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TRENDS AND NEW BUSINESS MODELS IN THE PORTUGUESE FASHION INDUSTRY: A STRATEGIC INNOVATION PERSPECTIVE

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ABSTRACT: *This research project focuses on the discussion of trends and new business models for the textile and clothing industry in general and for the fashion industry, in particular, using tools and an approach supported on strategic innovation. A documentary analysis was performed and they were conducted a series of semi-structured interviews. It was noted the importance of the strategic analysis and particularly strategic innovation for the design of new successful business models. Main findings and results are presented on the basis of two main criteria: relevance and feasibility. Two generic strategies were identified.*

INTRODUCTION

The Textile and Clothing industry is divided into two key sectors. The textile sector produces fibers, tissues and yarns, which will be used to produce different types of products namely home-textiles such as carpets, curtains, bed and bath lines textiles, etc. or technical textiles used, for example, in protection and safety garment. On the other hand, the clothing sector aims the transformation, through activities such as cutting, sewing and finishing of yarns, tissues and fibers on different types of clothing such as trousers, dresses and sweaters.

The clothing sector is strongly related to fashion and directly linked to end consumer markets. Product design, fashion, distribution and logistics as well as branding are key elements for the success of these companies. On the other hand, textile companies, especially those which have been focusing in technical textiles have acquired a high level of innovativeness, adding new features and functionalities to traditional

textiles, gaining or reinforcing competitive advantage under international competitors. The evolution and growth of the Portuguese textile sector has been very favorable, as evidenced by the high diversity of products with various applications and features, such as new and innovative protection and safety tissues for industry and military uses, textiles for the automotive industry, for the health sector (e.g. bed cloths with anti-bacterial characteristics and orthopedic products) and even in terms of home-textiles (e.g. anti-fire curtains).

Nevertheless, there are not only differences between these two sectors. In both sectors we can easily identify firms that do not have any type of internal new product development process as well as others which have in their innovative capacity the key factor of their competitive advantage. In the latter case, innovation can range from the development of new fibers to the restructuring and development of new business models supported in different

and deeper connections with partners, customers and suppliers.

Indeed, the innovation process in this industry is not limited to the development of new products which result from the application of new fibers, yarns or tissues. Innovation through the manufacturing processes can also occur but it is not so common. Process innovation come faster from changes in business process than in the production system, considering the level of maturity of this industry.

The textile and clothing Portuguese industry is expressed in Portuguese by the acronym ITVP. The major concentration of firms of ITVP is in the northern of Portugal and in the region of “Beira Interior” in the center/east of the country. The industry has been facing a restructuring process, which has led to the elimination of thousands of jobs due to the elimination of barriers to international trade. On the other hand, clients and customers have been changing their behavior and became more informed and demanding asking for high quality, low price and quick response (Massa and Testa, 2011).

Therefore, taking into account the current globalization of the textile sector and consequent increase in the level of competitiveness, new sources of sustainable competitive advantages are needed, even if the textile and clothing Portuguese industry remain very known worldwide by the quality of its products. Nevertheless, the ITVP need to innovate not just in products and processes, but through new business strategies, i.e. putting in practice new business models. However, many of these new business models lacks a proper strategic assessment, in order to make them effectively successful and competitive.

This research project focuses on the discussion of trends and new business models for the textile and clothing industry in general and for the fashion industry, in particular, using tools and an approach supported on the strategic innovation.

The paper is structured in the following way. The concepts of open innovation, co-creation and strategic innovation are introduced in the next section. After explaining the research

method in section 3, the main findings are analysed and discussed in section 5. The paper concludes with theoretical and managerial contributions and opportunities for further research.

LITERATURE REVIEW

The literature and many successful cases have shown that the current adoption/reinvention of innovative business models is as important as the creation of new products and the use of new technologies by firms (Chesbrough, 2010).

In general terms, a business model explains how it is established a relationship between customers, suppliers and other stakeholders (Zott and Amit, 2010).

According to Timmers (1998), a systematic approach to designing business models may be based on value chain analysis. Typically, they are distinguished five primary elements of the internal value chain: (1) the inbound logistics; (2) operations; (3) outbound logistics; (4) marketing and sales, and (5) customer service.

According to Sorescu et al. (2011), a business model is a very specific system of interdependent structures, activities and processes that support the logical of an organization or firm, both to create value for their customers as well as the appropriation of value for themselves and for their partners. The articulation of the means by which a firm creates and appropriates value, allows a clear delineation of the sources of their competitive advantage, which facilitates the updating and strengthening of the business model. Accordingly, it is fundamental the presence of interdependencies that transform the entire set of structures, activities and processes in an integrated system, avoiding that they are independent. In short, the fruitful interaction of all elements of a business model is crucial to the success of its implementation (Sorescu et al., 2011).

Chesbrough (2010) believes that a business model fulfils the following functions: a) articulates the value proposition; b) identifies a market segment and specifies the mechanism for income generation; c) defines the structure

of the value chain required for create and distribute what is offered as well as complementary assets; d) details the income structure through which the firm will be remunerated; e) estimates the cost structure and profit potential; f) describes the firm's position within the process of value creation, establishing a connection between suppliers and customers; and g) formulates a competitive strategy and defines the competitive advantage over the competition.

Indeed, a proper business model is crucially for the firms. For example, a product considered poor technologically, if integrated into an innovative business model, can provide higher profit margins and higher turnover than a product evolved technologically, but offered through an outdated business model.

Nevertheless, there are still many difficulties in the development of the business model, particularly innovative ones (Chesbrough, 2010). Some experts report that an innovative business model provides a new form of relationship between customers, suppliers and clients (McGrath, 2010).

The development of successful partnerships between clients and suppliers in terms of product development supported a new paradigm for the innovation process: the open innovation. The open innovation model is breaking the traditional perspective, which can be called closed innovation, through effective cooperation between firms and external sources, in order to enhance the design, development and commercialization of new technologies, products and services. According to Gann (2004) and Chesbrough and Schwartz (2007), the model of open innovation refers to the intentional use of inputs and outputs of knowledge from the outside of the organization with the goal of accelerating the innovation process. Inversely, the closed innovation model does not allow the existence of this technological flow between firms, being dependent on the resources available in the company for the development of R&D activities (Chesbrough, 2003). An eco-system of open innovation enables and asks for new business

models. The paradigm of open innovation can assume an important role or result in a catalytic element for the renewal and reinvention of business models.

To be considered as innovative a business model should broaden the spectrum of the market by reaching new clients or obtaining more revenues from the "old" clients. Indeed, the "new market" tends to be composed of different clients, as well as distinct key factors (Markides, 2006).

In fact, innovative business models may result or create new markets or, alternatively, they can produce new products or discover a different way of perform the business process (Anderson and Markides, 2006). New business models tend to be supported in a greater interaction with clients, suppliers and other business partners (Afonso and Vieira, 2012).

Morris et al. (2005) stated that, among others, the design of a business model should take into account the following questions: how (it is done)? and for whom (it is done)?. Or, according to Prahalad and Krishnan (2008), the business model aims to satisfy the needs of current and new customers (WHO), with products, services or a combination of both (WHAT), and through different and eventually new forms of promotion, production, distribution or delivery of such products and/or services (HOW)? All firms in an industry, develop their strategies based on their responses to three key questions: 1) Who should be select as a client? 2) What products/ services and value propositions we offer to the selected clients? 3) How to offer these products/services in a cost-efficient form? (Anderson and Markides, 2006). In this context, strategic innovation has been described as the reconstruction of the fundamental of business models and the redesign of existing markets, changing the rules of the actual competition (Schlegelmilch et al., 2003).

Therefore, the strategic innovation arises when a firm identifies opportunities for a new positioning in the industry. Namely, a) a new "Who" - clients who were not considered as potential or existing clients' segments whose

competitors have neglected; b) A new "What" - emerging clients' needs or the needs of current clients who are not currently well served by the other competitors; c) a new "How" - new forms of promotion, production, delivery, distribution of existing or new goods or services, to current or new clients segments (Hamel and Prahalad, 1991).

In this context, strategic innovation or innovative business models (Markides, 2006) result in the creation of growth strategies, new product categories, services or business models that change the rules of the game and generate higher added value for consumers, clients, business partners and even to other related organizations. The acquisition of competitive advantage through innovative business models tends to be disruptive to the established competition.

In pioneering work, Markides (1997) called this type of innovation as strategic innovation. Subsequently, Markides (2006) stated that the designation "innovative business models" will capture best the essence of this kind of innovation without ambiguity. An innovative business model is the discovery of a business model fundamentally different in an existing company.

In recent years, the emergence of information and communication technologies have played an important role as a facilitator of strategic innovation, since they allow the reduction of transaction costs and accelerate the exploration of innovative solutions at the industry level (Anderson and Markides, 2006). Timmers (1998) stated that the information and communication technology enables a wide range of business models.

According to Rowan Gibson, "... the renewal [is] the only way to maintain continuity in a discontinuous world. And the fuel for renewal is innovation. Innovate not superficially, but innovate with strategic depth in terms of the business model". Moreover, today, successful firms are those that co-evolve quickly and effectively, gathering resources, partners, suppliers, clients and other stakeholders, and creating networks of cooperation. This implies

that firms work cooperatively and competitively to generate new products/ services to fulfill customer needs, incorporating future innovations (Moore, 1993).

METHODOLOGY

Initially, a general analysis of the textile and clothing industry with a particular emphasis on the fashion industry, and the respective potential market, was performed, regarding the identification of general trends, needs, opportunities and new or alternative business models. To this end, a documentary analysis was performed.

Complementarily, they were conducted a series of semi-structured interviews, in order to understand and describe trends, traditional business models and innovative business models in ITVP.

An interview is an intentional conversation, usually between two persons, although sometimes it may involve in order to obtain additional information. In this study, we used semi-structured interviews because they allow to obtain reach empirical data.

The selected interviewees permitted to collect the opinion about the ITVP from different perspectives, in order to achieve a deeper understanding of the industry trends in terms of business models.

In the semi-structured interviews they were taken into account the following topics:

- innovation trends;
- trends in terms of the business;
- trends in terms of business models.

During the analysis of the initial interviews an important topic emerged and it was introduced in the following interviews:

- the importance of collaborative strategies vs. the creation of spin-offs for business model innovation.

Besides the empirical evidence from the interviews, the authors collected secondary data, from documentary analysis. The record of the interviews was listen several times and transcribe on-to several pages of text, then authors have broken down the data, examined it, categorized the data, and main findings were

several times discussed and (re)interpreted, and then the data was finally compiled into a fewer number pages of text. Accordingly, authors analyzed the empirical data combined with the literature.

The Table 1 shows the respondents and the duration of the interviews, all of them recorded. During the interviews they were made notes which were also considered in the analysis. The eight interviews represent approximately 8 hours of recording. Were interviewed two professors with a good knowledge of the ITVP, two experts of CITEVE (the technological center for the ITVP located in Famalicao), three CEOs and a Production Manager of 3 different firms of the ITVP.

Table 1: Details of the Interviews

Function	Institution	Duration
Professor of Civil Engineering	University of Minho	50 m
Professor of Textile Engineering	University of Minho	45 m
Responsible for Technology and Entrepreneurship	CITEVE	70 m
Deputy General Director	CITEVE	50 m
CEO	Small Firm	50 m
Production Manager	Small Firm	50 m
CEO	Medium Firm	80 m
CEO	Medium Firm	90 m

FINDINGS AND DISCUSSION

They were identified several trends in terms of the ITVP business namely, the use of new materials, particularly new fibers and functional products. Furthermore, several trends and drivers of strategic innovation on the ITVP were identified.

Finally, it was noted the importance of two generic strategies for strategic innovation in the industry: the creation of spin-offs for the materialization of new business models and the use of various collaborative strategies to leverage the existing business model. These two approaches may be compared with the recognized dichotomy presented in the innovation literature, i.e. *radical vs incremental innovation*. The discussion and implications of this conceptualization for strategic innovation in practice are presented in the end of this paper.

The ITVP

Recently, the ITVP grouped business domains into six areas: sport and leisure, safety and security, health, automobile, construction and architecture, home-textiles.

Indeed, the number of those who practice any kind of sport have been increasing and became more demanding consumers asking for pieces of clothing which need to be simultaneously suitable, comfortable and beautiful. At the domain of safety and security garment, products must be suitable for the specific needs of each activity (e.g. clothing for police, firefighters, military, plumbers, carpenters, construction operators, and others.).

The textile products for medical applications include materials used in the dental and healthcare, such as sutures and implants, hospital clothing, orthopedic textiles, compression stocks, material for personal hygiene, dental floss, disposable diapers, wipes and antibacterial and antiallergic tissues.

Moreover, there are multiple components in an automobile which are made by textile materials, including upholstery, the interior lining of the car, the inner liner of a tire, the airbag, carpets, etc.

The use of technical textiles in the construction industry and by architects have been increasing, because many of these materials can have similar mechanical properties or even higher to the commonly used. The tissues offer interesting features such as lightweight and strength, combining well with cement (e.g. materials and tissues that replace the iron, materials for sound and heat insulation).

Finally, the area of home-textiles, which remains highly recognized abroad, mainly in the United States of America. This sector produces a huge range of products, namely, the bed line: quilts, sheets, duvets, duvet covers, pillows, till the kitchen line: napkins, tablecloths, wiping cloths among others.

An important trend in the industry is the use of new fibers. For example, fibrous materials, in equipment or in clothing. These new fibers offer different characteristics: reduced weight, improved mechanical performance, durability

and elasticity, friction reduction, comfort, among others. With regard to the construction sector, the fibrous materials also offer very interesting solutions, which can range from concrete reinforcement to soil stabilization, as well as in sound and heat insulation.

Table 2 and Table 3 present the main characteristics of the industry by sector, according to the documentary analysis and the analysis of the interviews.

Table 2: The main characteristics of the industry by sector I

Sport and leisure	Safety and security	Health
Products must also be attractive (fashion)	It is necessary to be approved and certified	Difficult to enter the market
Produces all types of tissues	Existence of textile materials with distinctive features	Existence of many barriers to entry
Growing market	Firms have experience in this type of clothing	Many requirements
Possibility to use several existing materials	High know-how in sewing	

Table 3: The main characteristics of the industry by sector II

Automotive	Home textiles	Construction and architecture
Very demanding	There is Know-how	Uses several tissues
Many tests	Productive system implanted	Interesting materials
Largest sector in exports	Existence of the entire value chain which is concentrated in a region	Area to explore
Promising; uses many textile materials	International recognition	Possibility of increase products supply

Trends in the business model

A set of trends and drivers of strategic innovation on the ITVP can be highlighted from the empirical evidence collected. These are the main topics which will be discussed and summarized through a framework where the different options are structured in terms of feasibility and relevance:

- Fast fashion;

- Creation of new products;
- Use of local designers in internationalization strategies;
- Fashion managers;
- Change of structure and commercial area;
- New partnerships and co-creation;
- Sales on Internet;
- Creation of spin-offs;
- Collaborative strategies (for acquisition or production of raw materials; for promotion and dissemination).

There are some aspects that deserve particular attention. The hiring of designers from the markets for which the products are exported, is an important strategy for current and new business models in the ITVP. Indeed, there are markets that cultural aspects are crucial in the success of the product (e.g. markets in Africa or Asia).

Fashion managers were also mentioned as important for certain firms, because they inform about new fashion trends, which allows firms to adapt and anticipate products and production strategies to fit actual and future needs and interests of its clients and final consumers.

Fast fashion, on the other hand, means that firms seek continuously to adapt its offer to the needs and demands identified at point of sale. It is a pull approach for fashion products, opposite to the traditional push approach of fashion collections produced and offered to consumers by season. Furthermore, the sales on the Internet are considered as an additional sales channel which should be added to the traditional ones and not substitute them.

In general, the firms of the ITVP consider themselves very able to produce different types of products, for different markets, as well as consider to have enough flexibility and ability to change the business model if they have to do it. Moreover, firms report that, nowadays, products' (potential) functionalities are huge and the product innovation is currently, essentially, the offer of new or more functionalities. Thus, the production flexibility

and the wide range of possible products are described as two important competitive advantages of the ITVP.

Some of the alternatives are difficult to implement or have a reduced degree of feasibility by smaller firms, in particular such as the application of the concept of fast fashion, the creation of spin-offs, the use of services from fashion managers, among others.

Framework of analysis

Figure 1 presents the main findings and results on the basis of two main criteria: relevance (x axis) and feasibility (y axis).

As Figure 1 shows, there is a number of trends and business models which can be considered more important for the industry considering their level of relevance and their degree of feasibility.

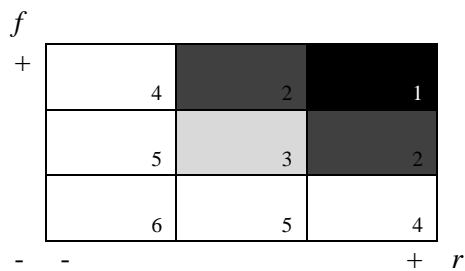


Fig. 1 Trends and business models in terms of their relevance and feasibility

The figure shows 4 (colors) to 6 (numbers) sets of alternatives or possibilities from very important to little important, respectively, from the upper right to the lower left corner. The different strategies can be grouped into 4 different levels as it is shown through the different colors or grey scales in Figure 1.

This framework shows the business trends depending on their level of relevance and degree of feasibility. Firstly, the most relevant possibilities and with higher feasibility (top right), followed by those that are relevant or with high degree of feasibility, these are followed by the alternatives with middle relevance and feasibility, and finally the alternatives that are little relevant or which have a low level of feasibility (no shading).

Levels 1 and 2 are those which deserve most attention because their feasibility and/or

relevance to the industry. Nevertheless, such feasibility and relevance are dependent on several aspects namely, the size of the company, its business strategy, level of technology, among others.

Two generic strategies

An important trend which can be seen in ITVP is the creation of a spin-off when a firm develops a new product, or intends to enter in a new market or doing the business in a new way (i.e. when innovates strategically).

In these cases the firm needs to design a whole new approach to perform the business and even a new identity to the firm, a new branding, which is facilitated through the creation of a new firm, that will be the image of the product and the contact with the clients and the market, even if the skills in terms of operations or production remain in the parent firm. The relationship between spin-offs and strategic innovation is an important aspect that deserves careful consideration.

On the other hand, alternatively, firms can invest in collaborative strategies. For example, establishing ways of collaboration for the acquisition or production of raw materials. This kind of cooperation implemented very recently in the ITVP by some textile firms, allows them to control the supply of raw materials, a critical success factor for some companies and business models.

Furthermore, collaborative strategies for the promotion and dissemination of different but complementary firms and their products are assumed as a very attractive and with a high degree of execution in the ITVP. Since it is not a business model itself, this approach or trend in the business could have important implications in the strategy of the collaborating firms, which can go beyond minimizing and cost sharing. These collaborative strategies consist, for example, in the joint exhibition of products of several firms with a complementary relationship. Or, in other cases, firms develop jointly marketing projects and markets analyses.

According to the interviewees, collaborative strategies are more effective, leading to more

predictable results and faster than the innovation processes, whether the innovation is internal or in co-creation. This is very interesting and also deserves particular consideration. Collaborative strategies tend to be more effective and efficient than innovative processes which are less predictable and last longer periods.

For the most cases of the firms (small and very small firms) the focus is mainly on collaborative strategies with national partners, assigning a medium importance to the creation of new products and limited importance to the creation of spin-offs.

CONCLUSIONS

Recently, many firms of the ITVP have been trying to be more innovative, devoting time and resources to creativity and to look for innovative solutions. However, the results of this effort in terms of innovation tend to be inconclusive or they have been insufficiently translated to the firm's business model.

The ITVP needs to gain new sources of competitive advantage what calls for (strategic) innovation models of greater and faster impact and contribution to the business.

In fact, many firms and many industries need to (re)invent business models that ensure competitive advantages that support a sustainable growth of the businesses in the actual and future markets. Innovative business models, the innovation in the business model or the strategic innovation could play an important role in this process. The innovation of the business model represents what might be considered of non-technological innovation. Being the strategic innovation linked to firms that develop new strategies, which can be disruptive or radical approaches, to face the existing competition and to create new products, new clients, new markets and new ways to do business (Markides, 1997).

In this research project the trends and opportunities in terms of business models for the ITVP were studied. It is noted the importance of the strategic analysis and particularly strategic innovation for the design

of new successful business models. Furthermore, they were identified trends and innovations namely, the use of new materials, particularly new fibers and the use of functional fabrics. On the other hand, two generic strategies were identified: 1) the creation of spin-offs to support disruptive business models and 2) the use several collaborative strategies to leverage business models more related with the status quo of the company.

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