SUPPLY –CHAIN AND LOGIC MODELS FOR THE TEXTILE AND CLOTHING COMPANIES

VISILEANU Emilia [1], ENE Alexandra [1], CĂRPUŞ Eftalea [1], MIHAI Carmen [1], SCARLAT Răzvan [1]

[1] *National Research and Development Institute for Textiles and Leather, Bucharest, Romania, Postal address: Lucretiu Patrascanu st. no 16, 030508, Bucharest, Romania*

Corresponding author: Emilia Visileanu, visilean@ns.certex.ro

Abstract: *The textile and clothing industry is characterized by specific supply-chain models with companies situated in a complex cluster type structure. Depending on the size, the volume and the variety of production, companies can be classified as follows: large companies, griffes, medium size companies and subcontracting companies. The logic of companies is defined by the main feature of the textile and clothing field, namely the logic of collections, determined by the seasonality and classified into several types: planning, fast -fashion, fast fashion/ planning. The market share defined by stylistic content, product quality and price determine their typology: mass-market, bridge, difusión, prêt-a-porter/haute-couture. The study conducted on a number of companies in the textile-clothing industry revealed the following: high share of SMEs (75%), dominant role of garments in the production (74.5%), fast-fashion logic of imitating companies is predominant (94%) and mass-market type products have the highest market share (71%).*
Success in national and international challenges that must be faced by the textile - clothing sector: complete liberalization of world trade, the implementation of quality standards, the adoption of the EU Customs Code and relocation can be provided only by changing the supply -chain models and business strategies with a focus on short series products with high customization and functionalization, new models of e-commerce services, e - business, etc.

Key words: griffes, fast-fashion,seasonality, mass-market, customization .

1. INTRODUCTION

The fundamentals that make up the strategy, management and organization of a company are determined by key strategic factors: business model, supply- chain characteristics and competitive positioning in the market.

Business models currently adopted by companies in the textile and clothing field are characterized by specific features and distinct evolution trends, which determine the short and medium term competitiveness of companies. The main production and organizational dynamics that occur during the *supply chain* [1] require increasing need for coordination of the supply chain, which is the basis of competitive advantage in the field.

Business models are chosen based on current and future market opportunities, the capital needs to start a business, the possibility of developing strategic partnerships, and especially the distinctive competencies of the entrepreneur and human resources available [2].

It should be stressed that today the term "industry" is increasingly replaced by the "system", understood as a vertically-integrated sector, with reference to the entire supply chain [3].

In most cases, enterprises are located within a large network consisting of supply relationships, depending on a variety of products, technologies and specific materials and the need to manage relationships in a coherent manner.

Overall, this system can be seen as an aggregate of enterprises, like a sector cluster, that is a group of business operators and organizations whose competitive advantage is enhanced by the mutual relations and connections established and strengthened. Cluster sectors have variable importance and share, but are closely interconnected.

2. EXPERIMENTAL STUDY

In this context the textile and clothing industry in Romania is a dynamic sector in the national economy with a high level of performance and it employs major workforce, mainly women; contributes to the social stability, being represented in all the country's counties; has a significant share in the national economy's exportation; contributes with positive balance to the country's external trade balance.In 2012 the textile and clothing industry has achieved the following shares in Romania's macroeconomic indicators: 2.74% of GDP; 4.4% of industrial production; 10.89% of exports, 7.98% of imports; 17.2% of the total number of employees in the industry.

Textile industry faces a number of challenges at national and international level which determined changes in the structure and organization of the production.

The study performed at national level during 2010 - 2013 shows that the structure of the *supply chain* in the textile and clothing industry is grouped into four main segments [4], which develop vertically and in other two other segments which can be considered connected and serve to support the entire supply chain, i.e. the mechanical-textile sector and advanced tertiary sector (trade fairs, technical and *design* schools, promotional and communication services, etc.) - (Fig. 1).
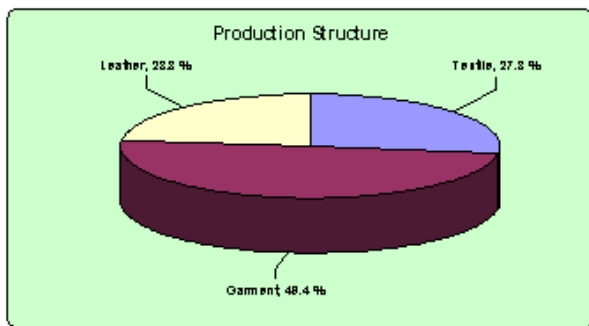

Fig.1: *Supply –chain*

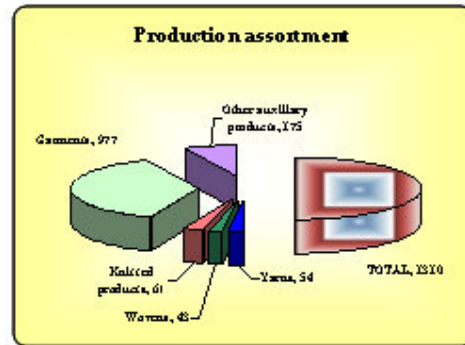***Chart no.1:*** *Production structure*

Chart no.2: *Production assortiment*

In 2012 the national production structure included: 27.3% textiles, 49.4% garments and 23.3% other articles- Chart no.1. In the study performed on a number of 1310 companies located throughout the country, the results shown in Chart no. 2 were obtained, which show a radical change in the structure, namely: yarns: 4%, fabrics: 3.5%, knitwear: 4.7%, garments: 74.5% and others: 9.5%.

A significant increase can be seen in the share of clothing sector which represents in the industrial process the link of the chain with the lowest added value and with low competitive advantages in time (as a result of the weak specialization and *labor-intensive* connotation*)* but it represents the fundamental link in the sector's dynamics, as it has the role of the manufacturer of the good for the end consumer, who perceives it as a main actor of such process. The competitive advantage of the enterprise in this sector is not conferred by the industrial process, but by factors such as image, brand, distribution.

Depending on their size and position on the market, the companies in this field may be [5]:**large industrial companies**, often integrated in textile holdings, which provide a complete range of products from different sectors and companies of large sizes, with a very strong trademark image, competitive on the international markets ;***griffes***, with a range of products presenting an increased degree of diversification, exceeding the field of clothing products and including accessories, perfumes or home items***;*medium** offering a more reduced range of products, manufacturing their own trademarks or under license and which are oriented over specific sectors, such as, for example, men or women clothes, *casual sport-wear, active wear*, underclothes or stockings;**big international companies**, which are characterized by the control of design and logistic activities and by a global procurement activity.The size of the Romanian companies in 2012 is presented in Chart no.3.

The results of the study prepared and presented in Chart no. 4 show a significant share of SMEs, of about 75% but also a significant difference as compared to the large companies (18.8% as compared to 2.0% nationally)
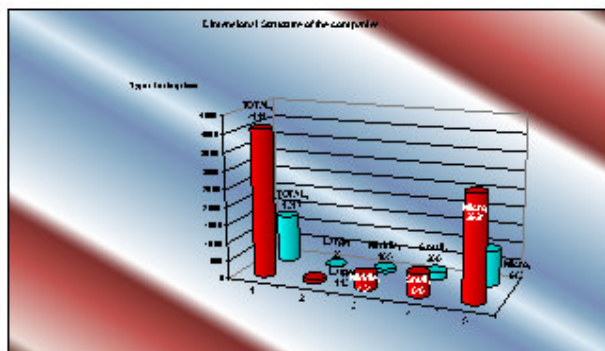

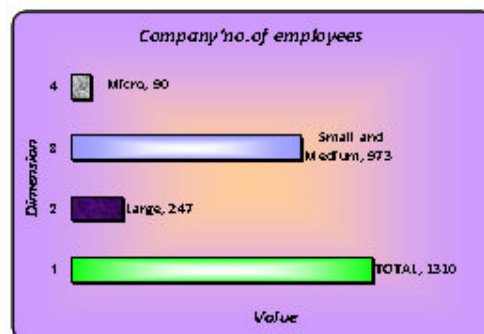*Chart no. 3: Dimensional structure of the companies*

Chart no.4: Company`no.of emploees

Depending on the market share addressed, the following types of textile products made by the companies have been identified (Fig.no.2):*mass market*, characterized by low price and simple stylistic content: they are basic products, weakly differentiated; ***bridge*** products are those for the intermediate market share, therefore products with a certain stylistic content, but with affordable prices for the majority of persons;***diffusion*** products address to the intermediate-superior market share, made of a narrow circle of wealthy persons, with financial resources; ***prêt-à-porter*** products, representing the synthesis between the programmed clothing industry and the *haute couture*;***haute couture*** products: characterized by their fame and by the high fashion content of items made straight to the shape, the symbol of an exclusive market share.

For a total of 1310 campaigns (Chart no. 5) the results showed that the products with the highest share are: ***mass-market*** products (71.0%) and ***prêt-à-porter sau haute couture*** products are not so common in the national production.

The company's business model is strongly influenced by one of the characteristics of the textile-clothing sector: the logic of collections is determined by the seasonality. This deeply influences the operational activities of the companies in this sector. The seasonality character acquires various meanings, depending on the adopted operative logic. Depending on the production calendar and the frequency with which the collections are made, there are three types of companies:
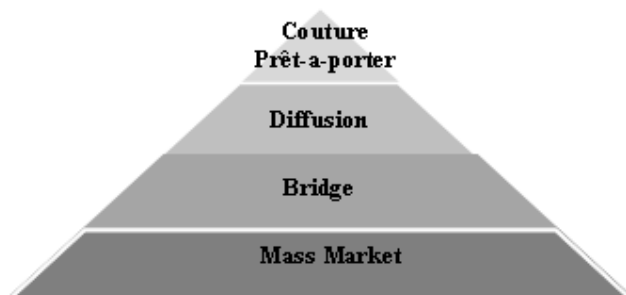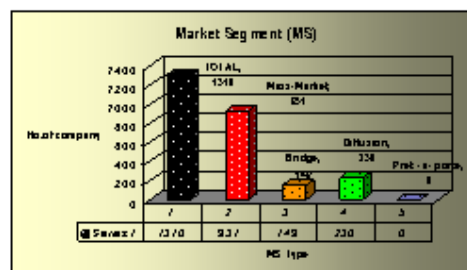

Fig.2: Types of textiles

Chart no 5:

- **planning company,** which consists in manufacturing products which anticipate the market's trends and represent mainly by the enterprises situated on the superior market share, those creating fashion trends, known as *market makers.*
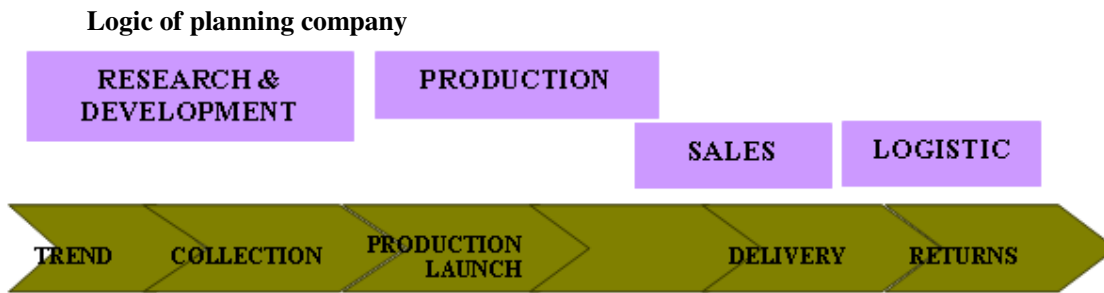
Logic of planning company

Fig. 3: *Logic of fast-fashion company*

- fast-fashion: (fig.3) adopts the opposite logic, following a "*pull*" type strategic orientation and producing for stock: due to their proximity to the market and the rapidity of responses, these companies launch high fashion textile products in accordance with the customers' requirements. They are, thus, "imitating companies", which manufacture small series models, following the signals issued by the fashion market (magazines, fairs etc.).

- *fast-fashion/* planned: was conceived to combine the advantages of the planning companies (stylistic originality and, consequently, strong brand identity) with those of the *fast-fashion* companies (quick reaction to the market signs, re-procurement speed). This solution involves the manufacture of season collections, which are completed with other models or mini-collections, manufactured based on the evaluation of the recorded trends and the sales feedback.

The results obtained in the study show (Chart no.6) that the share of companies in Romania is mainly based on fast –fashion logic (94.0 %) with „imitating" companies.
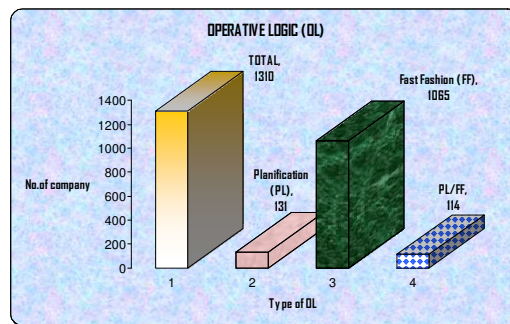

Chart no.6: *Types of the companies*

3. CONCLUSIONS

The success to the national and international challenges that must be faced by the textile-clothing sector, represented by the complete liberalization of the world trade, the implementation of quality standards, the adoption of the EU Customs Code, relocation, can be provided only by changing the supply-chain models and business strategies with a focus on short series products with high customization and functionalization, new models of e-commerce services, e-business, etc.

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