## **Regional Transformation through Design**

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#### Abstract

IPCA (Polytechnic Institute of Cávado and Ave) is the most recent Public HEI in Portugal, founded in 1994, in the Minho region. The School of Design (ESD) is one of four schools, offering a broad range of Bachelor, Master and Professional Short-cycle Courses. Beyond education and applied research, ESD is committed to regional, national and international cultural and artistic activity and to the fundamental role that Design has, and can have, in the society and in the regional development. In cooperation with some national and regional development agencies and programs, ESD planned a training project for small businesses and companies in Minho. It included a capacity building training program through Design, knowledge transfer at the level of communication design, digital design and product design for companies of predominant areas in the region such as textile, ceramics and wine industry. This industrial context is formed by small and medium-sized family businesses that have been recognized by the quality of its products. However, there is a lack of visibility of the existing brands and services offered, resulting in a decrease in competitiveness. This is where the design thinking strategy can help: in the systematization and sharing of the information available and in the creation of a tool kit that enables small businesses and companies, to improve their communication strategies and boost their real and virtual presence in the global market.

The activities carried out included:

- Analysis/diagnosis 'Innovation through design in Cávado companies';
- Web platform of the project "https://web.ipca.pt/dei/";
- Design, Companies and innovation Forum.

We intend to present the results and future intentions of this project, considering that this companies are the principal employers of our students.

We aim to continue with the project promoting actions like:

- Design weeks;
- Exhibitions;
- Design Innovation Lab.

We believe that, as a school, we are fulfilling the mission of polytechnic higher education in relation and training of companies. the work was developed by ESD researchers and teachers, and is currently being extended to undergraduate and masters students who have participated actively in the business forum already held. Research, knowledge transfer and teaching through practice are at the heart of design education.

Keywords: Design, Knowledge transfer, Region, Companies.

#### 1. Introduction

Design and design are part of the social, cultural and economic contemporaneity, being an active agent in the symbolic construction of our daily experience with the world. It is a global territory that deals with methods, strategies and creativity, and is called to respond to new and more complex challenges.

The project "Regional Transformation through Design" ("Capacitar pelo Design", in Portuguese) is an action that develops according to this emergent theme within design – design as a strategic constituent for companies and innovation. By the developed action we believe to be constructing a conscious knowledge and an acknowledgment of how the design happens in this territory, how it triggers its action and what mission it has yet to accomplish. Design, in this contemporary environment, engages in issues beyond its traditional configuration and action, extending to other areas and using its integrative profile to promote interdisciplinarity and interaction with all actors involved in the process.

It aimed at making a diagnosis of the current performance of a selection of companies in the Cávado region at the level of innovation by design, namely in the offers based on the identity elements and endogenous resources of the territory. This diagnosis allowed, on the one hand, to know in a deeper way the current behavior of the companies of the territory in terms of the use of the design as tool of

differentiation and creation of value. On the other hand, it allowed the identification of needs, and practical and concrete difficulties of the companies regarding this innovation by design, generating a set of concrete challenges to which it will be possible to respond with the other activities foreseen in this action.

The project involved the analysis of companies in the areas of textiles, ceramics and wines, as they are strong export areas in Cávado. The selection of companies was the responsibility of the project promoter, and it allowed a state-of-the-art analysis of design innovation. It is intended to be a project that promotes discussion and future action, providing insight into the possibilities of design, recognizing its multiplicity, its multiple creative processes, results and its relevance to organizations and companies. In this organizational and corporate interpretation, we believe that design becomes a component for development.

#### 2. Design as a constituent for the development of organizations

We see the increased interest in industries, publics and markets, on how design can contribute to the development and growth of organizations, creating new frontiers between theory and practice.

Design is at the center of the economy and culture or, in a more tangible way, the creative economy. The definition of design must be understood in a holistic, strategic and integrated perspective: through economic development, social cohesion and culture. It aims to contribute to the development of organizations, as an active strategic constituent in the processes of management and change. Thus, creative processes aim to optimize corporate performance involving innovation, quality, product appearance, environments, communication and brands. The materialization of these ideas is the result of the focus on developing the right solution for each project, reinforcing the message, linking codes and languages and valuing the needs and desires of the public.

#### 3. The School of Design (ESD) and the regional territory

ESD is one of the four schools of IPCA is currently headquartered at the IPCA Campus in Barcelos. With a vocation for higher education in design and for applied research in this area, it begins its scientific and pedagogical activity in the academic year 2015/2016, offering undergraduate, master's and technical superior professional courses.

With a young faculty, constantly in training, and equipped with classrooms, workshops and laboratories with current technology, conditions are created for the accomplishment of transversal and specific activities, allowing its students to experiment, test and produce in a way accompanied by the teachers. This environment inspires its students and teachers with the notion that their effort and know-how make their scientific and formative project a reference in the field of design in Portugal. The courses cover a complete set of different areas of design in order to provide students with skills that enable them to respond to the challenges of the professional market, along with a theoretical and conceptual training, they offer a strong preparation in technological areas, directly or indirectly related to the design.

ESD's mission is to contribute to the development of society, stimulate cultural creation, research and applied research and foster reflective and humanistic thinking, providing areas of knowledge for the exercise of professional activities. Integrates ID+ research Institute of Research for Design, Media and Culture, a multidisciplinary research center anchored at ESD-IPCA, University of Aveiro and University of Porto.

#### 4. "Regional Transformation through Design"

"Innovating by Design" was the founding principle of the project presented here. This is an action that develops according to this emerging theme within design – design as a strategic constituent for organizations and innovation.

Today, concepts of innovation and design appear at a central place as economic, social, symbolic and even utopian vectors in our societies. In the current scenario of regional development and internationalization of the economy of the region (NUT III Cávado), the promotion of design is considered by the promoters and ESD as a primary constituent to create an identity and added value to specific outputs of its local industries. In the globalized market – and therefore highly competitive – design presents itself as a tool that will allow the differentiation, both at the level of processes and at the level of results.

The exercise of diagnosis of the current performance of companies in the region of Cávado involved, in terms of innovation by design, contributes to the development of these ideas, prospecting and pointing solutions that can be aggregators of this territorial context. The business training workshops,



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implemented in the first phase of performance diagnostics at the level of design innovation, focused the work on a research interview organized in two parts. In the first part, we sought to gather relevant information about the company and its performance, tangible and validated data; in the second part, discussion was developed to diagnose the presence of design and innovation, namely through the perception of the use of design and reflection about their potential for entrepreneurship training.

The outputs generated in this diagnosis are shared and participated discussion, seeking to be a driving force for the local, local and business agents of this territory, pointing out ways and good practices that can help in the dynamization of design.

We believe that this response will remain up-to-date and relevant, especially when reinforced with the diversity of frameworks that are assigned to design. The discussion of strategic options to improve this performance, at this moment and as an output of this initial discussion, allows the definition of collective guidelines for the action of Cávado's companies. These can and should be interpreted in an individual sense, defining specific plans - this is the challenge!

The project aims at becoming a dynamic laboratory with impact in the region where it is being developed, activating agents and organizations around this discussion about the potential and relevance of the transformation of the region and its organizations based on the best good practices of design and innovation.

In the context of the research work carried out, the entrepreneurship training workshops were prepared by the team of researchers involved, according to the development schedule, between May and July 2018. They enabled the construction of a corpus of first-hand knowledge, which constitutes the first identification of concrete needs and difficulties of the companies in this territory of Cávado and of companies from three of its most important industries. This are regarding innovation by design, but also identifying opportunities to share experiences. This should be interpreted by all involved as an exciting starting point for transforming and improving the region.

#### 5. Conclusions

Design, in its relationship with industry, economy, territory and culture, faces complexities that prevent it from remaining focused only on the product and the means for its production. The intricacies within the product involve the high cost involved in launching a new product and the resulting decrease in error tolerance as well as the difficulty of predicting suitable processes for planning the solutions required in totally new situations. On the other hand, complexities external to the product involve the prediction of side effects for each new product, international standardization in terms of technologies and the impossibility of avoiding incompatibilities between products.

It is within this proposal, from a broad view on design, and recognizing the analysis that we perceive from contact with companies, that we affirm that the participation of design in the strategy will be more recognized as the designer may be involved or aware of its influence in whole system. The results that will be generated from this project will be continuously monitored and analyzed by ESD.

In practical action, this will demand a collaborative and systematic dialogue with the agents involved, the definition of problem and solution, and the integration of designers in companies. When the emphasis is on technology alone, you think about how to solve a problem; when you think of meaning, you think of "why". Therefore, design should not be interpreted as a tool to create pleasing forms, but must anticipate a need and propose a vision. Innovation should not be the end, it should be the creative instrument that contributes to development. Design is today promoted as a tool of efficiency and differentiation, to create and implant a corporate culture, integrating all stages of product development. Design takes on this optimism, which is transmitted to organizations and to the collective discourse. However, this optimism has to be configured according to the particularities of each company and each business area, in order to differentiate products, increase competitiveness, optimize processes.

The project presented here will be not the end but rather the starting point for this transformation of the territory and its industries.