in the following sections. In the sixth section, the conclusions finalize this paper.

## 2 Reverse Logistics: Concepts and Management of the Activity

Reverse logistics is a rather wide area/function that involves all the operations related to the reuse of products and materials such as the logistics activities of collecting, dismantling and processing of products and/or materials and used pieces in order to assure a sustainable recuperation of those that do not harm the environment (Revlog, 2005). Figure 1 illustrates the functioning of the reverse logistics process.

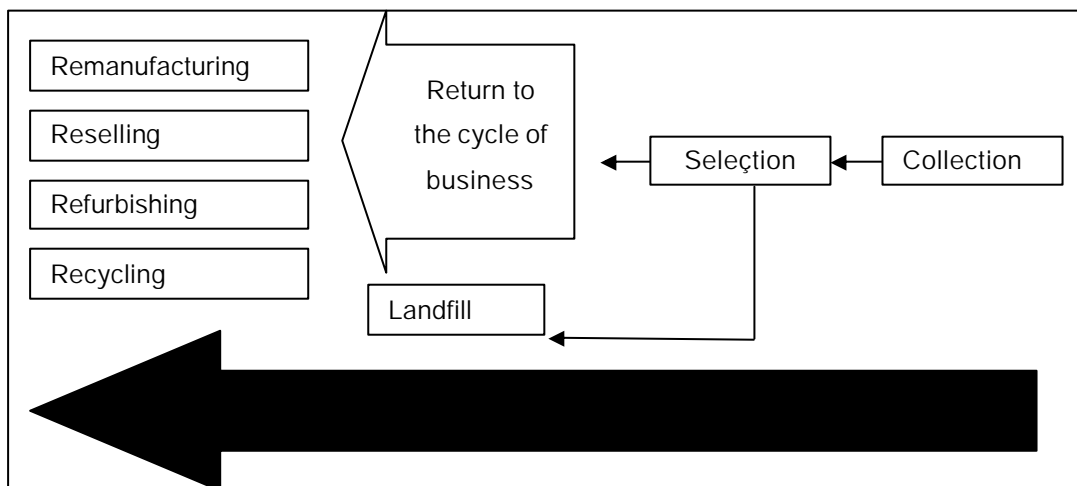


Figure 1 - Typical Activities of Reverse Logistics Process.

Source: adapted from Lacerda (2003).

The Council of Supply Chain Management Professionals (CSCMP, 2005) has defined reverse logistics as "a specialized segment of logistics focusing on the movement and management of products and resources after the sale and after delivery to the customer. Includes product returns for repair and/or credit". Through the management of this products and/or information reverse flow, reverse logistics integrates the reverse distribution channels. Leite (2003, p.4) defines the reverse distribution channels as:

[...] the steps, forms and means in which a parcel of these products, with little use after sale, with extended life cycle, or after expired life cycle, returns to the productive or business cycle, regaining value in secondary markets by the reuse or recycling of its constituent materials.

Thus, products and materials return through two reverse distribution channels. The after consumption reverse distribution channel is characterized by products from after use discharge that can somehow be functional again and, in the last case, discharged. The after sale reverse distribution channel is characterized by the return of products with little or no use which showed problems of the manufacturer or intermediary responsibility, and yet, because of consumer's dissatisfaction.

In the after sale phase, the return happens due to issues related to the product or brand image, as well as meeting legislation concerning consumer defense. According to Leite (2003, p. 207), after sale reverse logistics provides benefits to the company by helping the customer fidelization, the differentiation of the corporative image, the competitiveness and stock redistribution. This way, the company manages to reduce logistics costs and to improve its competitiveness.

To structure the reverse logistics systems, the same concepts of logistics planning are used. However, specific and standardized procedures are needed for this activity. Many factors must be managed to meet this process' specifications. Lacerda (2003, p. 480) identified some critical factors for the efficiency of the reverse logistics process, as listed below:

- Good entrance controls;
- Mapped and formalized processes;
- Reduced time cycle;
- Accurate information systems;
- Planned logistics network;
- Cooperative relations in the supply chain.

Among the critical factors presented, the relations between the supply chain links will be highlighted in this study, for it is known that the relationship between the channel agents is becoming integrant part of the operational strategies between companies

(Spekman *et al*, 1997). That happens because companies can no longer lose their efforts related to serving the final consumer because of existing problems in the relationship between the intermediate links.

It must be observed that this relationship is very important in the food sector. Any problem in this channel compromises the product quality and the customer's health, not to mention serious damages to the brand image and involved companies. Therefore, it is in the best interest of both, the establishment of an efficient reverse logistics system that makes possible a cooperative relation between the members of the supply chain and the consequent cost sharing. Through liberal politics of food returns, the company allows the return of defective products or with expired shelf life, preventing foodborne diseases problems, and then, protecting its brand.

### **3 Conflicts in the Distribution Channel**

A distribution channel or marketing channel is "a set of interdependent organizations involved in the process of making available a product or service for use or consumption" (Coughlan *et al*, 2002, p. 20). To reach the objectives of the distribution channel, it becomes necessary the building of viable relations between the members of the channel (Rosenbloom, 2002, p. 114). However, all types of relations produce uncertainties, opportunism and demand confidence between the involved parts.

The current speech about the logistics strategies between manufacturers and intermediaries tends to hide the conflicting dimension of its relations (Bonet, 2000). However, the channels "do not operate so smoothly; the conflicts and fights for power are sometimes incisive" (Kotler & Armstrong, 1998, p. 275). This occurs because of the difficulty to disfavor the company's objectives in benefit of the channel's objectives.

According to Coughlan (2002, p. 196), "the channel conflict emerges when the behavior of a channel member opposes to its channel counterpart". There is conflict when a channel member notices that the actions of another member are obstructing the accomplishment of its goals (Rosenbloom, 2002, p. 115). Therefore, one perceives that, much more than a rigid structure, the distribution channels are a complex system that includes the relationship between their members.

There are several causes for the conflict, which can arise in diverse situations. The business role incongruity, the lack of resources, the incompatibility on the set of objectives, the differences of perception, the differences of expectation, the difficulty of communication and divergence of domain are some of the causes of conflict pointed out by many authors (Rosenbloom, 2002; Coughlan *et al*, 2002; Castro *et al*, 2005; Kotler & Armstrong, 1998, p. 276).

An essential reason for all these statements is the interdependence between the members. Various researches try to connect the impacts of the power instability and conflicts levels to the distribution channel satisfaction and performance. These studies have demonstrated that high levels of perceived conflicts affect the organization satisfaction and the capacity of the channel to operate as a close partner in the long-term (Rosenbloom, 2002; Webb & Hogan, 2002; Coughlan *et al*, 2002; Magrath & Hardy, 1989).

As Magrath & Hardy (1989, p. 94) pointed out, the channel conflict is defined as "the frequency multiplied by the intensity and importance of disagreements occurring between manufactures and resellers". However, power is one of the influencing factors in conflicts and channel performance, despite being a necessary factor for the channel coordination. In the context of the marketing channel, power is "the capacity of a particular channel member in controlling or influencing the others' behavior" (Rosenbloom, 2002, p. 128).

Bowersox & Cooper (1992, p. 294), Coughlan *et al* (2002), and Rosenbloom (2002, p. 128) state that power can be of reward, coercive, legitimate (genuine), referent, or of specialist. In order to maintain a relationship channel viable in the long-term, all the involved parts must recognize and adapt to the inherent changes concerning power issues in a competitive system. This power must be coordinated to avoid a raise in the conflict level and a reduction of the channel performance.

Nevertheless, despite of the negative connotation and of its relation towards dissatisfaction and low performance, it is not always that conflicts are harmful to the channel efficiency. More than being naturally present, there are cases in which conflicts end up promoting a positive effect by pressuring the involved parts so that they discuss and accord, improving the performance of the distribution network as a whole.

## 4 Methodology

The conducted research was of the exploratory kind, with a qualitative approach. It was performed a case study in two companies of the food sector. The used tool for data collecting was the semi-structured interview. The questionnaire was formulated based on research carried out by Kevin Webb & John Hogan (Webb and Hogan, 2002). With open and closed questions (using a likert scale), the questionnaire contemplates general questions about the functioning of reverse logistics and various dimensions of the conflict, already discussed in section 3.

- Trust
- Information exchange
- Compatible goals
- Conflict frequency
- Conflict intensity
- Returns management
- Power in the channel
- Conflict level

The sample had a non-probabilistic characterization and was carried out by convenience, in which the basic criteria was the accessibility of information. The research framework takes into account the need of studying a company operating with a more liberal after sale products return policy towards the retail, and another company with a more conservative policy. This way, it will be possible to evaluate how reverse logistics (and its different strategies) can affect the relationship and interfere in the conflict management between industry and retail.

The interviews were performed through visits to the companies in November, 2005, with the responsible personnel of the logistics area and members of the reverse logistics reformulation project. The analysis of the outcomes took place after the description of the cases e data codification, as well as their comparison.

## 5 Outcomes and Discussion

Company A, used as an analysis unit in this study, works in the processing and packaging of beverages as an international brand franchise. Its product portfolio is composed of approximately 100 beverage kinds which are distributed to over 164 cities of the state of *São Paulo* and of the South of *Minas Gerais*, in 25 thousand establishments. It uses just the retail link of the distribution channel for delivering the products to the final consumer.

Company A's logistics manager remarked that the returns and changes derived from the retail link are not strategic for the company, since its image is not related to the point of sale. Only with major clients, when there is a stock excess in the store, there is an aid in the retailer sales force through bonuses so that the last can make discounts and clean the distribution channel. The interviewed manager A characterizes the relation between industry and retail as rather complicated, of the win-lose type, in which the negotiation is resumed in how much each link shall lose with determined action. According to him "retail returns are seen as a minefield" defining a tense relationship between the involved parts.

As for company B, it is a multinational operating in 150 countries. It works in the following segments: food in general, beverages, personal hygiene products and domestic cleaning; it has a staff of 12,500 employees in Brazil, covering all the states of the country. The company undertakes only the logistics management; the operational part (freights, cargo transportation, and other activities) is done by third-party enterprises. In the present time, company B is working on a project for the reformulation of reverse logistics for the whole company (at a world level), in which the interviewed participates, more specifically mapping the product return flow.

The company prefers to adopt a more liberal returns policy, in other words, it accepts and takes responsibility for the returns even when these are not of its competence. This happens because reverse logistics is considered strategic, in the sense of assuring the brand image. According to Chaves (2005, p. 56), "many retailers, facing the possibility of losing the product due to its expiring date and the impossibility of returning such product to the manufacturer, make discounts to finish the stock". Consequently, the company allows the return of defective or date expired products, avoiding foodborne disease related problems, and at the same time improving its brand through the



assurance of protection of consumer's health. Besides this food safety assurance and brand differentiation, the cost reduction, for environmental and elevation of the service level to the consumer issues are also strategic.

Table 1 below illustrates a practical comparison of reverse logistics for companies A and B.

Table 1 - Profile of reverse logistics in the analyzed companies.

	COMPANY A	COMPANY B
<i>Interviewed</i>	Logistics Manager	Logistics Technical Staff
<i>Reverse Logistics Accomplishment</i>	Accomplishes both the operational and managerial parts of reverse logistics	Operational part is done by third party companies; the activity is simply managed
<i>Reverse Logistics and Retail</i>	Differentiated after sale for big retailers	Interviewed did not know
<i>Returns Policy</i>	More conservative	More liberal
<i>Reverse Logistics strategic role</i>	Returns and after sale exchanges are not strategic for the company; they are critical points to be managed	Assurance and maintenance of the brand image, cost reduction, environmental concerns and elevation of the service level to the consumer

Source: elaborated by the author based on the information collected in the companies.

## 5.1 Relation Industry-Retail in the Conflict Solving in After Sale Reverse Logistics

Being a critical activity, reverse logistics can generate conflicts in the reverse flow management. Therefore, some aspects or dimensions of the relation between the members and of the conflict were observed in this study. Table 2 brings an evaluation of these aspects for the two companies.

Table 2 - Profile of the dimensions of conflicts generated by reverse logistics management in the distribution level

<i>DIMENSIONS</i>	<b>COMPANY A</b>	<b>COMPANY B</b>
<i>Goal Incompatibility</i>	Negative	Indifferent
<i>Conflict Frequency</i>	Very rarely	Rarely
<i>Conflict Intensity</i>	Intense	Superficial
<i>Communication</i>	Positive	Positive
<i>Trust</i>	Negative	Negative
<i>Power in Channel</i>	Shared between manufacturer and retailer	Retail
<i>Company Performance</i>	Positive	Indifferent

Source: elaborated by the author based on the information collected in the companies.

The two companies affirm that the rights and responsibilities concerning the after sale product return processes are carefully described in a clear way for the channel members. According to interviewed in company A, that does not mean that there is accordance and satisfaction over the agreed. Still, regarding the goals of each channel member, this relation is not positive. For company A, the goals of the industry and retail are incompatible and constant source of conflict. For company B, there are cases in which the goals can be the same, as in a strategic partnership relation.

As mentioned before, the relevance of the disagreements is directly related with the conflict frequency reinforced by their intensity. For company A, conflicts with retailers occur very rarely, but whenever they do occur, they are intense, what may cause discomfort in the relation. Magrath & Hardy (1989, p. 94) attest that marketing plans always predispose the manufacturer to be aggressive towards its distributors because either the marketing environment demands such aggressiveness or the anxiety for the company's growth does. In fact, this environment is not interpreted the same way by company B, which adopts a more liberal return policy and manages to make these conflicts rare and superficial.

In negotiations over conflicts related to reverse logistics, different from company B, company A does not trust the retail and understands that the retail does not trust the industry either. When an unforeseen fact occurs, the channel members do not get to work cooperatively in the solving of problems with the after sale reverse flow.

Company B could even use some kind of power to impose to the retailer a more convenient form of reverse flow management. Other than that, it recognizes the power of the retailer in the coordination of the distribution channel and does not compete with this member. According to interviewed B, the retailer enforces a coercive power to impose the after sale return. As for company A, it affirms using the power of the brand (identification) to impose to the retailer the more convenient reverse logistics. This company attests that the big retailer reacts in the form of punishment (coercive power) to negotiate the returns. Thus, the relation between these members is that of a "fight of forces" and generates intense and discomfoting conflicts.

Table 3 shows the consequences of these conflicting aspects in both companies.

Table 3 - Aspects of the conflict solving derived from after sale returns in the food distribution channel

	COMPANY A	COMPANY B
<i>Industry-Retail relation in the problem solving with reverse logistics</i>	Regular	Good
<i>When there are problems related to the after sale reverse logistics, industry and retail manage to work in a positive way in searching for solutions?</i>	No	Yes
<i>Performance of after sale reverse logistics versus logistics</i>	Inferior	Inferior

Source: elaborated by the author based on the information collected in the companies.

When comparing the after sale reverse logistics performance with the logistics performance, in both companies the reverse activity showed an inferior performance. Having that said, the reverse logistics reformulation program in company B seeks to elevate the efficiency of this activity.

## 6 Conclusions

Retailers value the service as an element of decision of whom to buy from and evaluate the performance of their suppliers in terms of availability, operational performance and reliability. In this sense, understanding the relation between the industry and retail members of the distribution channel in the conflict solving regarding reverse logistics is

a support for food companies in the decision making referring to return policies. Through this research comparing two companies with different return policies, it was possible to identify the consequences for the relationship towards the retail.

The analyzed companies have a divergent perception due to different reasons. Company A has a more conservative return policy than that of company B. The brand power and the structure of its distribution channel have a great influence in this decision. For company B, reverse logistics is considered a strategic activity for the industry-retail relation and, maybe because of this, conflicts are less intense and more quickly solved, in a positive way. Company B has a better relation towards the retail than company A concerning solving problems inherent to after sale reverse logistics.

As a limitation, this paper analyzes the industry-retail relation in the distribution channel according to the perspective of one member only, restricting the conclusions. For a research with wider inference it is necessary to consider the retailer perspective as regards to the conflict. Another limitation resides on the fact that the conflict between members is not a function exclusive of reverse logistics. Other factors influence on the conflicts, and yet it is not possible to isolate them all.

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