Perceived value in industrial clusters: A multidimensional perspective

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Abstract
This paper aims to demonstrate that the perceived value of the exchange relationships among firms of an industrial cluster is conditioned by aspects of a rational or functional character, and by other aspects of an emotional and social nature. We put forward some working hypotheses which we attempt to test in the Spanish ceramic tiles cluster. More specifically we analyze the relationships between manufacturers and a supplier of frits, enamels and ceramic colours and related services. The models were tested with Structural Equation Models (SEM). In all the causal models obtained in the course of the data analysis the maximum likelihood estimation method is applied. The results obtained support the hypotheses put forward, and in particular the importance of emotional and social value in industrial relations. We found through an empirical study that experience and interpersonal relationships are more important than price and switching costs.

KEY WORDS
Perceived value, Spanish ceramic tiles cluster, functional value, emotional value, social value
Introduction

This paper aims to demonstrate that the perceived value of the exchange relationships among firms of an industrial cluster is conditioned by aspects of different nature, when aspects of a rational or functional character are considered together other aspects of an emotional and social nature. We put forward some working hypotheses which we will attempt to test in the Spanish ceramic tiles cluster. More specifically we analyse the relationships between manufacturers and a specific supplier of product and service, supplier of fired, enamels and ceramic colours.

Literature Addressed

The Committee on Definitions of the American Marketing Association approved in 2004 a new definition of marketing: “Marketing is an organizational function and a set of processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders” (AMA 2004). Value becomes the keystone of marketing. The concept of perceived value has been the subject of great interest in the literature on relationship marketing since the early 1990s, especially in the services sector (Lindgreen and Wynstra, 2005). If we analyse the literature we can observe the complexity of this construct, and how its analysis and subsequent development has evolved over time (Sheth, Newman, and Gross 1991a and 1991b; Anderson, Jain and Chintagunta 1993; Cronin, Brady and Hult, 1997 and 2000; Sweeney, Soutar and Johnson, 1999; Jones, Motherebaugh and Beatty 2000; Lapierre 2000; Robinette, Brand and Lenz 2001; Sweeney and Soutar 2001; Ulaga and Chacour 2001; Ulaga and Eggert, 2003; Ehret 2004; Hinterhuber, 2004; Lam et al., 2004, Simon and Mandjack, 2004; Buttle and Biggemann, 2005; Lindgreen and Wynstra, 2005, Ulaga and Eggert, 2006). Starting from a rational or cognitive perspective based basically on aspects of a functional character, more intangible elements have also come to be considered, harder to perceive and to explain, but with a clear participation in the processes of decision making, such as emotional and social elements (Sheth, Newman and Gross 1991a and 1991b; Lapierre, 2000; Sweeney and Soutar 2001; Simon and Mandjack, 2004; Buttle and Biggemann, 2005; Ulaga and Eggert, 2006). This evolution is a consequence of the limitation of the initial approaches, which attempted to explain reality on the basis of rational phenomena, giving rise to events and situations that are difficult to understand and to transmit.

The relationships occurring in a cluster are therefore a competitive advantage for the firms located in it. The study of the relationships formed in this context is a point of interest of the first order for industrial marketing. Interdependence and long term relationships in B2B are matters that have preoccupied marketing researchers (Ford and McDowell, 1999; Lapierre 2000; Eggert and Ulaga 2002; Barnes, 2003; Bonner and Calantone 2005; Spiteri and Dion 2004; Lindgreen and Wynstra, 2005, Ulaga and Eggert, 2003, 2006).

In this sense, we understand customer perceived value as a multidimensional construct. This perceived value is considered as the overall assessment that a customer makes about the utility of a relationship with one or more suppliers of products and services. This assessment is based on the perceptions of what it is received and what it is given and, taking into account affective, emotional, social and rational or functional elements, where all of them interact and influence themselves in obtaining this final valuation.

Perceived value in industrial clusters

Although the study of the dimensionality of the value perceived by a customer began in the 1960s (Hartman 1967 and 1973), it was not until the 1990s that this became a matter of priority interest on the part of academics (Ford and McDowell, 1999; Barnes, 2003; Lindgreen and Wynstra, 2005, Ulaga and Eggert, 2006). These seminal studies identified functional or extrinsic dimensions and affective, emotional or intrinsic dimensions (Hartman 1967, 1973; Mattson 1991). Functional dimensions were related to the concept of economic utility while affective dimensions captured the feelings generated by a product.

A key study in the conceptualisation of perceived value is that by Sheth, Newman and Gross (1991a and 1991b) who in a vast empirical study in several disciplines, such as economics, marketing and clinical and social psychology, identified five dimensions of perceived value: social, emotional, functional, epistemic and conditional. The functional dimension refers to the economic utility derived from the attributes of the products and services. The emotional dimension refers to the value associated with the feelings or affective states generated by the products and services, as well as the human relationships developed between the parties. The social dimension is the value generated from the social image transmitted by the utilization or use of the product or service. The epistemic dimension is the capacity of the product to surprise, arouse curiosity, offer novelty or satisfy the desire
for knowledge. Finally, the conditional dimension derives from the temporary nature of the functional value or the social value, and refers to a series of circumstantial factors or situations, such as illnesses or specific social situations that may condition perceived value.

This literature review laid the bases for the identification of the dimensions of perceived value. The most important efforts to test this theoretical proposal are those of Sweeney, Soutar and Lester (1996) and Sweeney and Soutar (2001), who through different empirical studies designed a scale of measurement of perceived value (PERVAL). The analyses of reliability and validity carried out for the design of PERVAL resulted in the 5 dimensions proposed by Sheth, Newman and Gross (1991a and 1991b) being reduced to 3: functional, social and emotional, though in the functional dimension 3 types were identified (price, quality and versatility).

As a complement to these studies it has to be said that the majority of studies have agreed in the identification of functional and emotional components (de Ruyter et al., 1997; Gwinner, Gremler and Bitner 1998; Henning-Thurau, Gwinner and Gremler 2002; Swenney and Soutar, 2001; Robinette Bramad and Lenz 2001). The studies undertaken therefore seem to agree on the existence of at least three dimensions in perceived value: functional, social and emotional.

But these studies are focussed on perceived value in consumer markets. At the level of industrial markets there are very few studies of the dimensionality of perceived value (Simon and Mandjack, 2004; Buttle and Biggemann, 2005; Lindgreen and Wynstra, 2005, Ulaga and Eggert, 2006). The literature reviewed enables us to observe some studies by Anderson, Jain and Chintagunta (1993); Ford and McDowell, (1999); Lapiere, (2000); Ulaga (2001); Ulaga and Chacour, 2001; Flint and Woodruff, 2001; Hogan (2001); Sharma, Krishnan and Grewal (2001); Eggert and Ulaga (2002) Ulaga and Eggert (2003 and 2006); Brenan, Turnbull and Wilson (2003), in which the dimensionality of value is present, but not in a single form. Nevertheless, as in consumer markets, there seems to be an underlying dimensionality based on two factors, intangibles and tangibles. Thus in this study we have followed the line of research started by Sheth, Newman, and Gross (1991) and continued by Sweeney and Soutar (2001) and Eggert and Ulaga (2002), differentiating between functional or cognitive dimensions and emotional or personal dimensions (Eggert and Ulaga 2002) and social dimensions (Lapiere 2000) with totally intangible components, leading to the first hypothesis of the study:

**H1**: Perceived value in an industrial market is a second order multidimensional construct formed by three dimensions: functional, social and emotional.

The first hypothesis put forward considers perceived value to be a second order construct, implying that each dimension is in turn made up of various sub-dimensions. The functional dimension of value is the one that relates to the utility derived from the attributes of the products and services. The industrial customer obtains value from attributes like product quality, service quality, or price (Sweeney, Soutar and Johnson 1999). This is an economic and rational analysis comparing benefits and sacrifices, a concept that agrees with the view of perceived value maintained by some authors (Lovelock 1991; Rapp and Collins 1991, Anderson, Jain and Chintagunta 1993; Cronin et al. 1997 and 2000; Rust, Zeithmal and Lemmon 2000). This perspective identifies the quality of the product and services as positive values or benefits, and the price and other non-monetary sacrifices as negative values or sacrifices (Berry, Seider and Gresham 2002). The functional dimension is therefore a valuation almost equivalent to the quality/ price ratio, but with the inclusion of a non-monetary sacrifice component. The second hypothesis relating to the functional dimension is therefore posited as follows:

**H2**: The functional dimension of perceived value in an industrial market is made up of a positive component (perceived quality) and a negative component (monetary and non-monetary).

The emotional dimension of perceived value is that which derives from the feelings and emotions that the product or service generates in the buyer. This dimension, together with the social dimension, helps to explain why both individuals and organisations do not always make their decisions on the basis of a rational or functional valuation. The individuals who make decisions in organisations allow themselves to be influenced by their emotions and affective states as well as by their social milieu (Nyer 1997; Ford and McDowell, 1999; de Chernatony, Harris and Dall’Olmo 2000; Kleinz and Boshoff 2001, Barnes, 2003). The emotional dimension has been little studied, so the identification of its dimensions is at an exploratory stage. The first studies about the emotional value dimension have based on the IMP studies about B2B relationships in industrial markets with the interaction model (Ford, 1980; Ford, Hakannson and Johanson, 1986; Hakannson, 1982; Metcalf, Frear and Krishnan, 1990; Hällen and Sandström, 1991; Sandström, 1992). Afterwards, we can find different studies in industrial (Eggert and Ulaga, 2002; Ulaga and Eggert, 2003, 2006) and service markets (Sweeney and
Soutar, 2001; Barnes, 2003). From this last perspective, and on the basis of these studies, three factors can be identified: experience, personalised treatment and interpersonal relationships. Firstly the experience accumulated is a consequence of the exchange of sensorial stimuli, information and emotions between firms and customers (Schmitt 1999; Sweeney and Soutar 2001), replacing the traditional stimuli both in consumer markets (Holbrook and Hirschman 1982; Schmitt, 1999), and in industrial markets (Brown et al, 1995). Personalised treatment and interpersonal relationships are derived from the literature that analyses the psychological benefits (Gwinner, Gremler and Bitner 1998, Ford and McDowell, 1999; Barnes, 2003; Biggeman and Buttle, 2005) and the social benefits obtained from the establishment of a relationship, whether at individual level or at business level. Thus for Henning-Thurau and Hansen (2000), personalised treatment is among the elements that are valued positively and continually by customers in their relationships with firms. Also for Price, Arnauld and Deibler (1995), and Henning-Thurau, Gwinner and Gremler (2002) personalised treatment helps to reduce the feeling of anxiety and to generate a relaxed situation as a consequence of knowing what they are going to receive in their dealings with the supplying firm. Recognition of the customer by the contact personnel of the supplying firm helps in part to anticipate the content of the relationship in its initial stages. Finally, interpersonal relationships are closely linked to the two previous factors, experience and personalised treatment, and also help to generate pleasant feelings in the relationship with the supplying firm (Gwinner, Gremler and Bitner 1998; Price and Arnauld, 1998). The degree of interpersonal knowledge obtained throughout this process helps to eliminate feelings of distrust or anxiety in this context and to make the relationships more fluid and long-lasting (Henning-Thurau, Gwinner and Gremler, 2002). Sweeney and Weeb (2002) also agree on this, affirming that the perceptions of affinity, friendship, or feeling of familiarity, in the other party help to strengthen the relationships between firms. The second hypothesis is therefore:

$H_3$: The emotional dimension of perceived value in an industrial market is made up of experience, personalised treatment, and interpersonal relationships.

Finally, the social dimension of perceived value has to do with the consequences for different target populations of the purchase and consumption of a product or service. This dimension includes the social perspective of the company, in other words, the importance of the society’s assessment about the company. In both consumer and industrial markets, there is concern for one’s own social projection (Lapierre, 2000; Sweeney and Soutar 2001; Nguyen and Leblanc, 2001; Vilafañe, 2003). In industrial markets, where the personal tools of marketing are fundamental, the image or the reputation of a firm is a key element of decision making. Lapierre (2000) considers that social value is the image based on reputation and credibility and their social repercussions. As a complement, Allee (2000) suggests that perceived value should incorporate elements as important as social citizenship and corporate identity. Nguyen and Leblanc (2001) agree with Lapierre (2001) in identifying corporate reputation and social image as the determining factors of the social dimension. The social image conveyed, and reputation, are therefore identified as the two factors underlying the social dimension (Sheth, Newman and Gross 1991a; Anderson and Weitz 1992; Ganesan, 1994; Lapierre, 2000; Nguyen and Leblanc, 2001).

$H_4$: The social dimension of perceived value in an industrial market is formed by reputation and the perceived social image.

**Research Method**

The fundamental aim of the study is to identify the dimensions of the perceived value of the relationships among firms in an industrial cluster, developing a scale of measurement of the construct. For this we have taken into account both the rational component of perceived value and its emotional and social components.

To test the hypotheses put forward we chose the Spanish cluster of manufacturers of ceramic floor tiles. Geographical, cultural, and institutional proximity provides companies with special access, closer relationships, better information, powerful incentives, and other advantages that are difficult to tap from a distance (Porter, 1998). It was chosen because it is a cluster in which investment is constantly being made in improving the technology of processes and products, with a clear exporting component developed in the last 20 years, and which shows growing interest in continuing to improve, not only in its products and in the technology applied, but also in relationships with its customers. With this aim, we interviewed purchasing managers about the manufacturing firm's relationship with its main supplier of ceramic frits, enamels and colors. This supplier met the desired criteria of reliability and adequacy for both the products and the services offered, characteristics that are considered important for B2B
(Lam et al. 2004). The justification of this choice lies in the fact that among all the firms, possibly the frequency of deliveries\(^1\), together with the technical knowledge of the product, required the greatest quantity and quality of contacts. The very characteristics of the product supplied, with a certain level of complexity, require knowledge of chemistry in order to accept the type of material to be supplied. This requires collaboration and a certain level of intensity of contact between supplier and manufacturer, making this type of relationship appropriate for the objectives of the study\(^2\).

To design the measurement scales of the questionnaire we used material from two sources of information, so that the questionnaire could meet the requirement of internal validity. On the one hand, we consulted secondary sources of information, resorting to the literature on the subject. We also carried out in-depth interviews with 5 purchasing managers. Given the scarcity of studies focused on perceived value in the industrial market, the scales had to be designed specifically for the objectives of the study, adapting them in some cases from the literature reviewed.

The questionnaire is structured in five major sections: functional value technical quality of product, functional value quality of service, functional value sacrifices, social value, and emotional value (table 1).

Table 1. Scales of measurement of the dimensions of industrial perceived value

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of items on scale</th>
<th>References</th>
</tr>
</thead>
</table>

In accordance with the objectives of the study, the method chosen to gather information was a survey, addressed to the purchasing managers, or by default to the general manager, of the firm manufacturing tiles. It took place in three consecutive phases: in a first phase a questionnaire was sent by post, together with a letter of presentation of the study and its motives. A back-up telephone call was made to confirm reception of the questionnaire and the receiver's willingness to answer it, which permitted a second sending, in this case by e-mail. However, in both cases very few responses were obtained, compelling a third phase in which personal interviews were carried out for those firms.

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\(^1\) Together with clays and land atomized, this is a product in continuous use in the manufacturing process of floor and wall ceramic tiles.

\(^2\) The quality of the products of manufacturers of frits, enamels and ceramic colors, the constant research and innovations in their products, together with the performance of a permanent support and advice service throughout the useful life of the products supplied, confers upon them special characteristics that have not been observed in other types of suppliers.
that did not reply in the earlier phases. Once an appointment had been made, an interviewer traveled
to the firm’s head office and administered the questionnaire by means of a personal interview with the
purchasing manager.
The population consists of all firms of the Spanish ceramic tile industry (245 firms, manufacturers of
paving and wall tiles, and special pieces). Twenty-five (25) firms are suppliers of frits, enamels and
ceramic colors.
The sample obtained was of 101 observations, which for a level of confidence of 95.5% (z=2), and for
an estimate of proportions of (p=q= 0.5), implies a sample error of ±7.84%.
The models were tested with Structural Equation Models (SEM). In all the causal models obtained in
the course of the data analysis the maximum likelihood estimation method (Jöreskog and Sörbom
1996b) is applied, taking as reference the variance-covariance matrix calculated from the normalised
data after application of the normal scores procedure offered by PRELIS, which permits the joint
normalisation of the continuous variables being analysed (Jöreskog and Sörbom 1996a). Moreover, in
all these models the parameters that determine the relationships between the variables are always
significant, the associated t value being higher than 1.96, and are completely standardised.

After those considerations, we propose four hypotheses about perceived value dimensionality:

Research Findings /Data Analysis
The analysis of the data starts with a study of the dimensions, reliability and validity of the scales
used, by means of confirmatory factor analysis. Next a second order confirmatory factor analysis was

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Research Findings /Data Analysis
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used, by means of confirmatory factor analysis. Next a second order confirmatory factor analysis was
carried out in order to determine the importance of each dimension. Annex 1 contains the table with
all the items used to draw up the scale of measurement.

All the analyses carried out in this section are adequate, because the probability associated with chi-
squared is greater than 0.05, the statistics GFI and AGFI are close to unity; and RMSEA close to zero
(Hair, Anderson, Tatham and Black, 1999).

Moreover the scales used are all reliable, since the coefficient of composite reliability is always higher
than 0.63, reaching values higher than 0.95 (Bagozzi and Yi 1988; Río, Iglesias and Vázquez 2000).
The convergent validity of the scales is also ratified, the factor loadings being greater than 0.5; and
because each item contributes to the formation of only one factor (Bagozzi and Yi, 1988; Bagozzi, Yi
and Phillips 1991; Steemkamp and Trijp, 1991). The divergent validity of the scales is confirmed
because the confidence interval of the correlation between the dimensions obtained does not include
unity (Bagozzi and Yi, 1988; Río, Iglesias and Vázquez 2000; Steemkamp and Trijp 1991). These
results are shown in tables 2 to 8.

Functional value
The hypothesis relating to functional value establishes the existence of sacrifice and benefit
components. The bibliographical review permitted the identification of three quality-related dimensions
in the positive component (quality of the product, quality of the firm’s service and quality of the service
given by the employees) while in the negative component three dimensions have been identified
(price, switching costs and convenience).

Functional Value Product Quality
As we have mentioned, a confirmatory factor analysis was carried out to determine the dimensionality,
reliability and validity of the scale of measurement of the functional value product quality (table 2). This
analysis shows the existence of two dimensions: durable quality and technical quality. In the case of
the durable quality of the product, the highest factor loading is associated with the item in which the
reliability of the products purchased increases over the course of years (0.77). And for the technical
quality of the product the highest factor loadings are associated with the degree to which the supplier’s
products meet the technical specifications and with the fact that the supplying firm offers the best
products; both factor loadings take the value 0.64.

Table 2. Confirmatory Factor Analysis of the functional value quality of product

<table>
<thead>
<tr>
<th>DURABLE QUALITY OF PRODUCT</th>
<th>FACTOR LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The reliability of the products purchased increases with the passage of time</td>
<td>0.77</td>
</tr>
<tr>
<td>The quality of the products acquired from the supplier increases with the passage of time</td>
<td>0.74</td>
</tr>
<tr>
<td>The yield obtained over time with the products acquired is a determining factor in acquiring them</td>
<td>0.60</td>
</tr>
</tbody>
</table>
The technical specifications of the supplier’s products are adequate for our requirements 0.64
The supplier firm offers me the best products 0.64
The products acquired from the supplier are easy to use 0.62

FIT OF THE MODEL: Chi-Squared = 21.72; gl = 14; P-value = 0.08458; RMSEA = 0.074; GFI = 0.93; AGFI = 0.90
COMPOSITE RELIABILITY: Composite reliability of quality associated with passage of time = 0.7480; Composite reliability of technical quality = 0.6638; Overall composite reliability = 0.8287
DISCRIMINANT VALIDITY (correlation between factors and in brackets the confidence interval of the correlation): 0.84 (0.70-0.97)

Functional value firm’s service quality
Table 3 shows the individual analyses of the firm’s service quality dimension. Three dimensions can be distinguished. One is technical competence–tangibility, among whose items the highest factor loading is 0.83 corresponding in this case to creativity and innovation in products and services; expertise, and the main supplier's application of new technologies in the solution of problems. The second dimension detected is reliability. In this case too, various items appear with the same factor loading as before (0.83), these are speed and agility; keeping promises as to dates and services, and doing things right first time. Lastly, the factors detected in the security dimension, accuracy of information, keeping promises and technical advice, present lower factor loadings than the foregoing.

Table 3. Confirmatory factor analysis of the functional value firm’s service quality

<table>
<thead>
<tr>
<th>TANGIBILITY- TECHNICAL COMPETENCE</th>
<th>FACTOR LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our main supplier is very creative and innovative in the products and services offered</td>
<td>0.83</td>
</tr>
<tr>
<td>Our main supplier stands out for its special expertise in its activity in the industry</td>
<td>0.83</td>
</tr>
<tr>
<td>Our main supplier stands out for the way it uses new technology to generate solutions</td>
<td>0.83</td>
</tr>
<tr>
<td>Our main supplier stands out for its capacity to provide systematic solutions in response to our problems</td>
<td>0.77</td>
</tr>
<tr>
<td>Our main supplier stands out for its capacity to demonstrate wide knowledge of the processes of our business</td>
<td>0.74</td>
</tr>
<tr>
<td>In general, the appearance of our supplier’s physical installations and employees is nice and clean</td>
<td>0.64</td>
</tr>
<tr>
<td>In general, in our main supplier they strive to understand and attend to our needs</td>
<td>0.64</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RELIABILITY</th>
<th>FACTOR LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our main supplier offers us fast and flexible service</td>
<td>0.83</td>
</tr>
<tr>
<td>Our main supplier stands out for its skill in doing things right first time</td>
<td>0.83</td>
</tr>
<tr>
<td>Our main supplier scrupulously fulfils the delivery dates of orders or the performance of the services agreed</td>
<td>0.83</td>
</tr>
<tr>
<td>Our main supplier’s invoices are accurate and clear</td>
<td>0.61</td>
</tr>
<tr>
<td>Our main supplier knows how to deal with our complaints</td>
<td>0.58</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECURITY</th>
<th>FACTOR LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>For our firm the accuracy of the information from our supplier is very important</td>
<td>0.77</td>
</tr>
<tr>
<td>For our firm the fulfilment of the promises made by the supplier is very important</td>
<td>0.77</td>
</tr>
<tr>
<td>For our firm the technical advice offered by the supplier for the management of our business is very important</td>
<td>0.74</td>
</tr>
</tbody>
</table>

FIT OF THE MODEL: Chi-Squared = 124.18; gl = 100; P-value = 0.05101; RMSEA = 0.049; GFI = 0.86; AGFI = 0.83
COMPOSITE RELIABILITY: Composite reliability of tangibility- Technical comp. = 0.9037; Composite reliability of technical quality = 0.8581; Composite reliability of reliability = 0.8037; Reliability of total quality of service = 0.9512
DISCRIMINANT VALIDITY (correlation between factors and in brackets the confidence interval of the correlation):
- Tangible-technical comp. ↔ Reliability: 0.74 (0.57-0.93)
- Tangible-technical comp. ↔ Security: 0.54 (0.40-0.68)
- Reliability ↔ Security: 0.35 (0.21-0.49)

Functional value employees’ service quality
In the analysis of reliability and validity of the scale used to measure employees’ service quality (table 4) it can be seen that the two items with highest factor loading (both with 0.92) are those referring to reliability and consistency, and employees’ competence and professionalism respectively.

**Table 4. Confirmatory factor analysis of employees**

<table>
<thead>
<tr>
<th>EMPLOYEES’ SERVICE QUALITY</th>
<th>FACTOR LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>In general, the employees of our main supplier firm offer me a reliable and consistent service</td>
<td>0.92</td>
</tr>
<tr>
<td>In general, the employees of our main supplier firm are competent and professional</td>
<td>0.92</td>
</tr>
<tr>
<td>In general, the employees of our main supplier firm are accessible and it is easy to contact them</td>
<td>0.71</td>
</tr>
<tr>
<td>In general, the employees of our main supplier firm are polite and respectful</td>
<td>0.65</td>
</tr>
<tr>
<td>FIT OF THE MODEL: Chi-Squared=12.35; df=7; P-value=0.08958; RMSEA=0.087; GFI=0.94; AGFI=0.91</td>
<td></td>
</tr>
<tr>
<td>COMPOSITE RELIABILITY: 0.8828</td>
<td></td>
</tr>
</tbody>
</table>

Functional value sacrifices
From the factor analysis carried out for total sacrifices we obtain three dimensions (table 5): monetary sacrifices, non-monetary sacrifices of convenience, and the non-monetary sacrifice switching costs. In the first dimension the highest factor loadings relate to the items “perception of a reasonable price” and “they offer the best discounts and payment conditions”, the factor loading being 0.80 in both cases.
In the case of the convenience dimension, the highest factor loading relates to the importance of the number of visits made (0.65). As to switching costs, the two items forming this dimension have similar factor loadings (0.69 and 0.68 respectively); they refer to the effort and time that would be involved in changing supplier, and to the importance of continuing the relationship with the current supplier.

**Table 5. Confirmatory factor analysis of total sacrifices**

<table>
<thead>
<tr>
<th>MONETARY SACRIFICE</th>
<th>FACTOR LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our main supplier has a reasonable price</td>
<td>0.80</td>
</tr>
<tr>
<td>The main supplier firm offers us the best discounts and conditions of payment</td>
<td>0.80</td>
</tr>
<tr>
<td>It gives good value for money</td>
<td>0.55</td>
</tr>
<tr>
<td>The price offered is influenced by market competition</td>
<td>0.55</td>
</tr>
</tbody>
</table>

**NON-MONETARY SACRIFICE -CONVENIENCE (time, effort, energy)**

<table>
<thead>
<tr>
<th>FACTOR LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of visits or meetings that our employees have with the employees of the main supplier are important for the good development of the relationships between the two parties</td>
</tr>
<tr>
<td>The effort of negotiation with the employees of the supplier to reach an agreement is appropriate</td>
</tr>
<tr>
<td>The time and effort invested in training some or all of our employees in the products and services of the main supplier firm is appropriate</td>
</tr>
<tr>
<td>The main supplier is able to offer us the services required or the products desired whenever we need them</td>
</tr>
</tbody>
</table>

**NON-MONETARY SACRIFICE -SWITCHING COSTS**

<table>
<thead>
<tr>
<th>FACTOR</th>
</tr>
</thead>
</table>

Changing our main supplier would involve considerable time and effort for our firm due to the need to adjust products and services. For our firm it is very important to continue the relationship with this supplier.

FIT OF THE MODEL: Chi-Squared= 58.62; df= 44; P-value= 0.06909; RMSEA= 0.058; GFI= 0.90; AGFI= 0.88

COMPOSITE RELIABILITY: Composite reliability of price = 0.7780; Composite reliability of convenience = 0.7060; Composite reliability of switching costs = 0.6391; Overall composite reliability of sacrifices = 0.8829

DISCRIMINANT VALIDITY (correlation between factors and in brackets the confidence interval of the correlation):
- Price ↔ Convenience: 0.54 (0.44-0.64)
- Price ↔ Switching costs: 0.26 (0.12-0.40)
- Convenience ↔ Switching costs: 0.68 (0.58-0.78)

Social value
Two dimensions of social value appear (table 6): social image and reputation. In the social image dimension, the two items with highest factor loading are the external recognition of one’s social behavior (0.83) and internal ethical behavior (0.81). For the social reputation of the supplying firm, the item with highest factor loading (0.92) refers to the credibility of the supplier and its positive effect on the social image of the firm.

**Table 6. Confirmatory factor analysis of total social value**

<table>
<thead>
<tr>
<th>SOCIAL IMAGE</th>
<th>FACTOR LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our main supplier has a reputation for good social behavior</td>
<td>0.83</td>
</tr>
<tr>
<td>I consider that our main supplier behaves ethically towards its customers and employees</td>
<td>0.81</td>
</tr>
<tr>
<td>Generally, I read and pay attention to all the information that our main supplier sends me</td>
<td>0.56</td>
</tr>
<tr>
<td>Our supplying firm participates actively in social events</td>
<td>0.55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REPUTATION</th>
<th>FACTOR LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The general credibility of our main supplier helps to improve the image of our firm</td>
<td>0.92</td>
</tr>
<tr>
<td>The general reputation of our main supplier fits with the image of our firm that we want to present</td>
<td>0.79</td>
</tr>
<tr>
<td>The relationship with our main supplier improves the social perception of our firm</td>
<td>0.77</td>
</tr>
</tbody>
</table>

FIT OF THE MODEL: Chi-Squared= 19.74; df= 14; P-value= 0.13867; RMSEA= 0.064; GFI= 0.95; AGFI=0.89

COMPOSITE RELIABILITY: Composite reliability of factor 1 =0.8103; Composite reliability of factor 2 =0.8674; Total composite reliability =0.9017

DISCRIMINANT VALIDITY (correlation between factors and in brackets the confidence interval of correlation): 0.59 (0.41-077)

Emotional value
Three possible dimensions of emotional value were detected: experience, affective relationships, and personalized treatment or relationships. The joint confirmatory factor analysis of its components (table 7) shows us that for the experience dimension the items with highest factor loading are the ease of use of the products/services (0.72) and the perception of the supplier as expert (0.70). In personalized treatment, physical recognition and remembering names present the same factor loading (0.70). Finally, in interpersonal relationships we find the item with highest factor loading, referring to the pleasantness of dealings with the employees of the supplying firm (0.74), followed by the supplier’s pleasantness in general (0.70) and the development of bonds of friendship among the workers of both firms (0.70).

**Table 7. Confirmatory factor analysis of total emotional value**
The ease of use of the products/services of our main supplier favors the desire to use them 0.72
The experience with the supplier seems to us a determining factor in the relationship 0.61
Our supplier, in general, knows in advance what we need 0.51
Our main supplier’s experience enables it to offer the best advice 0.61
This supplier is an expert in its field 0.70

PERSONALIZED ATTENTION
The employees of our supplier recognize me when I deal with them 0.70
In the supplier firm they know my name 0.70

INTERPERSONAL RELATIONSHIPS
Relationships with our main supplier are pleasant 0.70
Bonds of friendship have developed between the main supplier’s employees and ours when they visit us or vice versa 0.70
Relationships and dealings with our main supplier’s employees are pleasant 0.74
In general, interacting with our main supplier produces positive feelings that I don’t think we would have if we had no contact with it 0.62
The evolution of the relationship with our supplier seems positive 0.70

FIT OF THE MODEL: Chi-Squared= 86.26; gl= 68; P-value=0.06674; RMSEA=0.052; GFI=0.87; AGFI= 0.86

COMPOSITE RELIABILITY: Composite reliability of experience = 0.7521; Composite reliability of personalised attention = 0.6577; Composite reliability of interpersonal relationships = 0.8238; Overall composite reliability of total emotional value = 0.8684

DISCRIMINANT VALIDITY (correlation between factors and in brackets the confidence interval of the correlation):
Experience ↔ personalised attention: 0.27 (0.15-0.39)
Experience ↔ interpersonal Relationships: 0.39 (0.27-0.51)
personalised attention ↔ interpersonal Relationships: 0.39 (0.27-0.51)

Total perceived value
Following the above confirmatory factor analyses for each of the components of the value perceived by the firm, we carried out a joint confirmatory factor analysis of its components, based on the weighted averages of the values obtained in the earlier analyses. In table 8, it can be seen that the results of the earlier analyses are corroborated, obtaining a model with good fit and a reliable scale with convergent and divergent validity, following the criteria indicated at the start of the data analysis.

Table 8. Confirmatory factor analysis of total perceived value

<table>
<thead>
<tr>
<th>TOTAL PERCEIVED VALUE</th>
<th>FACTOR LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional Value</td>
<td></td>
</tr>
<tr>
<td>Price (SACM)</td>
<td>0.62</td>
</tr>
<tr>
<td>Convenience (SACONV)</td>
<td>0.69</td>
</tr>
<tr>
<td>Switching costs (SACC)</td>
<td>0.54</td>
</tr>
<tr>
<td>Product quality (BFCP)</td>
<td>0.76</td>
</tr>
<tr>
<td>Quality of employees (BFCPEMPL)</td>
<td>0.76</td>
</tr>
<tr>
<td>Firm’s service quality (BFCEMP)</td>
<td>0.84</td>
</tr>
<tr>
<td>Social Value</td>
<td></td>
</tr>
<tr>
<td>Social image (VSIMG)</td>
<td>0.75</td>
</tr>
<tr>
<td>Reputation (VSREP)</td>
<td>0.75</td>
</tr>
<tr>
<td>Emotional Value</td>
<td></td>
</tr>
<tr>
<td>Experience (VEEXP)</td>
<td>0.89</td>
</tr>
</tbody>
</table>
Personalised attention (VETP) 0.58
Interpersonal relations (VERI) 0.80

FIT OF THE MODEL: Chi-Squared= 72.88; gl= 55; P-value= 0.05361; RMSEA= 0.057; GFI= 0.88; AGFI= 0.86

COMPOSITE RELIABILITY: Composite reliability of emotional value =0.8556; Composite reliability of social value =0.7188; Composite reliability of emotional value =0.8086; overall composite Reliability of perceived value =0.9260

DISCRIMINANT VALIDITY (correlation between the factors and in brackets the confidence interval of the correlation):
Functional value ↔ Social value: 0.55 (0.35-0.75)
Functional value ↔ Emotional value: 0.69 (0.47-0.91)
Social value ↔ Emotional value: 0.55 (0.35-0.75)

It can be observed that the functional value is integrated, in order of importance of the factor loadings, by the overall quality of the firm’s service (0.84); by the quality of the employees’ service (0.76); by the overall quality of the product (0.76); by convenience (0.69); by the price (0.62); and by the switching costs (0.54). According to these results, it can be affirmed that hypothesis H2 is fulfilled.

Emotional value, for its part, consists of experience (0.89); interpersonal relationships (0.80); and personalized treatment (0.58). Thus hypothesis H3 is empirically demonstrated.

Finally, social value is formed by social image and reputation, both with the same explanatory factor loading (0.75). Hypothesis H4 is also fulfilled in this case.

From the analysis of discriminant validity we can highlight that the three variables are correlated, indicating the importance of all of them in the management of perceived value in relationships with the industrial supplier (Gwinner, Gremler and Bitner 1998; Sweeney and Soutar 2001). The correlation between emotional value and functional value stands out, with a value of 0.69.

Continuing the overall analysis of total perceived value, a second order factor analysis was carried out, in which weighted measurements were made and a variable was calculated to capture the overall value to be inserted into the general model. This analysis is carried out to obtain an overall latent variable for total perceived value. The results of this second order confirmatory factor analysis are shown in figure 1, where it can be observed that three first order factors are obtained which include the same items as those obtained in the earlier analyses, thus determining that for each of these factors the factor loadings are similar to those earlier considered individually.

**Figure 1.** Second order confirmatory factor analysis of the total perceived value of the firm
Furthermore we obtain a second order factor that reflects total perceived value. This factor is formed by functional value (0.91), emotional value (0.95), and social value (0.94). In interpreting the results, we can highlight that although all three have high factor loadings, emotional value, though with very little difference, has the highest explanatory capacity in the formation of the overall value perceived by the customer. Nevertheless, the close parity among them determines the need to consider them jointly in order to interpret adequately the value perceived by the customer, as posited by Sweeney and Soutar (2001). That is to say that perceived value is shown to be a multidimensional construct in which the three dimensions interact and complement each other, in a balanced manner, and help us to understand a complex construct, which adopts different roles and can be interpreted in different ways by customers, as manifested by authors such as Sheth, Newman and Gross (1991a); de Chernatony, Harris and Dall'Olmo (2000) and Sweeney and Soutar (2001).

The resulting model is adequate, since the probability associated with the chi-squared is greater than 0.05 (0.052); the statistics GFI (0.86) and AGFI (0.84) are close to unity; and RMSEA (0.057) close to zero (Hair, et al. 1999). Reliability is high, for both the first order factors and the second order factor, the overall reliability of the total perceived value being 0.9538 (Bagozzi and Yi 1988; del Río, Iglesias and Vázquez 2000). It possesses convergent validity as all the factor loadings are higher than 0.5; and also divergent validity for each of the dimensions of total perceived value, as the items constituting them only form part of that factor and do not contribute to the formation of any other (Bagozzi and Yi 1988; Bagozzi, Yi and Phillips 1991; Steenkamp and Trijp 1991).

H31 is thus fulfilled in this case too, and it is empirically demonstrated that the value of a relationship as perceived by a customer firm is made up of a functional dimension, an emotional one and a social one, which reinforces affirmations made in this regard by Sweeney and Soutar (2001).

**Discussion**

This study has allowed us to expand the analysis of the perceived value of the industrial relationships between a supplier and an industrial customer in a cluster. The identification of the emotional and social components in the decision-making of the firms in a cluster, and in the formation of the value perceived by the customer, the managers of supplier firms should reconsider the need to develop a commercial policy in harmony with a social and human policy. The need to train personnel with the
Been to draw up a scale of measurement of perceived value for industrial markets that will be valid for studies, both of theoretical and practical nature. One of the objectives of this study, therefore, has been to draw up a scale of measurement of perceived value for industrial markets that will be valid for either of the two perceptions noted above: the one integrated by negative and positive connotations of a cognitive character, and the multidimensional one. We have also put forward a multidimensional model that integrates the perceptions of value used in the literature, considering that significant behavioral and attitudinal differences occur in the relationships between a buyer and an industrial supplier, and in the generation of perceived value in that relationship.

The dimensional analysis has led to 4 hypotheses being put forward, all of which have been fulfilled. The empirical phase of this study has thus permitted us to demonstrate the existence of the three dimensions and their influence on the overall conception of perceived value. Traditionally, the opinion has existed that decision-making in industrial markets followed basically rational or functional criteria. However, the results of the empirical study have shown the importance of emotional and social value in the formation of the perceived value of the relationship on the part of the customer firm. Undoubtedly, the fact that firms are made up of people notably influences the existence of emotions, feelings and sensations that affect the final decisions of the people with decision-making capacity in firms. Likewise the notable increase in the importance of the social perception of the firm and of its influence on financial results has led to social value also having a more than significant part in the perception of higher value by the industrial purchaser.

Nevertheless, some small qualifications should be made to the results obtained. With regard to sacrifices, if we analyze the price, customer firms have equated the purchase value of the product with the transaction value in accordance with the postulates of Monroe (1990) and Grewal et al. (1998). The purchase value is the ratio between the benefits obtained and the sacrifices incurred in obtaining them, while the transaction value is defined as the psychological satisfaction that the customer obtains when he perceives that he has obtained a good agreement or deal. Thus, aspects such as the customer's perception that he is being charged a suitable price in terms of the benefits perceived with the utilization of the product and the performance of the supplier's service, together with the perception that he is getting the best payment terms, are the two most important elements in the final formation of the monetary sacrifice price. The projection at the moment of purchase of the future benefits of the product, together with the adequacy and suitability of the conditions of payment, prevail over other more traditional factors such as the quality-price ratio and the influence of competition on the final application of the price. That is to say, the customer's valuation incorporates future elements which go beyond quality and focus more on the relationship with the supplier. The feeling of a fair price or payment conditions was foreseeable, given that this was incorporated into the questionnaire at the suggestion of the purchasing managers in the pre-test. In respect of non-monetary sacrifices, the homogeneity in the factor loadings of the items analyzed shows how important for the manufacturers of floor and wall tiles is their relationship with the supplier of frits, enamels and ceramic colors. The technological dependence that occurs in this relationship, on many occasions as a consequence of the greater innovation capacity of the supplier of frits, enamels and ceramic colors, leads to the situation where most innovations in ceramic products arise as a consequence of the developments in their laboratories. This situation exposes a weakness of manufacturing firms as against their suppliers, as they leave an important part of the research, development and innovation in the hands of the supplier, making life easier for their own design departments, but weakening them at the same time. In this way, the manufacturer leaves in the hands of the the supplier of frits, enamels...
and ceramic colors the product that he will be able sell, depending on the final design that the latter is able to achieve.

The managers of the firms manufacturing floor and wall tiles should consider this, and enhance their own design departments with the aim of differentiating themselves from the rest. They cannot ignore the fact that one supplier supplies several manufacturers, so the possibility of similar designs coexisting at the same time in the market is a real threat. Ideas must emerge within firms as a sign of their creative capacity and of their personality, and as a sign of identity. Their fit with the taste of the markets is but a sign of firms’ skill in juggling innovation with acceptance.

The analysis of product quality has permitted us to verify that technical quality is as important as the presence of the utility of the product over time. The valuation made by the customer firm at the present time of the future benefits that it can obtain with the use of the product are decisive in its decision to purchase. If at the time of purchase the attributes of the product and the price are important, no less so are the firm’s perception of use and the results obtained. Thus contributions such as Slater (1997) and Woodruff (1997) made in this line, are confirmed by the results of this study.

In the valuation of the employees’ service, the factors with a more technical profile, such as reliability, competence and professionalism, had greater explanatory loading in this variable. Their factor loadings were above those of other more behavioral factors such as accessibility and conduct. Therefore, although the human factor is important, in the study, the professional and technical profile of the supplier’s employees are more highly considered than the behavior of the firm itself. Perhaps the type of industry analyzed may influence this result, and even the type of supplier, with products of highly developed technological power. The professional profile of the employees thus prevails over the behavioral profile. Possibly, this would not occur in purely service firms, which work with intangibles, and where the employees’ behavior and attitude is as important as the service performed (Henning-Thurau, et al. 2002).

In respect of social value, the results of the study show that in its two dimensions considered, social image and reputation, the factors most valued by the customer are good social practices and credibility in general. In this situation adequate management of information becomes a key factor in business and social success (Nguyen and Leblanc, 2001, Villafañe, 2003). If the results of the study show that customer firms are sensitive to the social behavior of the supplier firm, but that its credibility is high, in this situation, it is important for the firm to know how to communicate internally and externally all the achievements made in this direction. A suitable presence in the media, together with careful transmission of information to its customers, becomes a key factor in the success of the firm.

Recent studies have been demonstrating that the success of firms is increasingly based on adequate coordination between good performance of services and an adequate social effect of its activities (Villafañe, 2003). The results obtained from the analysis of the dimensionality of emotional value provide evidence for affirmations made by other authors like Gwinner, Gremler and Bitner (1998) regarding aspects such as familiarity, fraternity, friendship and personal recognition between employee and customer, which are some of the factors most highly valued in the creation of social benefits. Above all in those situations where the interaction between customer and employee is intense, as is habitual in industrial and services markets. Together with them, the considerations of experience have been shown to be important, as anticipated by authors such as Holbrook (1994), Brown et al. (1995); Eriksson, Majkgard and Sharma (1999); Slater and Narver (2000); Robinette, Brand and Lenz, (2001); Sweeney and Soular (2001) among others. Experience permits the accumulation of information and knowledge which, adequately managed and correctly applied, lend credibility, another of the factors highly valued in the study.

In a way, the presence of the emotional and social component in the perception of value by the customer links in with the conception of relationship marketing understood as a humanized marketing. In this context, commercial strategies based on intensive production processes, based in turn on the application of mass marketing, are giving way to a marketing with a more individualized application, based on research and the proper use of data bases, whose application permits personalized treatment, i.e. offering those products and services in the conditions demanded by the customers. And an attitude in the relationship based on the analysis of human values as determinants of the consumers’ purchase processes, both for their indirect influence on prices through the need to satisfy the customers’ desire for utility, and for their direct influence by satisfying their needs for self-expression. Experience, from this perspective, once more becomes an important asset for firms in their relationships with the various publics with whom they interact.

Conclusion and further researchs
With this study, we have demonstrated an important aspect, the importance of emotional value and social value in industrial supplier-customer relationships. Relationships in industrial markets have traditionally been considered merely rational, due to the complexity of decision-making due to the sizes of the purchases sometimes to be made. However, the results of the study reveal that emotional and social aspects have notable weight in the making of such decisions, due mainly to the necessary conjugation of the dual objective of firms, those of an economic and business character and those of a human and personal character. The fact that firms are formed basically by people endows each of them with features and characteristics that make them different from each other and, obviously, condition their final valuation in the decisions to purchase from their suppliers.

Firms must therefore be capable of working in this triple direction. At least the employees whose functions involve interrelationships with other firms must be endowed with training with this perspective. On the one hand technical training, on the product and the services that the firm offers. They must be aware of technical Characteristics, of use, installation and operation, among others. On the other hand, they must be given human training, understood as skill in developing interpersonal relationships, social sensitivity, respect for people and integration in a working team. And they must also be trained to be sensitive to environmental and business ethics themes, to how they can affect the negative image of the firm externally in these aspects and how to work to improve it constantly. And lastly, specific training in their specialty at work. To the training that the person brings to the job through education and experience must be added continuous training to be able to incorporate and understand the new advances that are continually occurring in all fields. Finally, good knowledge of the firm, vision, mission, culture and values, permit them to contextualize all this knowledge in the ambit in which it is to be applied.

The study has, of course, limitations. This research was carried out in the context of the industrial relationships between two manufacturing firms, where one plays the role of supplier and the other that of industrial purchaser. Taking this premise into account, the conclusions obtained should not be extrapolated to other relationships in an industrial market, such as the relationships between manufacturers and retailers. The constructs have been analyzed at a particular moment in time, though taking into account the course of the relationship until that moment, and future situations arising as a consequence of it. Nonetheless, the conclusions drawn must be interpreted taking this condition into account, making a longitudinal study of this model necessary for future studies. The study has focused on dyadic relationships from the purchaser’s viewpoint, and it was therefore the latter who was interviewed. This focus of analysis obviously bounds the study if we take into account that the industrial relationships between two parties occur in the context of a network of relationships. It would be appropriate for future lines of research to extend this study to relationship networks, analyzing as a first step the opinion of the supplier and then widening the analysis to the rest.

As we analyze a single type of industrial supplier, and specifically the most important one for each firm, the conclusions of the study cannot be extrapolated to the rest of the relationships with such suppliers, and even less so to the general body of suppliers of the customer firm. In future, this study should be widened in a first phase to all the suppliers in this category of products and services, and in a second phase, to all other suppliers. Consideration should be given to carrying out a similar study in an industry other than ceramics, with a lower index of geographical concentration of production, so as to integrate better more diverse business cultures or philosophies.

A deeper analysis could be made to determine whether the factors composing the dimensions that appear in the study are the only ones, or if perhaps there may be more. Or even whether other dimensions may exist. It could be considered whether the dimensions obtained are only applicable to the industry studied here, or if analyzing other industries, other dimensions could emerge alongside the existing ones. The emotional and social elements have not been analyzed very profusely in marketing, and even less in industrial markets. This study could therefore be the starting point for other subsequent ones that could examine more deeply the factors and dimensions obtained, and in this way develop the concept of the perceived value of a relationship.

References


### Table 9. Scales of resultant measurement of the perceived total Value

<table>
<thead>
<tr>
<th>FUNCTIONAL VALUE</th>
<th>QUALITY OF THE PRODUCT</th>
<th>DURABLE QUALITY OF PRODUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>VF1</td>
<td>The reliability of the products purchased increases with the passage of time</td>
<td></td>
</tr>
<tr>
<td>VF2</td>
<td>The quality of the products acquired from the supplier increases with the passage of time</td>
<td></td>
</tr>
<tr>
<td>VF3</td>
<td>The yield obtained over time with the products acquired is a determining factor in acquiring them</td>
<td></td>
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<table>
<thead>
<tr>
<th>TECHNICAL QUALITY OF PRODUCT</th>
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<tbody>
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<td>IF</td>
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<tbody>
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<td>TANGIBILITY - TECHNICAL COMPETENCE</td>
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<td>VF7</td>
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<td>VF9</td>
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<table>
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<th>SACRIFICES</th>
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<tr>
<td>VF26</td>
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<tr>
<td>VF32</td>
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<td>VF33</td>
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<tr>
<td><strong>NON-MONETARY SACRIFICE -CONVENIENCE</strong></td>
</tr>
<tr>
<td>VF34</td>
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<tr>
<td>VF35</td>
</tr>
</tbody>
</table>

**SOCIAL VALUE**

**SOCIAL IMAGE**
- VS1 Our main supplier has a reputation for good social behaviour
- VS2 I consider that our main supplier behaves ethically towards its customers and employees
- VS3 Generally, I read and pay attention to all the information that our main supplier sends me
- VS4 Our supplying firm participates actively in social events

**REPUTATION**
- VS5 The general credibility of our main supplier helps to improve the image of our firm
- VS6 The general reputation of our main supplier fits with the image of our firm that we want to present
- VS7 The relationship with our main supplier improves the social perception of our firm

**EMOTIONAL VALUE**

**EXPERIENCE**
- VE1 The ease of use of the products/services of our main supplier favours the desire to use them
- VE2 The experience with the supplier seems to us a determining factor in the relationship
- VE3 Our supplier, in general, knows in advance what we need
- VE4 Our main supplier’s experience enables it to offer the best advice
- VE5 This supplier is an expert in its field

**PERSONALISED ATTENTION**
- VE6 The employees of our supplier recognise me when I deal with them
- VE7 In the supplier firm they know my name

**INTERPERSONAL RELATIONSHIPS**
- VE8 Relationships with our main supplier are pleasant
- VE9 Bonds of friendship have developed between the main supplier’s employees and ours when they visit us or vice versa
- VE10 Relationships and dealings with our main supplier’s employees are pleasant
- VE11 In general, interacting with our main supplier produces positive feelings that I don’t think we would have if we had no contact with it
- VE12 The evolution of the relationship with our supplier seems positive