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## **XIX International Triple Helix Conference – 2021**

**TITLE:** Stages of the Portuguese textile, clothing and fashion sector - a case of the triple helix model

**TYPE:** Practical case/experience analysis

**TRACK:** Other topics related to Triple Helix

### **PURPOSE:**

The textile and clothing system (TCS) is composed of a long, complex, and highly interdependent value chain driven by fashion, an activity with a high degree of innovation in products, processes, raw materials, and distribution. It has significant importance in the economy of several countries and has become intensely competitive with the liberalization of international trade promoted at the beginning of the century, with the entry of new producing countries, such as China, and the consolidation of new business models towards the digital transition. To maintain or increase the competitiveness of companies in the sector is necessary an intense training and integration of all players in the chain, an ideal scenario for the Triple Helix Model (THM) application, an innovation model that refers to a set of interactions between academia, industry, and governments to promote economic and social development.

Portugal, in its northern region, went notably through three very distinct phases in the sector in the last thirty years: from traditional industry largely protected by import quotas until the end of the 1990s, it went into a deep crisis at the end 2000s, and is now internationally recognized for the quality, technology, sustainability orientation and service level of its products. To achieve this level, participation and integration between companies, educational institutions and the government was crucial, and needs to be recognized and understood in depth.

The objective of this work is understand and describe the Portuguese case, to contribute with the knowledge in the field of the Triple Helix, mainly answering the question: was this development planned or did it happen spontaneously?

### **DESIGN/METHODOLOGY/APPROACH:**



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Even though the TCS is characterized by a large number of players in the number and type of activity of the companies, the Portuguese case has as a peculiarity the large number of business associations that permeate the entire sector with intense activity. The knowledge of this dynamic demanded a deep immersion in this sector and, to this end, in addition to desktop research on the triple helix and innovation themes focusing on definitions, models and case studies, we participated in several events, such as fairs, congresses and lectures among others, with the objective of identify the main players and the activities developed by them. This resulted in twenty interviews with fifteen interviewees: seven presidents or those responsible for associations, six university professors responsible for courses in the sector or for the institution itself and two responsible for government actions. The interviews were submitted to the content analysis process, with aiming to obtain keywords and describe the scenario and understand how this process occurred.

#### **FINDINGS OR EXPECTED OUTCOMES:**

Over the past thirty years there has been a clear paradigm shift in the sector that went from traditional industry focused on price, to a quality-oriented industry, technological advanced and concerned with sustainability, with fast responses, short lead times and one of the quickest time-to-market in the world.

The need for companies to respond to market dynamics was the main factor in the innovation process. Portugal is a small European open economy accustomed to thinking globally. Most of its companies are of a family nature, therefore more willing to risk, with a collaborative culture, and with important competitive advantages such as the relatively competitive labor cost. At the same time, these are companies that are part of a complete cluster in the sector's value chain, concentrated geographically within a radius of 50 kilometers and less than 200 kilometers from the headquarters of the largest clothing producer group in the world, which has expanded in the same period: the Inditex Group. This group has largely used the Portuguese industry as a service provider and transferred knowledge and technology there.

Another peculiarity of this sector is the existence of a large number of business associations, with strength, representativeness and an intense level of activities and correlations, which assume in part the functions normally belonging to governments.



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Universities and teaching centers are another fundamental pillar for the results obtained by the sector. Pressured by the lack of students, as a result of stagnant or declining demographics and the prospect of having courses closed, they went in search of companies, changing the old paradigm of “teaching what they wanted”, to re-design the necessary profile of employees with companies for the growth of the sector and to carry out joint projects of technological development, to support researchers not only in the research processes, but also in the patents and marketing innovations. The income from these activities, led universities to more interesting levels of profitability. At the same time, either because of the tuition fees obtained, because of the growing demand and interest on the part of young people, or because of the opportunity for successful patents, universities and teaching centers have achieved a new economic breath.

In the third pillar of the THM, the government apparently had a greater participation at the beginning of the process as a whole, in designing strategic macro policies and prioritizing sectors for its development in the mid-1990s. Since then, it has concentrated more on the distribution and control of European community funds’ investments, decisive in the sector's growth process. The government has relatively little interference in activities, and is more linked to arbitration, respect for the rules of the funds, while leaving the development and implementation of the strategies to the associations, companies and universities. If, on the one hand, this attitude was well received, with the opinion that “helps a lot who does not get in the way”, there are also interviewees who understand that the government could have greater control over the overlapping activities of the associations, and with its more aggregating and to create and encourage even more cross-synergies between these entities.

Regarding the THM, only two of the interviewees, directors of business associations, declared that they knew the model, allowing us to suppose that apparently it was being configured spontaneously and informally, according to the needs of each of the propellers involved, and that there was no integrated policy, thought from top to bottom, but each of the players has been building their plans within the great limits laid out for many years, according to the logic of adaptation to the market, in a dynamic known as bottom up.

**ORIGINALITY/VALUE:**



We did not find in the researched bibliography any study on the THM that used the textile, clothing and fashion sector as a study object, which is quite complex, dynamic, diversified and interdependent. The reported case, on the other hand, has very specific and peculiar characteristics, and the proximity of the researchers to the sector gave accessibility to a rich collection of data. Finally, the case shows a situation with few reports in the literature, the development of a model in an informal and spontaneous approach, and therefore in an approach closer to the bottom-up system.

### **PRACTICAL/SOCIAL IMPLICATIONS:**

Currently, there is great socioenvironmental concern in the sector studied, considered one of the most polluting in the world and subject to issues related to employment patterns. Greater integration between its players may result in significant evolution in this ecosystem and in social and environmental gains for the sector and for the planet. The results of our investigation allow to comprehend better which doses of articulation between players may be better to lift sustainable goals.

### **DIRECTIONS FOR FURTHER RESEARCH/LIMITATIONS:**

This study may be useful for other countries or sectors that are willing to apply the THM, and for the continuity of the studies, mainly (1) verifying if the formalization of the model can be carried out and its effectiveness, (2) comparing the development of the Portuguese sector with that of other countries, (3) helping to define the key factors for the successful application of THM.

### **KEYWORDS:**

Triple Helix; fashion, textiles and clothing; bottom-up

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