

THE ROLE OF DESIGN IN THE CERAMIC SECTOR

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ABSTRACT

As a general summary and as the initial conclusion of the project presented below, it should be noted that the sector's current use of design tools is lagging far behind the level required to enable the current market system to survive. The analysis also shows us where we stand and what kind of action we need to take in the future to allow the ceramic industry to stabilise and have potential to evolve in a competitive market.

The results of the research¹ are presented in a schematic format to allow companies in the ceramic sector, according to their current use of design as a tool for competitiveness, to take advantage of some of the design competencies through good management, and to emerge from the situation they find themselves in. The scheme used, which is based on the Design Ladder Model, SVID (Swedish Industrial Design Foundation), is as follows:

¹ The information presented in this paper may be consulted in greater detail in the research publication "The role of design in the ceramic sector".



Level 1: Use of design is anecdotal and requires no specialised management.

Level 2: Design is used sporadically in some projects. **Level 3:** The company has integrated design as a management tool and has a specific design policy.

Level 4: Companies that use design in a strategic plan.

Design competencies for integration are proposed on each level, as well as potential market opportunities and the achievable competitive position. Most of the companies analysed are in level 2 and some are in level 3.

1. INTRODUCTION AND OBJECTIVES

“Why we did this project and what we sought to obtain”

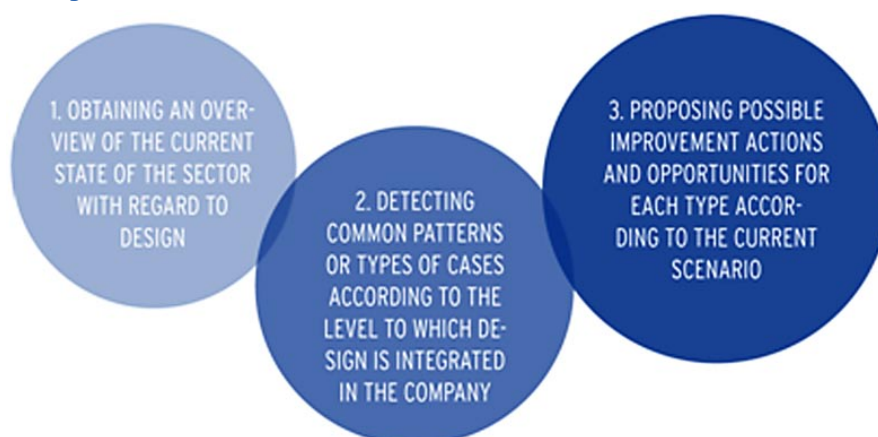
One of ITC's project research lines focuses on design management in the Castellón ceramic tile sector. By 2001, ALICER had already become involved in this type of activity with its initial comparative analysis of Spanish and Italian companies with regard to the use of design. The research looked at how the decision on whether or not to have a design department affected design abilities and, when such a department did exist, what its position was in the company's organisational chart. Later, in 2007, came “Design management to better meet user needs and perceptions”, a project subsidised by IMPIVA as part of the Design Promotion programme, whose main purpose was to “create a work dynamic to help improve design management for a closer relationship with end users in SMEs in the tile sector”. The intention was for the product design process to be closer to the final consumer and consequently to take the market information into account, in line with efficient design management.

This was a two-year project. In the first year several companies with an interest in design-related aspects were selected, analysed, and evaluated and strategies were proposed with a view to incorporating or revamping their design management processes. Later, in the second year, the idea was to run a pilot project with some of the companies analysed the previous year to develop and present “success stories” to encourage incorporation of design management into business strategies, considering the users as end consumers.

Because of the economic situation since 2007 and the business climate, all activities for the second year of the project were put on hold.

In 2010 the project was resumed, assuming that a review of the situation in the tile industry in terms of its use of design and design management would put us in a position to be able to improve the profitability of ceramic sector companies according to their business structure.

Initial objectives of the research



We believe that good design management will be one of the keys to the tile sector in the coming years. Design has always been an essential factor for improving business competitiveness, because it is a bridge between innovation and creativity.

2. INVESTIGATION PROCESS

“Planning is vital and determines our goals”

To conduct this investigation, a group of experts was established comprising Xènia Viladàs, design management consultant; Manuel Lecuona, Professor of Design Management at the Polytechnic University of Valencia; and Cristina Serrano, designer and design manager, who, in collaboration with the ALICER-ITC team, carried out the phases planned for the correct completion of the research.

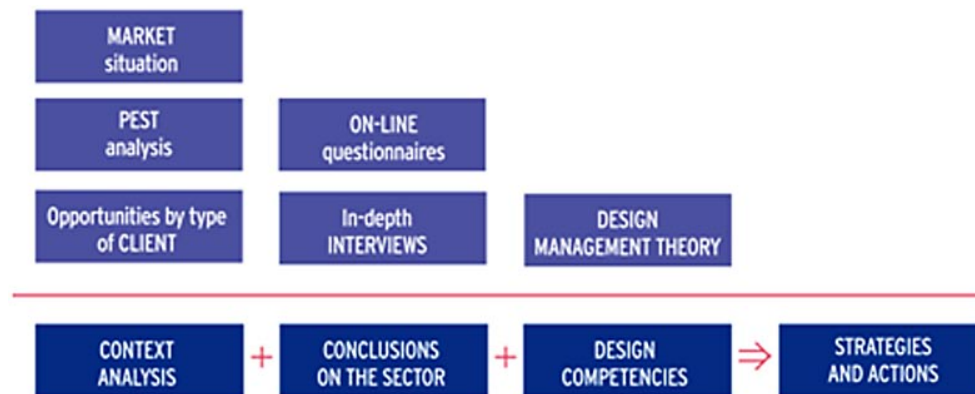
Research phases



In the approach used to address these phases, the group of design management experts met regularly to prepare, among other aspects, the entire research study process, with on-line questionnaires, scripts for interviews, scheduled data collection and analysis. They also created group dynamics such as debate workshops where they pooled all the information gathered and analysed, presenting different articles on the evolution of the market to allow them to progressively define the ideal strategies and actions for the ceramic sector.

At the same time, they also used face-to-face interviews with companies to find out their opinions of the sector and the paths they intended to follow in what is generally an uncertain situation. These small debates revealed the feeling of uncertainty in today's market and how most companies are hoping to increase their market share by offering good service and cutting costs, putting off all kinds of long-term activities which might lead them to position the product in the uppermost segments of the international market.

Conducting the research



3. RESULTS OF THE RESEARCH

How have sector companies integrated design?

The sector has to stay ahead of market expectations rather than just responding to them. This involves some risk and difficulty, which can be reduced by suitable integration of design competencies, as set out further below.

In effect, design has the competencies and abilities needed to address complex problems and the capacity to put creativity at the service of a business strategy. The companies that grow most in the market are those that invest most in design, though not necessarily and not always because they have a better image, but because they stay ahead of trends and respond more quickly and better.

This section therefore presents a summary of the results drawn from an analysis of the context and conclusions of the sector, focusing on the most important aspects, where design competencies can help when it comes to taking strategic decisions within the company.

3.1. Conclusions of the sector

“Analysis of design in the sector”

To be able to draw suitable conclusions, a consistent structure was followed when compiling and analysing information from the interviews and the on-line questionnaire. They were organised by starting with the more general aspects of a business and gradually adding more and more detail; in other words, beginning with the more strategic and common part and then on to all functional areas of the company, going down level by level to reach the most vital design issues. This structure matched most of the examples analysed and also ensured consistency with the questionnaire administered during the first stage of the project.

STRUCTURE OF THE INFORMATION ANALYSED

- Design and context of the companies' business
- Design in the companies' organisational chart
- Which factors are most relevant in a company's success
- Integration of design at strategic level.
- Distinctive features of design in companies
- Areas of action of design in companies
- New models strategy
- Communication strategy
- Integration of design at policy level.
- Leadership of design activities in companies
- Design services characterisation
- Outsourced design service contracts
- Specialised design management in companies
- The value of incorporating design

The results of the interviews were analysed, and they confirmed what had been learned from the on-line questionnaires. To summarise, we would venture to say that:

- Design is used only sporadically and to resolve one-off situations, especially with regard to the product.
- Given that design is used only occasionally, there is no specific knowledge of the subject, nor are adequate structures created.
- Competitiveness is based more on prices and distribution networks than on design content, so no actual design policies are conceived.
- The obvious conclusion is that design is not part of organisations' strategic planning, nor do they contemplate the more advanced competencies that design can bring.

Some of the companies interviewed varied slightly from the behavioural pattern, but the research conducted confirms the idea that the ceramic world has a long way to go in the design field.

3.2. Design competencies

How and in what areas can design help me?

By combining an understanding of ceramic sector companies' management practices through questionnaires and interviews on the one hand and market analysis on the other, the team identified areas for improvement where design can be an efficient competitive tool for the sector. Final strategies are defined that propose orderly activities for large groups and will identify what each can contribute to design, differentiating between:

3.2.1. Traditional design competencies

Those which basically consist of conceiving products taking the user into account, limited by production possibilities and trends. To do this correctly, a minimum management base is needed to allow all the potential of design to be harnessed.

3.2.2. Advanced design competencies

Design competencies taking a more strategic, prospective view, which define complex sets of products and services. In this case, what is required has more to do with an attitude to incorporating design than the design practices themselves and their implementation involves the senior decision-making levels of companies more than their operational levels.

Given the situation of the sector, it is not possible to recommend generalised use of any particular competencies, but that they need to be introduced on a case-by-case basis according to different needs and possibilities.

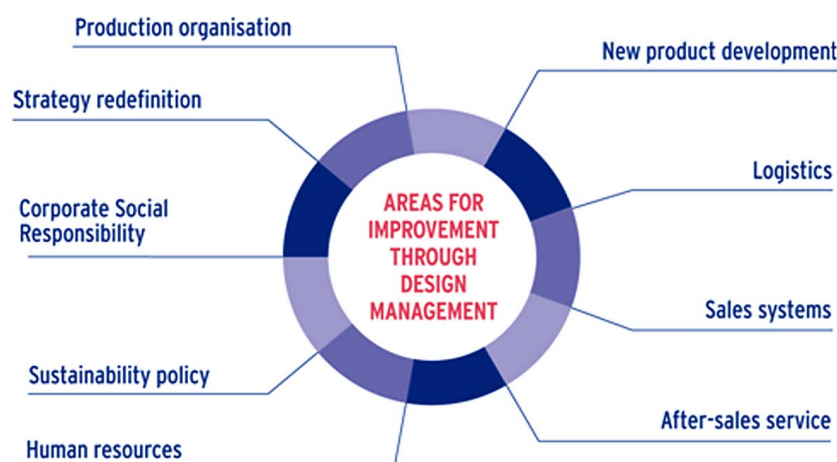
The following table summarises general actions that companies should take to introduce and use traditional design competencies to the full and to be able to integrate advanced design competencies.

TRADITIONAL COMPETENCIES Basic management tools:	ADVANCED COMPETENCIES Company mindset and vision for their incorporation:
A protocol for selecting and hiring designers to create a professional design team. A design briefing model to improve understanding of the commission and therefore, the quality of the result. A design plan model to schedule projects in a more orderly fashion which is executed more efficiently. A political design model to systematically incorporate design into the company to bear long-term fruits. By introducing these simple tools, any company can make great improvements in the design field and will be able to make more investments when they see results.	A well-trained design manager (internal or external), who understands and embraces the company's design policy and is current with what design can bring to each area of the business, knows how to find and incorporate it so that it benefits the company. Continuous support and monitoring from competent sector institutions, which act to increase the benefit of design. Companies that already have a consistent design policy in place can opt to go further and include more complex areas of design which will make them stand out from the competition and put them in a better position in the market.

3.2.3. Areas for improvement through design management

To complete the model, we described what design can bring to each area for competitive improvement, in other words, in each of the major phases of the production and marketing process, which would give the company a competitive edge over its rivals by making the most of opportunities for ceramic companies in the current environment.

The areas identified for competitive improvement were:



In each of these we showed how both traditional and advanced design competencies can make a difference, citing some activities by way of example, which are not intended to be a comprehensive list but some activities recommended for

every company in the sector. Each case requires individual, in-depth analysis.

The following table sets out the most relevant conclusions:

AREAS FOR COMPETITIVE IMPROVEMENT	TRADITIONAL DESIGN COMPETENCIES	ADVANCED DESIGN COMPETENCIES
Strategic redefinition	Design of corporate identity	CSR, Visualisation of scenarios
Organising production	Graphic design and communication	Visualisation of scenarios
Development of new products	Product and model design Collection design	Visualisation of scenarios
Logistics	Container and packaging design	ICT service design
Sales systems	Environment Design Graphic design and communication	Services design Visualisation of scenarios
After-sales service	Graphic design	Visualisation of scenarios Services design
Human Resources	Communication design (internal and external)	Visualisation of scenarios
Sustainability policy	Graphic design and Communication Optimised use of materials	Eco-design Services design
Corporate Social Responsibility (CSR)	Communication design	CSR, Visualisation of scenarios

After outlining a very generic scenario, the next stage was designed to organise and provide sector companies with more specific guidelines.

4. POSSIBLE STRATEGIES AND ACTIONS

"There's no 'one size fits all'. Everyone has their own needs."

Lastly, by compiling all the above, we can summarise the way in which ceramic sector companies, according to their present use of design as a tool for competitiveness, can take advantage of some these design competencies through good management and emerge from their current situation. The guidelines to be applied, which require refinement before use, are as follows²:

² The levels are those on the design ladder model. (See page 1).

4.1. Level 1: Use of design is anecdotal and requires no type of specialised management.

Design competencies for integration: There are few companies of this type in the Castellón ceramics cluster, thanks to the work done by economic development organisations and the support structure (IMPIVA, technology centres, associations, etc). If they prove to be economically viable and also show they are interested in making progress, companies can gradually acquire traditional design capabilities: i.e. obtain a good corporate image, have good sales catalogues, etc. To achieve this, they need to make sure they have the basic tools of hiring designers, a design supervisor, project manager, etc.

Available market opportunities: These companies can also work for third parties or make the most of local market opportunities by recovering traditional models, etc., and even engaging in direct marketing.

Achievable competitive position: maintain, on a small scale, lucrative niche markets with specialist commissions, small runs, semi-handmade products, etc.

4.2. Level 2: Design is used sporadically in some projects.

Design competencies that can be integrated: This is the profile of most companies in the ceramic sector, which still need to take design to a higher level in order to improve their level of competitiveness. Processes, protocols and procedures must be established to enable design to become fully integrated in business management. Companies need to learn to organise a real design policy that supports and reinforces the corporate strategy.

Available market opportunities: Reinforced by design management, this type of company can aspire to compete on grounds other than price, launching differentiated product ranges which are developed internally rather than being defined by colour producers. Some of them, depending on their production structure, may want to specialise in short production runs which, as well as being a complete yet lucrative market, is the start of a chain reaction where contact with designers and architects strengthens the company's internal potential to innovate.

Achievable competitive position: These organisations have a key role in an evolving market in which flexibility and capacity for innovation will be key trends. By replacing price with competency, the company will be on the path to sustainable growth.

4.3. Level 3: The company has integrated design as a management tool and has a specific design policy.

Design competencies for integration: There are some companies of this type in the sector, but not many. This type of company, on the one hand, has to

invest in tools to improve its capabilities and on the other, explore strategic design. The first objective is to integrate design in the corporate strategy, ensuring that this is understood as global or integral design, in other words design covers all aspects of the company to present a more consistent face to the market and become a more efficient organisation. Demand will focus on added services to intensify their design policy, training, attending seminars, etc.

Available market opportunities: New, complex markets can be penetrated with well-structured collections and trends and robust logistics. Perhaps user studies could be introduced to develop new concepts to the final consumer and of course innovative sales concepts to support distribution.

Achievable competitive position: This type of company can compete on the international market, with the same weapons as the best brands. Alliances with complementary products can also be considered, for example, to grow and provide greater coverage.

4.4. Level 4: Companies that use design strategically.

Design competencies for integration: Although these do not abound in the sector, what this type of organisation needs is to go even further into the most advanced design practices, such as, for example user studies, trends analyses, etc. In the ceramic sector it is essential to develop advanced services around the product such as, for example, direct sales, etc. Service design is quite a new discipline, both in Spain and abroad, and is not very common. Companies wanting to progress in this area require training and methodologies to select the right staff. Similarly, design may be suitably introduced in processes and from the strategic point of view, but it might be useful to improve aspects related to the job and CSR activities.

Available market opportunities: Development of innovative concepts in services, sustainability, marketing and CSR; brand strength and consistency.

Achievable competitive position: The company can diversify products and services to create its own place in the market to become a benchmark and a leader. Companies can use the experience of other sectors, using design capabilities to make connections and stay ahead of market demand.

In line with the philosophy of this model, individual work should be done with each company to determine a strategy which will allow them to achieve a position in the market that will ensure profitability and secure jobs.

5. CONCLUSIONS

An analysis of the sector has made it even obvious that there is still a long way to go. The information we have gathered gives a more accurate view of the

real situation facing the sector and enables us to see more clearly what design can contribute to the business strategy. The advances made with this investigation were as follows.

1. We have been able to take the pulse of the ceramic sector and understand how it is feeling with regard to the use of design in companies, which has made us more aware of the real situation that companies are finding themselves in.
2. We have learned firsthand what types of strategies are being used to keep afloat during the crisis, a factor that has led us to see what types of strategies could be used in the future.
3. By analysing economic, political and user factors together we have been able to propose strategies that ceramic companies can use in the short and medium term.
4. We now have clear knowledge about how design is managed and its intended role in the near future within business strategy.
5. This project has been useful for opening a connecting door between business and design, which will need constancy and perseverance in order to assess how design can help in today's aggressive, changing market.

In the years to come, providing more training in design management aspects, continuing to raise awareness, monitoring and supporting companies suitable for these types of strategies and continuously promoting design to the business community in Castellón will be essential for setting out a clear path for the sector towards suitable positioning in markets that are increasingly competitive, where these types of differentials are already and will continue to be indispensable to making the most of opportunities both in Spain and abroad.

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