



SEE DESIGN

Sharing Experience
on Design Support
for SMEs

Case Study of Good Design Support Practice

This case study is a snapshot of activities taking place during the lifespan of the SEEdesign project from 2005 to 2007. For updated information please contact the organisations directly.

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**PROJECT PART-FINANCED
BY THE EUROPEAN UNION**

Spain

PREDICA – Promotion for a Competitive Industrial Design

Technology Centre for Promotion of Industrial Design and Manufacturing (PRODINTEC)

The PREDICA project was launched in 2005 by the Technology Centre for Promotion of Industrial Design and Manufacturing (PRODINTEC) in order to disseminate the benefits of industrial design among SMEs in northern Spain and to provide guidelines for the implementation of a design management methodology within the companies. Due to the success of the first project, PREDICA is now an ongoing initiative implemented as PREDICA II.

The project was a response to the general lack of interest shown by SMEs for Industrial Design in the northern regions of Spain. This lack, combined with short and medium term problems resulting from the absence of creativity and innovation among SMEs, was leading to a migration of companies to areas where raw materials and human resources were cheaper.

The project developed an easy and comprehensive methodology for performing and managing design activities and a number of SMEs participated in a pilot project which aimed to prove, qualitatively and quantitatively, the benefits of design for all kinds of companies.

The project targets SMEs in northern Spain, in the regions of Galicia, Asturias, Cantabria and Castilla-Leon and is funded by the Spanish Ministry of Industry, Tourism and Trading, the State Society for Design and Innovation and by FEDER (EU). The total budget for the project is €450,000.

PREDICA is a vital component of the work of PRODINTEC and an expression of its principle that the introduction of appropriate systems for performing and managing design within companies results in a substantial improvement in competitiveness. PRODINTEC has the experience and expertise for analysing a product from a number of perspectives in order to determine how design is integrated within a company and advise on how to improve that integration and so performance.

A team of engineers and designers with experience in research and development, education and design project management ran the project.

Before engaging with the SMEs this team worked with an external consultant to define the design methodology and create an auditing system to assess the situation of the participating companies in relation to this methodology. The consultant was selected on the basis of their ability to communicate with SMEs and provide a strong methodology through a balance of expertise in both theory and practice. The audit schemes were defined by the consultant and PRODINTEC through a process of documentation, reviews and company visits.

The team then worked with the SMEs in two phases. In the first they compared the design activities of 85 SMEs with the methodology they had developed. Each company was then given a series of recommendations based on this analysis. In the second phase, 60 of the 85 SMEs were selected to participate in a pilot project in which they collaborated with professional design companies and practitioners. Companies were selected on the basis of their potential for design development and also, in some cases, through regional networks of SMEs. Figure 1 shows the number of audits, predicted and actual, in the four areas participating in the project.

Performed vs Predicted number of audits per region

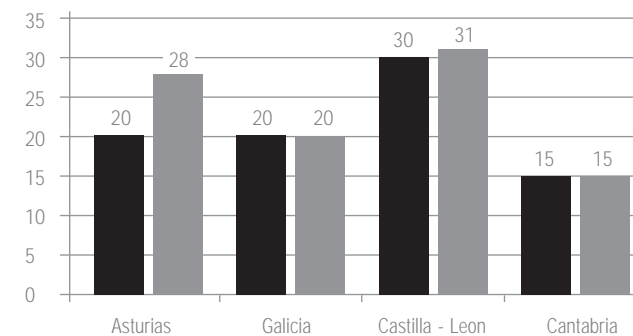


Figure 1: Audits performed per area

Project with SMEs per region

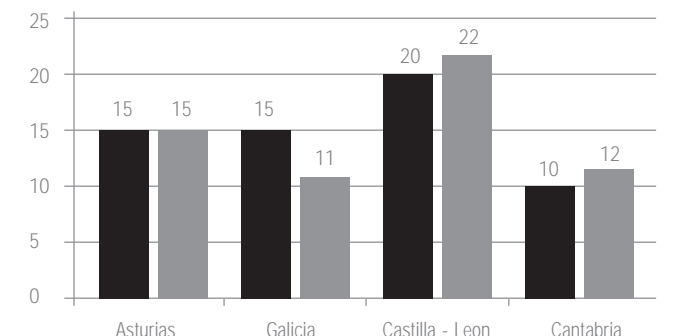


Figure 2: Projects per area



Figure 3. Oil gun for heavy machinery company made by external designer as part of the PREDICA project. The aim was to design the gun so that it was easy and fast to connect, ergonomic to use and robust. The aesthetic appearance was enhanced as well for both versions, manual and electric.

In all cases the relationship between SMEs and their external designer was monitored by PRODINTEC with a strong and fluent communication being encouraged in order to achieve satisfactory results from the projects. The designers were selected according to their experience and capabilities with regards to the SME they would be working with. A key factor in the process was the degree of understanding of the needs, possibilities and philosophy of the company by the designer and vice versa. This is where the reports generated by the individual audits helped PRODINTEC to find the 'best fit' for each company. In all cases final decisions about the projects and the designers were taken by the SME itself.

The main problems arose from defining the brief, in terms of conceptualization of the desired new product. In some cases the SME was not able to identify the market for the product proposed by the designer. Another key issue was the industrialization of the product due to the, in some cases necessary, change of mind in terms of manufacturability, process, providers, logistics. Nevertheless, PRODINTEC acted as intermediary to foster this change and make the transition as easy as possible. The next figure represents the number of pilot projects per area.

The companies came from a wide variety of sectors including basic manufacturing, lighting, furniture and the automotive industries. Some were more prepared to introduce or implement new design methods, especially those traditionally driven by design (e.g. lighting, furniture) and for them

the PREDICA project was a great success. As the first project to promote industrial design in the regions, PREDICA was strongly innovative. However, the companies accepted the programme and perceived benefits from their participation. All plan to increase their sales as a direct result of new design strategies and many of the companies have created structured design departments and methodologies for product lifecycle management.

PREDICA has created a network of design-aware companies which are investing in strong design implementation and optimised methodologies. Some of the companies have received very positive feedback about their PREDICA designed products at trade fairs. Another company has increased the speed of communication between the production and engineering departments as a result of the design departments new structure. Other companies have acquired software and training for CAD, CAM and have initiated product lifecycle management (PLM) processes.

Success of the project depended on the active involvement of the SMEs and most especially the managers responsible for strategy and policy. Another key factor was the collaboration between external designers and the company's engineers or those responsible for design. Communication between these two and the manufacturing of products designed by external designers was not always easy and it was PRODINTEC's task to promote this communication and solve any major problems that arose during the process.

It became clear that some SMEs were resistant to changes in their structures and working methods, but this was eased by strong support from regional government and by grouping SMEs with similar problems together.

The programme is seen as a successful means of producing results progressively, enhancing the productivity and profitability of SMEs over time.

PREDICA invites other organisations in Europe to contact them if they are interested in creating European Project Consortia under FP7, INTERREG IVC, etc.

For more details go to:
www.prodintec.com