

“LEARNING-BY-PRODUCING” IN THE FASHION VALUE CHAIN

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ABSTRACT

The know-how and experience (“learning-by-doing and learning-by-producing”) is critical in the traditional industries. The Portuguese fashion industry has many SMEs with a long experience working in private label regime to other European companies.

The process followed by Procalçado shows the importance of the “CEO vision” and “corporate strategy” to acquire new equipment and technology, qualifying the workers to develop new products based in these new investments, and prepare the resources to launch the concept and the brands to the right market.

Procalçado owns the brands For Ever, WOCK and Lemmon Jelly.

The methodology followed is qualitative using the single case study.

Key Words: *innovation; “learning-by-producing”; footwear; fashion value chain*

1. INTRODUCTION

Porter’s value chain [1] is central in the discussion about competitiveness and corporate competitive strategy. The primary activities are related with internal domains of the companies, starting in inbound logistics and finishing with the services. Support activities are related with other business dimensions and involve firm infrastructure, human resources, technology and procurement.

Procalçado’s value chain integrates different technologies according the final products and this technological upgrade from components (soles) to moulded footwear occurred over than 40 years. In 1973 occurred the foundation of For Ever, that started developing and selling footwear soles to the Portuguese market. In five years becomes the Portuguese market leader in footwear components, position kept until today. The present portfolio of components satisfies high quality standards of the footwear industry (Figure 1).

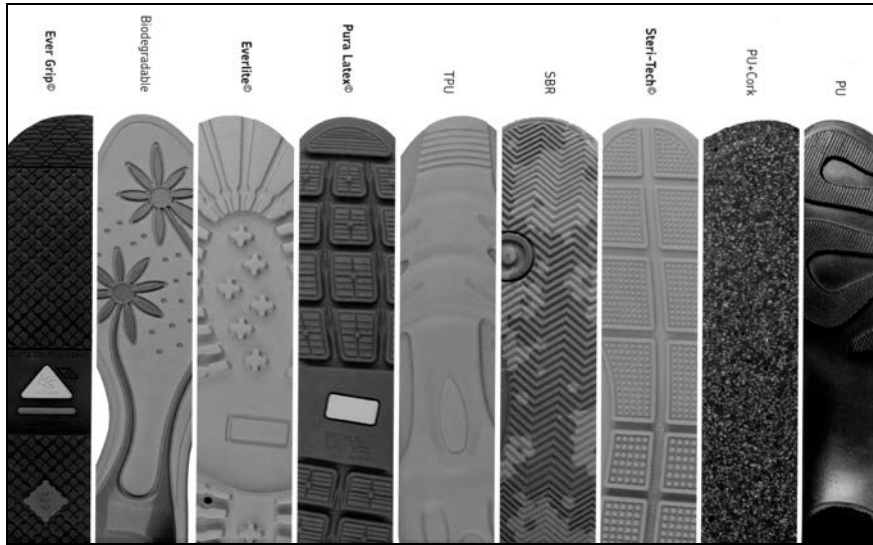


Figure 1 – Procalçado's materials (present portfolio)

1984 is the beginning of Procalçado (keeping For Ever as brand of soles). It starts with the expansion of company facilities, and proceeds in 1989 with the acquisition of the second production unit (PROBOL). One year later, Procalçado and PROBOL start selling directly to the market under the brand For Ever.

In 2001 the company makes the acquisition of equipment injecting TPU (Thermoplastic Polyurethane) soles and this fact had increased the industrial's skills to other level. After had received several awards and certificates for quality, in 2005 occurred the development of the WOCK product line based on the concept of moulded footwear. Two years later was the commercial launch of the first product of WOCK and 2008 begins the internationalization of WOCK products.

The process of vertical industrialization had continued in 2009 with the acquisition of equipment for production of EVA (Ethylene-vinyl Acetate) soles and moulded footwear. One year later, Procalçado acquires a footwear injection equipment to increase the portfolio of WOCK products. To finish the industrial improvement, in 2012 occurred facilities' expansion and the acquisition of rubber injection equipment. Finally, Procalçado has the complete line of production from the polymeric moisture until the inject footwear.

In 2013 Procalçado begins a new adventure. Starts with a fashion injected footwear project, associated to a new concept and brand: Lemmon Jelly.

As result, today exports to over 50 countries on five continents, mainly components and soles, but the products WOCK and Lemmon Jelly are growing very fast. Vertical integration of the production was a step-by-step process and it ends in this new concept of fashion products: Lemmon Jelly fashion products.

Understand the market is essential to create a sustainable competitive advantage, supported by a correct marketing mix, using innovation, giving superior service and establishing strong customer relations [2].

2. RESEARCH METHODOLOGY

The methodological approach to the research was defined considering the work objectives. The research methodology can be quantitative or qualitative: the qualitative analysis is presented as the most recommended when the researcher wants to study a single case or a

small sample of entities and the study is focused on a theme or sector. It is also recommended when the investigation aims obtaining detailed and in-depth information on situations, events, people, organizations, interactions and behaviors observed by the investigator during the field research [3]. When the industrial sector consists mainly of SMEs, the qualitative approach is recommended to reduce the distance between the administrator or owner and the investigator [4]. Procalçado is a SME and relations between researcher/owner during the meetings were very close, clear and friendly.

The research methodology was qualitative and the strategy for data collection was the single case study. A case study uses different sources of evidence and is relevant to answer to the questions “What”, “Why”, “How” and “When”. “What is happening here?”, “Why is it happening?”, “How has it come to happen this way?” and “When did it happen?” are examples of questions that the researchers will put during the investigation [5]. It is also recommended when the researcher has little or no control over the behavior of the events, if the study is based in the real world and reports events that take place at the present time [6].

To obtain the data, were used different techniques: interviews, document analysis and observations in real context. The interview were semi-structured and it has been finished after a pretest with footwear industry experts (APICCAPS – Associação Portuguesa de Industriais de Calçado, Componentes e Artigos de Pele e seus Sucedâneos, and CTCP – Centro Tecnológico do Calçado de Portugal).

The qualitative data was analysed with the MAXQDA software.

3. RESULTS AND GENERAL DESCRIPTION

Procalçado is Portuguese industrial leader in the components production to footwear sector since 1978. Table 1 shows the evolution in several Procalçado’s indicators through three decades: 1993, 2003 and 2013.

Monitor Company report’s presented in 1994 to the Portuguese industry gave some guidelines to footwear and textile sectors [7]. That’s why decided to start the comparative analysis from 1993, after 2003 and finish in 2013.

Table 1. Procalçado general data (1993, 2003, 2013)

Year		1993	2003	2013
Turnover (€)		6.500.000	17.000.000	21.000.000
Nº Workers		166	230	296
Production (pairs/ year)		5.100.000 (soles)	5.700.000 (soles)	5.500.000 (soles)
Own Brand	Name	For Ever (1990)	For Ever	For Ever (1990) WOCK (2006) Lemon Jelly (2013)
	(% sales)	30%	45%	60%
Own Collection		No	No	Yes
Marketing Department		No	No	Yes
% Outsourcing		0%	15%	24%
Exportation	Value (€)	6.439.944	4.687.474	13.028.783
	Markets	Spain/France/UK	Spain/France/Germany	Germany/Slovakia/France

Between 1993 and 2013 turnover was multiply by three. The work force had increased two times as it happened with the exportation values.

Component's productions are almost stable around 5 million pairs/year between 1993 and 2013. That means the average price has increased drastically during this period.

The development of portfolio's new products based on the concept of moulded footwear in 2005 (WOCK products) and fashion moulded footwear (Lemmon Jelly collection) gave a significant contribution to final's turnover and higher average price.

Once the Procalçado controls the industrial process and acquires technology and equipment, advances in the value chain of their products. "Learning-by-producing" is the category of incremental innovation [8] followed by the company. According the Oslo Manual [9], the Procalçado does product and marketing innovations. During the different interviews, all respondents with major responsibilities in the company consider these two types of innovation as the most relevant and directly related to the company's results.

The know-how and worker's experience is critical to the necessary improvements that had occurred. After, was necessary understand the markets and prepare the resources to launch the new concepts and brands: WOCK in 2006 (Figure 2) and Lemmon Jelly in 2013 (Figure 3).

Lemmon Jelly's collection was launched in the second semester of 2013 and finished the year with a sales volume of 350.000 euros. In 2014 the sales volume of Lemon Jelly products raised to 2 million euros, into a new category of fashion products.



Figure 2 – WOCK products



Figure 3 – Lemon Jelly handbag

4. DISCUSSION

Fashion value chain has a high importance in the Portuguese economy. Innovation and differentiation are essential to remain competitive in demanding and sophisticated markets of the fashion industry. Traditional industries as they are textile, clothing and footwear, need incremental innovations based on the long experience of firms and workers. Since the eighties, a large number of European fashion industries make in Portugal their products.

This industrial history of decades is important to the "learning-by-producing" in which the incremental innovation is based. Procalçado works in private label regime in the components (mainly soles) and combines with own collections in Lemon Jelly fashion products. Design's process in the WOCK products line was prepared during almost two years. Today, design's process continues active but focused in the technical features of the products. Concept is done by creatives and technicians; Design is done in the development center using CAD technologies; Prototyping of "maquettes" and "moulds" is done with the different materials;

finally, testing is done in certified laboratory to ensure compliance with the technical specifications required. The close relation with sectorial associations (APICCAPS and CTCP), with the footwear producers and with the markets has as result a perfect understanding of the entire value chain.

The importance of innovation to Procalçado is obvious. Procalçado received several innovation awards since 2003. That year and the following, Procalçado received GAPI's award (GAPI – Gabinetes de Apoio à Promoção da Propriedade Industrial) of Technological Innovation in the “Innovative Materials and Components” category with some developments in the industrial processes. This award was achieved again in 2005, 2007, 2008, 2011 and 2013. GAPI's award “Professional Footwear” was received in 2010 and 2012. More recently, Procalçado received more GAPI's awards related with the Lemmon Jelly concept and brand. In 2013, Procalçado's brand Lemmon Jelly received award in “New Brands” category. In 2014, received award in “Innovative Products – Ladies Shoes” with Lemmon Jelly collection's.

Procalçado has teams with several workers, with different skills and competences, to develop the new products and concepts. The CEO coordinates team's work and the regular meeting's. The development process is evaluated permanently and the innovative products are discussed and studied by the team.

Figure 4 describes Procalçado's positioning according different indicators. In 2013, the ratio “Turnover/n^oWorkers” was 70.950 euros/worker. Procalçado follows a “Differentiation” strategy, according Porter's definition [1]. According the Oslo Manual categories [9], Procalçado has Product and Marketing innovations. On the right side of figure 4 can see a sphere with a green circle around. The colors in center's sphere represent 40% of private label, mainly components and soles, and 60% of own products (soles For Ever, WOCK shoes and Lemmon Jelly fashion shoes).

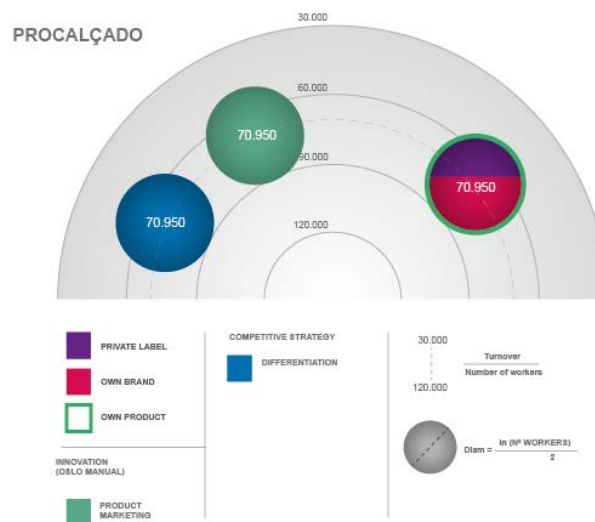


Figure 4 – Procalçado's positioning in several dimensions

Chain-linked model proposed by Kline and Rosenberg [10] and open innovation theory suggested by Chesbrough [11] helps to understand how works the innovation in the Procalçado. The innovation in Procalçado, as it is described in this paper, fits into the general theories about innovation in “low-tech” industries and in SMEs [12], [13].

5. CONCLUSIONS

The vertical integration of production in the fashion value chain requires dimension, resources and strategic vision of the owners and administrators. Procalçado prepared a sustainable framework of their industrial divisions, with the collaboration of the workers and teams to put innovation (incremental innovation, “learning-by-producing”) as key factor to achieve superior competitive positioning in the fashion value chain. Lemmon Jelly collection is today a very well positioned concept. The sales volume of Lemmon Jelly brand is increasing year by year, with a huge impact in the external image of Procalçado. And innovation is the main source of these achievements.

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