ARAGON
Inhabitants: 1.296.655
Area: 47.719 Km2

CORPORATE DESIGN AND STRATEGY
Evaluation study at the company in Aragon. 2004

Technical specifications:

Promoter: Industrial Design Centre of Aragon (Centro Aragonés de Diseño Industrial, CADI). Initiative carried out within the DISEÑA project (2002-2006), and financed by the Small and Medium Sized Business Competitiveness and Consolidation Plan of the Ministry of Industry, Tourism and Commerce (Plan de Consolidación y Competitividad de la PYME del Ministerio de Industria, Turismo y Comercio).

Study author: Investigation Team of the Economy and Business Management Department of the School of Economic and Business Sciences of the University of Zaragoza.

Sample: 8 consultants, 5 industrial designers, 30 companies, 54 directors, 60 distributors, 50 installers, 114 consumers.

OBJECTIVES AND METHODOLOGY

The objective of the study is to determine how important design is to company strategy, measure its contribution towards company performance and if possible gauge its contribution towards the value of the company.

The most outstanding item of the study is the defined methodology used as a first step of unquestionable technical reliability to reach the objective of finding a model capable of measuring the contribution that design makes.

As the study was carried out, information has also been gathered and structured at a second level, which can be useful in the future.

The study sample was composed of 30 companies from Aragon belonging to different manufacturing areas and with a history in using design. But not only was there sounding out of opinions and obtaining information from companies. The manufacturers' vision of industrial design was contrasted and compared with that of other agents that have an influence on the product acceptance process in the market and therefore are influential at the moment of measuring the greater or lesser value of design in the purchase decision process: distributors, installers (110 surveyed) and consumers (144).

- The first step in carrying out the study consisted in trying to define the specific terminology used. The study is about the "industrial design of a product as a strategic factor". Yet from the very beginning there was a compelling need to focus this concept further. The investigation team conducted open, in-depth and in-person interviews of consultants and designers from the Diseña project, and discussed their perception of the activity, their opinion of how companies perceive and understand it, how they apply it, why and for what, etc.

Using this information, other open and in-person interviews were conducted with the directors of selected companies in the sample, all of them experienced in developing industrial design projects and many of them participants in the DISEÑA project to manage the design.

The complexities of industrial design were discussed with them using the same objectives and scope as with the consultants, but trying to understand the direct perspective coming from the companies themselves. (One first by-product of this investigation was the ability to compare the consensus that service consultants and manufacturing companies have over this issue.)

The final result of this first phase was obtaining enough information to delimit the field of investigation. Such an investigation would be fundamentally qualitative (without giving up obtaining and dealing with quantitative data), due to the size of the sample, but also to the multidimensional aspect of the concept of design itself and as foreseen at that moment, to the difficulty of isolating design as a business asset.

- A closed survey model was developed (and given to 54 directors of those companies, including those that had the personal interviews), with a generic objective: gauge to what extent companies consider design as beneficial to them, determine which variables express that fact, and quantify the results to the maximum extent possible; all of this in order to conclude that design should actually be considered as a significant factor in strategic management.

The structure of that evaluation was expressed in three paragraphs: a) a quantitative measurement should be carried out (completed also qualitatively) of the financial benefits obtained by the company b) a qualitative evaluation should also be conducted of other less tangible benefits c) lastly, a qualitative evaluation of intangible benefits should also be conducted

(In addition, information was obtained and structured which was more uniform from a statistical point of view than the previous phase, such as: what is understood by industrial design, what is needed to apply it to the company, what departments need to be involved, what is the motivation to apply it, in what phases should the activity of industrial design be structured …)

The study separates and deals with information depending on the company's experience in applying industrial design (less than 6 years conducting projects; between 6 and 10 years, and more than 10 years), and also depending on size (small, medium or large companies), and on the number of projects carried out in the last five years (less than 10 projects, between 10 and 20, and more than 20).

- The following portion of the study focuses on gauging the value placed on industrial design from the point of view of market demand. In this way, the vision that the market has is introduced through customers' opinions, which may or may not corroborate whether design has a strategic aspect for the company. These are subdivided into two categories: intermediaries and consumers. In the first paragraph, the distinction is made between distributors and installers.

Two closed survey models were developed for each category, with small changes in the intermediaries group depending on how they relate to the product, consumer motivator or user; and in the case of distributors, depending on if besides knowing the brand they had chosen it as one of their suppliers.

a) The first survey, directed to intermediaries, is about the brand of one of the sample companies and about one of its products considered as "equipment for domestic use" with installation required. It was carried out using a list of distributors and a list of installers from all over Spain.

The primary objective is to try to determine how important design is for intermediaries when selecting a specific brand as their supplier. This objective is subdivided: first, an attempt is made to delimit the perception this group has towards design. At the same time, an attempt is made to gauge which are the main factors used as a basis for the decision, including variables that are not only related to the design of the product (post-sales service, warranty, price…). Third, an attempt is made to rate the brand in question regarding the perception of the effort it expended in the design, and lastly regarding the specific factors that led them to choose it as a supplier.

b) Likewise, the study continued on with consumers, making the distinction in the workflow between those who were buyers and those who were simply users. The data is broken down depending on sex, age, (less than 35 years old, between 35 and 50, and over 50) cultural level (elementary school, high school, university) and income level (less than 1,800 euros, between 1,800 and 2,700, and more then 2,700), in order to try to find differences and/or correlations. In this case a different company was selected from the ones in the sample list. The selected company manufactures a product for long term consumption.

MAIN CONCLUSIONS

- In the first place, it is important to realize that results obtained have a differential value compared to other studies, because on one hand our analysis is conducted with many variables including the opinions of the market; and on the other, it does not focus on measuring isolated results obtained by companies carrying out one project. Rather, it focuses on the quantitative results (less or more) obtained by companies with a history in applying industrial design, and therefore its value stems from gauging the results of the managerial aspect of the design.
- Companies consider design to be a strategic factor; actually, design is certainly a strategic factor for companies in terms of what they themselves communicate. Data:

  <u>Quantitative financial benefits</u>

  - An average of 34.4% of sales from these companies in the last five years comes from industrial design projects.
  - Close to 31% of the obtained benefits in the same period comes from projects involving design.

- In the same period, companies allot 30% of R&D investments to industrial design projects.
- The average increase in profitability for the period corresponding to industrial design projects is 4% for 50% of the companies, between 4% and 10% for 25%, and greater than 10% for the rest.

Qualitative financial benefits

- 70% of companies consider that design has allowed them to improve their market share
- 56.6% have increased sales volume
- 48.8% have reduced expenses and 43% have increased benefits and profitability

Qualitative tangible benefits

- 75% have increased their competitiveness and improved their product development process
50% have diversified their product portfolio
42% have increased exports and 35.6% have developed patents

Qualitative intangible benefits

- 84.4% have improved their brand image
- 75.6% have improved differentiating and positioning their product
- 57.8% have improved customer loyalty and satisfaction
- 51% consider having penetrated new market segments, and 40% have improved quality

The general trend is that these results do not reflect large differences due to company longevity or number of projects carried out. It is important to note slight differences in the order of importance (the first place does not change in any case) placed on each factor within a category (years of experience or number of specific projects).

It can be stated that both the passage of time and the increase in number of projects carried out have a positive correlation with the benefits that design brings.

On the other hand, no significant difference exists from the point of view of company size, in other words, size is not a determining factor for obtaining benefits from industrial design.

- It is also confirmed that *from the market point of view,* intermediary clients regard design as an important factor in their purchasing decision processes. Using a scale from 1 to 7 points, (from least important to most important) the average importance placed on design is 5.7. On the other hand, the two factors that have had the most influence in their decision are related to design. Data:

- 80% of those surveyed have considered that ease of use and ease of installation are significant when choosing a brand.
- Over 70% of clients have also considered that warranty, post-sales service, technical service and quality are important factors in their decision.
- Price falls into 7th place, but with more than 65% of clients.

There is a very slight difference between the level of importance placed on manufacturers services depending on whether distributors or installers select a brand; installers place more emphasis on ease of use and installation compared to distributors.

From the point of view of the client consumers it is important to see that the study proves that all aspects included in the design (not the only ones considered by them) have a significant influence in their purchasing decision. Data:

- 97% state that ease of use is a factor that has an influence on purchasing the product in the study
- Next are issues related to correct product operation: quality 95%, 94% brand, and 90% warranty.
- Surprisingly, of all the factors that have an influence on the purchase of this product, aesthetics is in next to last place (23%).

The following is also evident when considering the information broken down in this section, among other things: when those surveyed select a product, the importance they place on design is greater when their education and income levels are higher and their age is lower.

- Lastly, it is important to note that the three groups studied, companies, intermediaries and consumers understand design as something mainly linked to product aesthetics, but in all cases, as something associated with product features such as ergonomics, ease of use and installation, and even product quality. In this sense, a smaller degree of understanding of the concept of design stands out among consumers who only associate design with the factors of aesthetics and ergonomics at significant percentages compared with the next factor at only 40%.

The study shows that much has to be done in order to isolate the real value of design, both from the point of view of quantifying company results and therefore their contribution to the overall value of the company, and gauging its real effect in the market while isolating its influence from other variables that as stated, also have an influence (brand, warranty)

The only thing accomplished (not a small matter) is having pointed out the way.