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July 22, 2019

# Reverse Logistics Strategy of Women's Fashion Shoes-Two Taiwanese Cases

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**Abstract.** In the era of hyper-competition, product return management can be differentiated strategy to increase customer satisfaction and stay ahead in the business. The purpose of this study is to explore how the product return management can be improved, especially in the case of fast fashion products either internally or externally in the women's shoes industry. In addition, with the rising of environmental awareness, the society has put more efforts on reverse logistics to keep sustainability. This study conducted in-depth interviews to evaluate different product return strategies adopted by two representative domestic enterprises of women's fashion shoes in Taiwan. Furthermore, we identified the strengths and weakness from managers' point of views. The findings shown that Company A relies on outsourcing versus Company L choose to use in-house strategies. The study provides cases information on product return management by implementing different reverse supply chain strategy. The research also suggested that in order to gain a competitive advantage, a company should select appropriate reverse supply chain strategies to fit the target consumers' demand and enhances environmental sustainability.

**Keywords:** Reverse Supply Chain Strategy, Fashion Shoes, Cases, Taiwan

## 1. INTRODUCTION

As customer first has become the motto of today's business practices, more and more companies have been adopting a competitive product return policy to make themselves differentiated from the competitors and keep and customer loyalty (Zaarour et al, 2019). For example, fast fashion brands, Uniqlo, Zara and H&M, etc., they offer consumers 30 days of free return condition on the item must be unworn or unstained and returned in its original condition. However, such an aggressive products return that incurred negative effects will erode original profits of corporate due to its expensive reverse logistics costs and expenses. In the report of the well-known online media Business Insider (BI Intelligence) pointed out that effective reverse logistics management could let retailers recover over 32% of

production cost. Besides, Freling (2016) found that lenient return policies led to increased purchase, and in context of business-to-consumer (B2C), effective product returns management can increase and prompt repeat purchase behaviors (Ramanathan, 2011; Ra et al., 2014; Huang et al., 2016).

Corporates can leverage returns management strategically to establish healthy relationships with customers by satisfying their requests in a timely manner, and meanwhile providing the firms with enough time to reclaim some value from the returned product by reselling, reusing, or salvaging the components of the products (Griffis et al. 2012; Stock and Mulki 2009). Sometimes the product does not meet customer' expectations, effective product return management can still be used to build

customer loyalty (Kocabasoglu et al., 2007). Yet, despite the above mentioned financial and relationship management benefits of effective product returns management programs, many firms still continue to view returns as a costly nuisance and few have formal strategies for dealing with products that customers don't want (Griffis et al. 2012; Rogers and Tibben-Lembke 2001). However, with the popularity of multiple retailing channels and Omnichannel shopping come, the product return rate will increase (Bernon et al., 2016). In academic, previous studies have produced many insights about how a firm should manage product returns, ex Hazen et al. (2012) identified the determinants of product return policies, Turrisi et al. (2013) designed returns management systems to avoid product obsolescence, and investigated different disposition strategies to deal with products returns (Stock and Mulki, 2009). Unfortunately, despite product returns management being such a vital issue both in practice and academic, there is still no continuous exchange between research findings and business practices.

For bridging the gap between academic findings and practical applications, this study will explore the product returns management thoroughly and deeply by comparing two local women shoes companies. The objective of this article is to identify a shoes manufacturer's implementation and application of a "product return management". In so doing we highlight the impact of a product return management on supply chain efficiency and the challenges facing a local shoes manufacturer trying to differentiate a commodity in a highly competitive markets especially invaded by powerful foreign brands.

## 2. ITERATURE REVIEW

Below a brief literature review was carried out to understand the product return management and summarized some empirical research on product returns.

### 2.1 Product Return Management

The return begins with the customer contacting the company to obtain a return authorization for the product (customer contact may be in a physical retail store, online, or over the telephone). A product returns management refers to a set of steps that determine the processes of decision

making and actions in relation to product returns which is adopted in order to reduce product return rate (Walsh et al., 2014). The configuration and structure of product returns systems differ across firms, and emerge from the interactions of entities involved in the reverse channel. We investigate the product return strategy by describing the processes and interactions that occur for a returned product to move back through the logistics channel. Stock, Speh, and Shear (2006) proposed the process of product return comprises five stages, receive, sort and stage, process, analyze, and support. When the distributors first receive the returned product from customers, and stores the product in a staging area (*Receive*). Next the distributor sorts all of the returned products, organizing returned items by type of product or date received (*Sort and Stage*). As employees process the returned products, additional sorting and staging may occur (*Process*). Employees next will inspect the condition of the returned products and make a decision on the future of the returned product (*Analyze*). Following the employee's decision, the returned product moves to the location selected by the employee (*Support*). Rogers et al. (2002) adopted a broader look at the steps returned products travelled through, including receiving the return request, determining routing, receiving the return and processing it, disposition decision, issuing credit, and monitoring return rates. More recently, Agrawal et al., (2016) gave a more complete processes, including product acquisition, collection, Inspection and sorting, disposition, and redistribution, shown in figure 1.

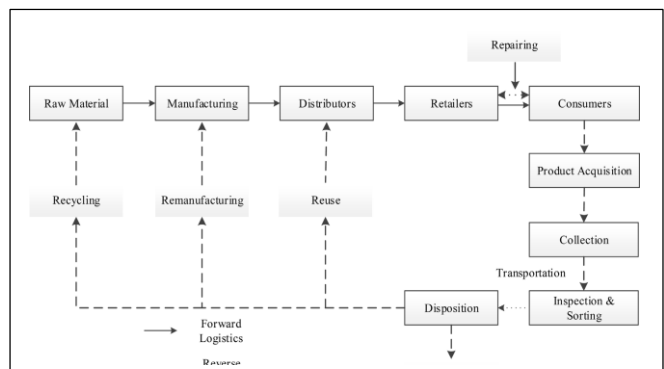


Fig. 1. Basic flows of forward and reverse logistics processes

Source: Agrawal et al. (2015).

While these three researchers described the general product returns system used to process returned products, the different reverse supply chain strategy of firm often

alters the configuration and structure of product return strategy.

## 2.2 Empirical Product Returns

Except from the perspective of supply chain management, several papers in the marketing literature have studied product returns. For example, Hess and Mayhew (1997) found that return rates vary across product categories with some having return rates as high as 25% (e.g., shoes) and others having almost no returns (e.g., socks). Wood (2001) indicated that consumers value more lenient return policies, and the ability to return increases overall sales. Petersen and Kumar (2009) confirmed that generous product returns could positively affect consumer's future buying behavior and increase consumer's future value to the firm.

## 3. METHODOLOGY AND BACKGROUND

The current study has applied an inductive approach to describe and compare the product returns strategies of two local shoes manufacturers in Taiwan. Data was collected through three sources (1) semi-structured in-depth interviews with senior managers, (2) researchers' observations of actual operations at the company site, and (3) internal and external corporate documentation. This study mainly relied on in-depth interviews, because some implicit knowledge is embedded in a small number of professionals and in depth interview is a better method to collect this kind of data. We extracted the business practices through face-to-face conversation, and meanwhile supplemented by on-site observation to reflect the real situation of two cases' product return systems.

### 3.1 Shoes Industry in Taiwan

Taiwan has been playing an important role in global footwear industry, especially its world-famous manufacturing power. In the 1980s, Taiwan has created so call economic miracle in three industries, that is textiles, electronics, and footwear. At that time, Taiwan once won the reputation of "kingdom of shoes-making", since one of the four pairs of shoes in the world was made in Taiwan. However, faced with the foreign competitors which are good at marketing with world-class brand name, the local shoes manufacturers still hold on the traditional manufacturing advantages has gradually lost their territory. As shown in Figure 1, from 1998 to 2018 about 10 years, the total production of the domestic footwear industry has shown a

significant downward trend year by year. This also means that the domestic shoe industry operating environment is getting more and more difficult.

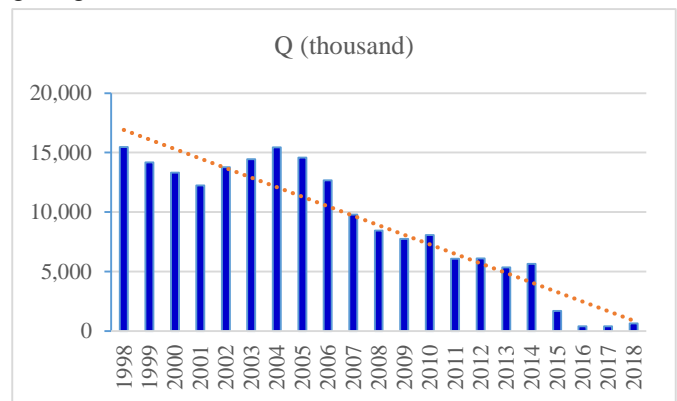


Figure 2 Production Quantity of Shoes made in Taiwan

Source: Ministry of Economic Affairs

### 3.2 Background of A Company

A company its market share is top two in Taiwanese shoes making industry, established in 1952, positioning themselves as healthy, environmental and comfortable shoes and accessories providers. A company's sales solely focus on domestic market, and own their own retailing channels by establish almost 217 brick-and- mortar stores all over the island. Vice President of A Company has publicly stated that "we insist on not doing everything by ourselves." Therefore, Company A focuses on product design and innovation, brand and channel development, and then outsourced other value activities, such as production used ODM, and logistics rely on 3PLs. Company A and 3PLs jointly develop logistics information systems, built several "standardized and systematic models from procurement, manufacturing, distribution and delivery to the store achieve the goal of properly logistics cost while maintain the service level.

### 3.3 Background of L Company

Established in 1996, L company International Co., Ltd. has three major advantages in R&D, production and quality respectively. In 2001, L company is a pioneer who set up "Foot Institute "in Taiwan, emphasized to design the most suitable and comfortable shoes for the oriental people. Next year, the "L company Quality Testing Center" was established to implement quality assurance in product design and production processes. L company differentiated themselves from the competition by developing functional shoes, such as for gout, diabetes, and the disabled etc. Compare with Company A's

outsourcing, Company L operates a vertically integrated supply chain. From research and development, production, logistics, marketing and reverse logistics, they made by themselves rather than outsourcing. As to production, most shoes are manufactured in the Vietnamese factory. The specialty is that L company established three logistics centers by themselves, and positioned to handle logistics and customization centers. Besides, these logistics centers also accept and process product returns, do repairing and scrapping. The company attempts to control all stages of the supply chain in order to establish and maintain a genuinely high quality service level.

**4. FINDINGS AND LESSON LERANED**

**4.1 Product Returns Practice of Company A**

A company's product returns mainly rely on third-party logistics center, and then through build compatible logistics information system with suppliers, 3PLs, and stores(offline/online) to control the flow of product, information and cash. Followed the categorized by Blackburn et al. (2004), here company A's product returns practice fits "centralized returns supply chain" shown in Figure 3. The rationales underpin to run centralized returns supply chain is for economies of scale—both in processing and transport of product returns since returned products are sent to a central location for testing and evaluation to make decisions of disposition, restocking, refurbishment or repair, parts recovery, or scrap. A schematic of A company's centralized product returns is shown below,

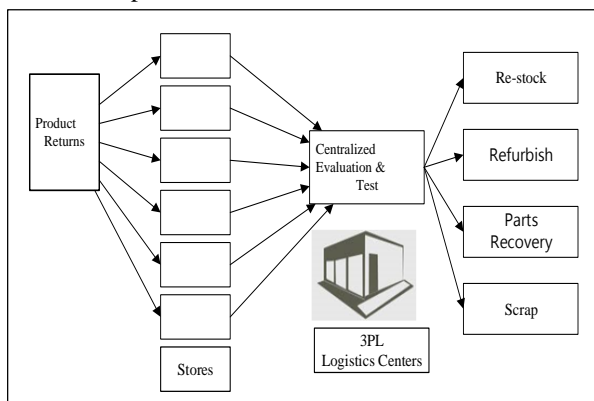


Figure 3 Centralized, Efficient Reverse Supply Chain  
Source: Blackburn et al. (2004)

**4.2 Product Returns Practice of Company L**

Company L positioning themselves with differentiation and run a vertically integrated supply chain.

Under such differentiation dominant thinking, decentralized reverse supply chain that characterized with early diagnosis of returned product condition what we call the "preponement strategy" results in significant time advantages in responsiveness. When product returned to stores, they must conduct a field tested to determine the future of returned products, —re-stock, repairable, or scrap— then sent back to L company's different warehouse/logistics center for further processing. To achieve quick responsive supply chain, the testing and evaluation of product must be *decentralized*, L company authorized their own chain stores to do the evaluation and response customers' request instantly. The "decentralized returns supply chain" is displayed in Figure 4.

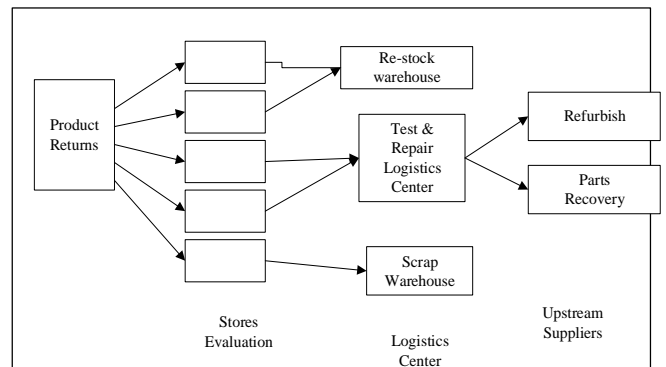


Figure 4 Decentralized, Responsive Reverse Supply Chain  
Source: Blackburn et al. (2004)

**4.3 Lesson Learned**

The two cases of shoes-making companies highlights a number of implications for implementation and promotion of product returns and supply chain management. The main findings can be evaluated using the following criteria, the costs, time and satisfaction of after-sale. The company A demonstrates cost efficiency by delaying testing, sorting, and evaluating until returned products have been collected at a central location and also for stores who just need to send all the products back to a central location instead of shipping products to multiple locations. However, this centralized reverse supply chain is designed to minimize costs, often at the expense of slow response and lead to customer dissatisfaction. Company L used decentralized reverse supply chain that focused on quick response and customer satisfaction by reducing time delays of disposition decision but lost cost advantage. Decentralized reverse supply chains rely on the store employees' evaluation abilities, that is, being able to determine the condition of the returned

products and it will determine how much value can be recovered from the returned product.

## **5. CONCLUSIONS AND MANAGERIAL IMPLICATIONS**

### **5.1 Conclusions**

The customers may return the products online/offline for many known or unknown reasons, such as defects or damage, or just because customer change their minds (Barsky and Ellinger, 2001). Product returns are uncertain in terms of quantity, quality, and timing of returns; and they are more complicated for firms difficult to manage in comparison to new products in forward logistics (Rogers and Tibben-Lembke, 1999). Accepting and quickly processing product returns represents a strategic tool companies can leverage to maintain healthy relationships with customers, benefit companies financially by reducing inventory levels, costs, and the risk of product obsolescence, even generate differentiation through corporate image and better customer satisfaction (Stock et al., 2006). That is, product returns are so important in a competitive business environment and firms need pay more attention to manage those returns effectively. Therefore, this study compared two Taiwanese shoes manufacturers to explore the underlying rationales of adopting different products returns strategy. Through in-depth interviews and structural analysis, the research findings can be categorized in three aspects.

#### **Reverse logistics: Make or Buy**

One of the most important decisions regarding reverse supply chain for manufacturers is that they have to decide whether performing the activities themselves or outsourcing to a third party (Martin et al., 2010), since they contribute less value to firms. (Serrato et al., 2007). Kumari et al. (2015) observed that reverse logistics outsourcing may take advantages of cost reduction and quality improvement, lower capital investment, more flexibility, better customer responsiveness, and better access to new technology etc., and then let manufacturers can focus on their own core competency. However, some firms realized unexpected higher costs because of complexity, lack of flexibility, and other hidden problems with outsourced service providers (Tadelis, 2007).

A company believed in efficiency and chose to

emphasize on cost saving, thus they delegated reverse operations to a 3PL. There some reasons backup their choice, first, they think themselves lack of internal capability to perform product returns, since the forward logistics have outsourced the 3PL. Second, developing the necessary skills to fulfill none core competencies tasks, in company A, their core competence is located in design and marketing rather than logistics, need heavy investment in training and can be very time consuming and require much efforts. Therefore, outsourcing is often preferred to “in-house operations”, because it allows the firm to concentrate time and energy on performing the tasks where it is actually competent. The reason why Company A is so confident in entrusting noncore business to 3PLs is that they resort to strong corporate network. In addition to building the common information networks, the close cooperative network backup by strong social and human capital is key determinants of Company A’s successful reverse logistics strategy.

Therefore, outsourcing to one centralized third-party logistics center who plays as a professional return processing center and with advantages of flexible manpower usage, transportation dispatching and storage space. So far, both forward logistics and reverse logistics, Company A still enjoys the advantages of outsourcing and win customer satisfaction and loyalty in shoes-making industry in Taiwan. For L company, outsourcing to a third party is not their option, because from the whole supply chain perspective the third party raises the supply chain profits less than the firm can by its own. Thus, L company almost keep supply chain functions in-house and reduce the risk associated with outsourcing. L company run their own factories in Vietnam, built three logistic centers in North and South to carry out the forward and reverse logistics. As to product returns, the store staffs play a crucial role who have to make a series of decisions to correctly classify the returned item’s condition as perfect, imperfect but functional, defective, or defective but fixable, that can finish the quick response of decentralized reverse supply chain.

#### **Environmental awareness**

Two company both devoted to implement corporate social responsibility, especially in the environmental protection aspect. Almost follow the main four categories

proposed by Zhu and Sarkis (2004), internal environmental management, external green supply chain management (GSCM) practices, investment recovery, and eco-design. Specifically, the senior management teams' commitment to environmental compliances in water, electricity, energy and paper etc is internal green practices. External GSCM practice category comprises of green purchasing and cooperation with customers. Two companies are committed to recycling of shoe boxes and cartons. Take A company as example, 2018 the proportion of carton recycling has exceeded 70%, and shoebox recycling also exceeded 10%, that all need customers and outsourcing partners' cooperation. Company L implement green purchasing to conduct environmental control in the upstream and then environmental production, and packaging. They also pay attention to the ecologically responsible design of new products by using more environmentally friendly materials, and reducing resource consumption. Investment recovery is about how to deal with surplus assets and recycle the returned products. These two companies recycle used materials to reduce inventory or sell idle assets.

### Consumer Satisfaction

These two companies both mentioned that according to the customer response survey report conducted inside of the company, it shows that there is no significant positive correlation between the performance of product returns and consumer satisfaction. Target customers still use brand awareness, product design and price as the key criteria to evaluate satisfaction. However, regarding after-sales service, both companies provide MRO services, and that indeed improve consumer satisfaction, but it is still not significant.

### 5.2 Managerial Implications

"Product returns" has become an essential part of consumers' post-purchase decision-making processes and appropriate return policy is critical in doing business in the market today (Yan and Cao, 2017). The results of the current research incur a number of managerial implications. First, company A with centralized reverse supply chain, the weakness slow response. On the contrary, company L adopted decentralized reverse supply chain, response quick but low decision quality. These two companies' managers of product returns need to invest is store employee decision-making capabilities/knowledge and computer-aid judgement system/equipment to improve the speed and

quality of disposition decision. Second, Company A lack the abilities of customized and repaired in store, it relies on upstream suppliers will delay the time to response, here we propose to train skillful shoes-making technician and stationed on stores or alliance with other professional shoes repairing centers. In summary, product returns represent an important relationship management tool for firms. Effective product returns management has minimal improvements on a firm's bottom line, but has important impacts on subjective perceptions of performance and the quality of relationships w with customers. Managers should give reverse supply chains as much attention as forward supply chains. According to the study, the operation modes of A and L have their own advantages and disadvantages. This study use case study as a starting point, and sincerely look forward to more future study will carry on shoes enterprises to find a netter scheme for reverse supply chain strategy. And also these two cases can offer some practical insights to help other shoe-manufacturers in implementing product return management.

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