The Relational Practice Existing Between a Service Provider and its Customers and the Customer Retention: a Comparison Between a Theoretical Model and Rival

Gabriel Sperandio Milan, Maria Emilia Camargo, Deonir De Toni, Marcelo Machado Barbosa Pinto, Carlos Alberto Costa

Abstract: This study discusses the strategy of customer retention by means of the practice of relationship marketing in an environment of services. It proposed a theoretical model and its hypotheses, which is compared to a rival model, identified from the perception of executives of a Business Group with outstanding performance in the services sector in Brazil. The constructs of customer satisfaction, value, services provider’s reputation and trust are regarded as antecedents of the customer retention. Data analysis was implemented by multivariate statistical techniques, and the Structural Equations Modeling. The results indicate that the theoretical model presents a better conformity when compared to the rival model, but it needs additional theoretical and empirical discussions. Results from the theoretical model provide some relevant conjectural contributions. The main contributions of the model are three causal relationships confirmed in the test of hypotheses. The first of them is the confirmation of value as an antecedent of trust, this relationship is mediated by the supplier/service provider reputation (H2 and H3). The second contribution is the confirmation that the supplier/service provider reputation is a relevant construct in the context of relationship. The third contribution is the confirmation of the relationship existing in the customer retention which is directly influenced by the trust established between the client and the service provider (H4), holding 85.90% (R2 = 0.859) of its variance explained by the other constructs of the model (trust, supplier reputation, value and customer satisfaction). This study provides relevant evidences, showing that the value perceived by customers is a construct considered as antecedent of trust in services provider, and this relationship is mediated by the services provider’s reputation. In addition this study shows that the services provider’s reputation is important in the relational context studied and that the customer retention is positively influenced by the trust placed in the services provider.

Key words: customer retention, services, structural equation modeling.

INTRODUCTION

The policy of long-term relationship permeates the entire organization, influencing the interactions with customers before, during and after the sale season. It is essential to understand the relationship with customers as an expertise that establishes a difference for businesses in an increasingly competitive environment (Day, 2000).

Relationship marketing should not be seen as a panacea (Pillai & Sharma, 2003; Sharma, 2007), but a fruitful area for developing studies aiming at transforming companies in market-oriented businesses (Grönross, 1994). According to Morgan & Hunt (1994), companies are learning to collaborate in order to compete. This collaboration allows companies to reduce the risk inherent in relationship, to increase profit and to obtain a sustainable competitive advantage (Doney & Cannon, 1997; Fontenot et al, 1998).

Due to fierce competition, customer retention has become one of the central goals of relationship marketing. One of the major challenges for a company is to recognize the importance of its clients by showing them how much the company estimates the fact that they have chosen its products and or services. However, this appraisal goes beyond customer satisfaction, which has an essential role in the performance of organizations (Oliver, 1997), to improve the quality of services and the value of the company through its image and reputation (Milan, 2006). Actually, it appears as a new approach to generate profit and to guide businesses (Vavra & Pruden, 1995).

Profit is important not only as an end in itself but also because it allows the company to improve value generation and to provide incentives for customers, employees and investors (Reichheld et al, 2000). Thus, one of the main tasks of marketing managers is to establish and to keep relationship with customers, improving the profitability of the company even though it is difficult to account the specific cost of the relationship (Storbacka et al, 1994).
Benefits from customers’ retention and loyalty often reflect on why a player is more profitable than the others (Reichheld, 1993). Therefore, in order to maintain or increase its market share, a company has basically two options: keeping current customers and acquiring new ones.

Companies that invest in relationship not only attract new customers but also maintain and improve their relationship with existing ones. Fascinate new customers should be seen as an intermediate objective (Berry, 2002). Besides, Pruden & Vavra (1995) proclaimed that customer retention is a key element to succeed in market in this new millennium. Therefore, customer retention as a defensive marketing strategy is becoming pivotal for businesses and has been proposed by several researchers (Reichheld & Sasser Jr., 1990; Rust & Zahrlik, 1993; Reichheld, 1993, 1996; Heskett et al., 1994; Vavra, 1994; Reichheld et al., 2000; Milan, 2004, 2006).

**Theoretical Model and Research Hypothesis:**

The objective of this paper is to test and validate the theoretical model proposed, that is a relational practice between a service provider and its customers, resulting in customer retention. In addition, this work compares this model with a rival one obtained from the opinion of executives who work in service companies. Thus, we propose the following constructs: customer satisfaction; value; service provider reputation; trust and customer retention. A brief definition of each construct comes ahead.

The management of customer satisfaction has become an imperative for most companies to succeed (Anderson et al., 1994; Oliver, 1997; Anderson & Mittal, 2000). According to Oliver (1997), satisfaction can be defined as a judgment of the customer that a product or service has a characteristic due to the fact that it provides or has provided a comfortable level of fullness related to consumption, or even as a consumer feeling with regard to the results from the consumption in comparison to a standard of pleasure or displeasure (Oliver, 1999).

As satisfaction is strongly rooted on the customer experience by addressing issues relating to service quality, the judgment of customer satisfaction is based both on actual and on past experience. This reinforces the cumulative aspect of the definition of satisfaction offered by an array of researchers (Johnson & Fornell, 1991; Anderson et al., 1992; Anderson & Fornell, 1994; Garbarino & Johnson, 1999). In addition, future experiments may also be anticipated by the judgment of customers (Fornell, 1995).

Value or perceived value is a pivotal aspect that supports the relationship of a company and its customers. Value represents what a customer understands, at a certain period of time, as precious for the beginning and the maintenance of a long relationship aiming at purchasing and consuming with a specific supplier (Rust et al., 2000). Perceived value is a construct that represents the exchange between the benefits of a certain offer and the sacrifices of a customer who acts to obtain it (Zeithaml, 1988; Juran & Godfrey, 1999; Sirdeshmukh et al., 2002). It results in a general assessment of the customer by means of comparing what someone gets (benefits) and what is given in exchange (sacrifices) (Zeithaml, 1988).

The reputation of the service provider is related to the company’s image, the way the market perceives its organization, brand and bid (Stern et al., 2001). Moreover, the reputation of a company is related to the trust demonstrated by its customers and consequently, its credibility and prestige (Ganesan, 1994; Webley, 2003; Alsop, 2004). Reputation is founded upon the perceived quality and reliability of the company’s bid (Garvin, 1987). It is rooted in the historical behavior of the organization (Shmatikov & Talcott, 2005). Thus, many researchers argue that reputation is a construct that precedes trust (Ganesan, 1994; Webley, 2003; Shmatikov & Talcott, 2005). Reputation can result in a high level of profitability (Webley, 2003; Alsop, 2004; Apériaet al., 2004, 2004; Carmeli, 2004).

Trust is the expectation held by a person or by an organization that the word or the promise made by a partner will be kept (Rotter, 1967). Trust means to tolerate the risks that are present in a relationship established to goods exchange (Sheppard & Sherman, 1998). Rousseau et al. (1998) and Hawes et al. (1989), trust helps to reduce uncertainty over a specific transaction, and can be identified in terms of the perception of a client towards the reliability, honesty, integrity and high levels of ethical standards of a service provider (Coulter & Coulter, 2002). Therefore, trust is relevant in the service sector since the customers do not buy the service itself but a promise of service that can be or not delivered in a near future (Claycomb & Martin, 2001; Bitner, 1995).

Customer Retention is related to the maintenance of the customer’ preference for a particular supplier. It is the customer intention of an effective and regular exchange with a supplier over a long period of time (Fornell et al., 1990; Reichheld & Sasser Jr., 1990; Vavra, 1994; Hawkins et al., 1995; Vavra & Pruden, 1995; Reichheld, 1996; Oliver, 1997; Rust et al., 2000). A high customer retention rate can indicate a high number of customers who buy frequently and in bulks. It can also indicate a reduction in transaction costs (Fornell & Wernerfelt, 1987; Reichheld & Sasser Jr., 1990; Anderson & Mittal, 2000).

The following theoretical model in Figure 1 illustrates the causal relationship established between the customer and the supplier and depict the research hypotheses.
Theoretical Model and Research Hypotheses.

Thus, the following research hypotheses are proposed:

- **H1**: The Customers’ Perceived Value is positively influenced by the Customer Satisfaction;
- **H2**: The Supplier Reputation is positively influenced by the Customers’ Perceived Value;
- **H3**: The Trust in the supplier is positively influenced by the Supplier Reputation and;
- **H4**: The Customer Retention is positively influenced by the Trust in the supplier or service provider.

**Research Method:**

The Structural Equation Modeling (SEM) was utilized as a research method for the evaluation of the proposed causal relationships (Kline, 2005; Hair Jr. *et al.*, 1998). Confirmatory modeling was the strategy applied (Jöreskog & Sörbom, 1993 In: MacCallum, 1995; Hair Jr. *et al.*, 1998). Beside this approach and based on the research hypotheses, a single transversal cutting study was implemented by means of a survey (Churchill Jr., 1995; Hair Jr. *et al.*, 2000; Malhotra, 2006).

**Research Field:**

This work was developed in a multinational group that operates in the Brazilian market since late 1970s. This group supplies three segments: catering; hostelry and marketing. It offers 28 brands in its portfolio. This group employs 30,000 persons who attend 60,000 clients. The gross revenues of the group in 2007 was around US$ 3.5billion.

The population analyzed in this study comprises clients from the segment of catering in the metropolitan area of Porto Alegre and in the northeastern region of the state of Rio Grande do Sul. This choice is due to the fact that these regions represent the large amount of revenues and the majority of clients of this group. Considering such information as vital and strategic, the group decided not to inform the number of clients and the amount of revenues in the state.

This initial approach led the authors to define the research sample utilizing a non-probability sampling technique by convenience (Hair Jr. *et al.*, 2000; Malhotra, 2006). Once the researchers adopted the structural equation modeling (SEM) and the complexity of its models, Kline (2005) suggests that the sample should include 200 or more cases. However, Hu & Bentler (1995) propose that for providing acceptable levels of model adjustments it is appropriate to have a sample of around 250 or more cases. Therefore, it was decided to fix a sample of at least 250 cases.

**Structuring the Data Collection Instrument:**

Five constructs were performed to elaborate the instrument for data collection: Customer Satisfaction; Value; Reputation of the Service Provider; Trust and, Customer Retention. Such constructs are unobservable variables, that is, variables that cannot be observed directly or latent variables which can be represented and measured by means of one or more indicators that are observable variables (Bollen, 1989; Hair Jr. *et al.*, 1998; Byrne, 2001).

A scale of four items adapted from Cannon & Perreault Jr. (1999) was utilized to deal with the construct Customer Satisfaction (SATISF). A scale of four items adapted from Perin *et al.* (2004) and based on Sirdeshmukh *et al.* (2002) was employed for the construct Value (VAL). A scale of five items was applied to the construct Reputation of the Service Provider (REPUT). This scale was adapted from Ganesan (1994) (REPUT_1 to 3 and 5) and from Doney & Cannon (1997) (REPUT_1 to 3), while the scale item REPUT_4 was added by Milan (2006). A scale of seven items adapted from Doney & Cannon (1997) and utilized by Hewett *et al.* (2002) was used to evaluate the construct Trust (TRU). Finally, a scale composed of six items and adapted from Ganesh *et al.* (2000) was employed for the construct Customer Retention (RETEN). Except for the construct Value and its respective scale items, for which a semantic differential scale of ten points was utilized (Perin *et al.*, 2004), a seven point Likert scale was employed for the other constructs. This scale ranges from 1 to 7 where 1 means totally disagree and 7 means totally agree.

After structuring the data collection tool, the authors verified the validity of the content or face validity, which consists of a subjective but systematic evaluation, a representation of the contents of one or more scales
used to measure the constructs of the study (Malhotra, 2006). Thus, the data collection instrument was submitted
to three experts in the area.

And, for the effective completion of the questionnaire, we implemented a pre-test (Malhotra, 2006;
Churchill Jr., 1995), applying it to thirty respondents. The average time to respond the questionnaire was nine
minutes. Although respondents did not have significant doubts, we provided some improvements of order and
language for the final version of the questionnaire. As changes were made, besides the form of the questionnaire
in the pretest, which included the presence and guidance of a researcher to the respondents, such cases were
discarded.

Data Collection, Data Examination and Final Sample:

Data collection was conducted using a survey, based on a structured questionnaire by self-report of
respondents. 898 questionnaires were distributed, resulting in 278 questionnaires obtained, with a return rate of
30.96%.

To obtain a better quality of sample, two types of analysis have been implemented. In the first analysis it
was verified the existence of missing data and outliers. As there was not a pattern to the non-responses, we
chose to include only cases with complete data in the sample, a procedure known as complete case approach
(Hair Jr. et al, 1998; Kline, 2005), using the list wise deletion method, which is the most popular method to deal
with missing cases (Byrne, 2001). From the 278 questionnaires, 4 were eliminated. For the outliers, based on the
standardization of test variables and calculating the z-scores and in their analysis (Hair Jr. et al, 1998; Kline,
2005), we identified five cases also eliminated. The final sample resulted in 269 valid cases (Table 1). In the
second analysis, we analyzed the normality, the multi co-linearity, linearity and homoscedasticity. The results
were satisfactory.

Table 1: Profile of the respondents

<table>
<thead>
<tr>
<th>Sex</th>
<th>Type of Company</th>
<th>Size (Company’s Criteria)</th>
<th>Location of the Company</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>M</td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>169</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Private</td>
</tr>
</tbody>
</table>

Identification of a Rival Model:

Through a qualitative/exploratory research, we performed in-depth interviews with executives responsible
for the market area of the Corporate Group. We sought to identify in the perception of these professionals a rival
model to the theoretical model proposed in this study. This rival model should translate the relational practice
of the group with its customers, highlighting the customer retention construct. Indeed, converging with this
procedure, Gummesson (2000) argues that the report and the analysis of real managerial situations under the
perspective of its participants, is critical to the dissemination of best practices in the competitive environment,
qualifying and increasing the existing body of theory.

It should be noted that the in-depth interviews have been characterized as one of the main methods of data
collection in qualitative research, mainly because the researchers have the opportunity to deeply understand the
research object. Although the number of respondents is small, the researcher’s involvement with the agents who
hold the information is significant (Ribeiro & Milan, 2004).

For obtaining depth and consistency in data collection, with regard to the selection of participants
interviewed, some criteria were observed. Thus, respondents should: (i) know the market and the customer
profile, (ii) experience the actions undertaken by the Group to establish, maintain and expand customer
relationships, and (iii) perform the function or position that confer freedom of speech concerning the aspects
covered by the survey. Thus, we interviewed four executives with extensive market and company experience,
using a script of questions (Ribeiro & Milan, 2004).

The interviews were recorded and later transcribed in order to maximize the collection of data and facilitate
the description of the interviews and the analysis and interpretation of the results. The interviews were
conducted in one session and they were performed in around 1h7min.

Based on the analysis and interpretation of data, we decided to identify the rival model. The process of
selection of the model to be tested and compared with the theoretical model is given basically by three criteria:
(i) similarity between the models; (ii) coherence in causal relationships established, and (iii) consistency with
the extant literature. Therefore, we present the Rival Model identified (Figure 2):
Regarding the constructs Confidence in Management Practices and Policies (CMPP) and Confidence in Direct Personal Contact (CDPC), inserted in the Rival Model, we used scales with eleven and ten items, respectively. Both scales were adapted from Perin et al. (2004) (CMPPs 1 to 5 and 7 and 8; CDPC 1 to 3 and 5 to 8) based on the study developed by Sirdeshmukh et al. (2002). The scale items CMPP 6 and CDPC 4 were added (Milan, 2006). The scale items CMPP 9 to 11 and CDPC 9 and 10 were adapted from Santos (2001), Sirdeshmukh et al. (2002) and Perin et al. (2004).

### Results:

To assess the structural relationships inherent to the theoretical model and the rival model, we followed the steps set out in the literature (Hoyle, 1995; MacCallum, 1995; Hulland et al., 1996; Hair Jr. et al., 1998; Garver & Mentzer, 1999; Brei & Liberali, 2004; Kline, 2005). We utilized the statistical software AMOS®.

By setting the matrix of data input, we have chosen the Covariance Matrix (Cudeck, 1989) associated with the estimation method of the Maximum Likelihood parameters, which is a method that, by iterations, improves estimations of parameters to minimize a specified function of adjustment (Hair Jr. et al., 1998).

#### Individual Validation of Constructs:

Before validating the integrated model with their respective constructs, it is essential to come along with the validation of individual constructs or sub models (Anderson & Gerbing, 1988; Hair Jr. et al., 1998; Garver & Mentzer, 1999; Kline, 2005). We also evaluated the unidimensionality, the reliability and the convergent and discriminant validity of the individual constructs.

For the measurement and analysis of the unidimensionality, we developed a factorial exploratory analysis (FEA) using the method of principal components with Varimax orthogonal rotation for each construct, minimizing the number of variables with high loads on one factor (Malhotra, 2006), by means of maximizing the square of the variance of the loads of the factors (Johnson and Wichern, 1992). This procedure demonstrated that the matrix of correlations is suitable for the technique of analysis chosen and that the constructs are formed by a single factor.

We opted for a composite reliability and an extracted variance since the Cronbach's alpha assumes that the scale items are unidimensional and that all these items are also correlated (Gerbing & Anderson, 1988). Such option tends to be an inflated measure by how it treats the variances of the errors associated with indicators (Finn, 2000). Both measures were calculated for each construct from standardized charges and errors of measurement of variables.

As a criterion for the composite reliability, values equal to or greater than 0.70 are acceptable. For the extracted variance values should exceed 0.50 (Hair Jr. et al., 1998; Garver & Mentzer, 1999). According to the results presented in Table 2, the composite reliability of all constructs was well above the recommended amount, ranging from 0.90 to 0.95. For the extracted variance, the values obtained were also satisfactory, ranging from 0.66 to 0.82. These results therefore provide reliability to the scales used to measure the constructs included in the work.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Composite Reliability</th>
<th>Extracted Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Satisfaction</td>
<td>0.94</td>
<td>0.81</td>
</tr>
<tr>
<td>Value</td>
<td>0.95</td>
<td>0.82</td>
</tr>
<tr>
<td>Supplier Reputation</td>
<td>0.93</td>
<td>0.72</td>
</tr>
<tr>
<td>Trust</td>
<td>0.92</td>
<td>0.79</td>
</tr>
<tr>
<td>Confidence in Management Practices and Policies</td>
<td>0.91</td>
<td>0.72</td>
</tr>
<tr>
<td>Confidence in Direct Personal Contact</td>
<td>0.90</td>
<td>0.74</td>
</tr>
<tr>
<td>Customer Retention</td>
<td>0.92</td>
<td>0.66</td>
</tr>
</tbody>
</table>

The convergent validity of the constructs was examined in two ways: (i) by analyzing the statistical significance of the estimated parameters (load factor of the variables) based on t-values of the indicators for each construct. They should be equal to or greater than 1.96, giving them statistical significance (p <0.05)
(Dunn et al., 1994; Garver & Mentzer, 1999), and (ii) by evaluating the measures of adjustment from the Confirmatory Factor Analysis (CFA) implemented for each construct (Baggozzi et al., 1991; Graysson & Marsh, 1995; Kline, 2005). It is observed that there is a convergent validity (Table 3) for the analyses of t-values, which show that all estimated parameters are statistically significant, and for the adjustment measures of the constructs.

Table 3: Measures of Adjustment for Construct (sub model).

<table>
<thead>
<tr>
<th>Constructs</th>
<th>GFI</th>
<th>AGFI</th>
<th>RMSEA</th>
<th>TLI</th>
<th>NFI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Satisfaction</td>
<td>0.99</td>
<td>0.95</td>
<td>0.08</td>
<td>0.98</td>
<td>0.99</td>
<td>0.99</td>
</tr>
<tr>
<td>Value</td>
<td>0.98</td>
<td>0.87</td>
<td>0.15</td>
<td>0.95</td>
<td>0.92</td>
<td>0.99</td>
</tr>
<tr>
<td>Supplier Reputation</td>
<td>0.98</td>
<td>0.94</td>
<td>0.07</td>
<td>0.98</td>
<td>0.98</td>
<td>0.99</td>
</tr>
<tr>
<td>Trust</td>
<td>0.98</td>
<td>0.95</td>
<td>0.05</td>
<td>0.99</td>
<td>0.99</td>
<td>0.99</td>
</tr>
<tr>
<td>Confidence in Managing Practices and Policies</td>
<td>0.94</td>
<td>0.90</td>
<td>0.07</td>
<td>0.97</td>
<td>0.97</td>
<td>0.98</td>
</tr>
<tr>
<td>Confidence in Direct Personal Contact</td>
<td>0.96</td>
<td>0.91</td>
<td>0.06</td>
<td>0.98</td>
<td>0.98</td>
<td>0.99</td>
</tr>
<tr>
<td>Customer Retention</td>
<td>0.98</td>
<td>0.93</td>
<td>0.07</td>
<td>0.98</td>
<td>0.98</td>
<td>0.99</td>
</tr>
</tbody>
</table>

Note: For GFI, AGFI, TLI, NFI and CFI, values above 0.90 indicate good adjustment of the model for data, and for RMSEA, values between 0.05 and 0.08 are considered as acceptable (Hair Jr. et al., 1998; Kline, 2005).

For the identification of the discriminant validity between the constructs, we used the procedure suggested by Fornell & Larcker (1981). Through this procedure, the extracted variances of the constructs are compared to the shared variances which are calculated by the correlations between square constructs. Consequently, there is discriminant validity between constructs when they present extracted variances greater than the variance shared with other constructs.

Based on the results shown in Table 4, two comments are appropriate: As the extracted variance of the construct Supplier Reputation (0.72) was slightly lower than the shared variance with the construct of Trust (0.76), we can say that these two constructs are slightly correlated. The same occurs also with the proposed relationships in the Rival Model with the constructs Confidence in MPP (0.72) and DPC (0.87), which may raise the inference about the redundancy between these two dimensions. Again, the one-dimensional addressed trust can bring better results. However, even considering these comments, it appears that, in general, there is discriminant validity between the constructs.

Table 4: Extracted Variances and Shared Variances.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Satisfaction</th>
<th>Value</th>
<th>Reputation</th>
<th>Trust</th>
<th>MPPs</th>
<th>DPC</th>
<th>Retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Satisfaction</td>
<td>0.81</td>
<td>0.76</td>
<td>0.64</td>
<td>0.59</td>
<td>0.59</td>
<td>0.59</td>
<td>0.58</td>
</tr>
<tr>
<td>Value</td>
<td>0.82</td>
<td>0.61</td>
<td>0.72</td>
<td>0.54</td>
<td>0.59</td>
<td>0.59</td>
<td>0.59</td>
</tr>
<tr>
<td>Supplier Reputation</td>
<td>0.64</td>
<td>0.61</td>
<td>0.72</td>
<td>0.76</td>
<td>0.76</td>
<td>0.76</td>
<td>0.76</td>
</tr>
<tr>
<td>Trust</td>
<td>0.59</td>
<td>0.59</td>
<td>0.71</td>
<td>0.69</td>
<td>0.69</td>
<td>0.69</td>
<td>0.69</td>
</tr>
<tr>
<td>Confidence in MPPs</td>
<td>0.59</td>
<td>0.59</td>
<td>0.71</td>
<td>0.68</td>
<td>0.68</td>
<td>0.68</td>
<td>0.68</td>
</tr>
<tr>
<td>Confidence in DPC</td>
<td>0.58</td>
<td>0.58</td>
<td>0.59</td>
<td>0.59</td>
<td>0.59</td>
<td>0.59</td>
<td>0.59</td>
</tr>
<tr>
<td>Customer Retention</td>
<td>0.58</td>
<td>0.58</td>
<td>0.59</td>
<td>0.59</td>
<td>0.59</td>
<td>0.59</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Note: bold values across the table represent the extracted variances while the other values represent the shared variances.

Validation of the Proposed Theoretical Model and Test of the Hypotheses:

Based on the estimation of the hybrid model we obtained the measures of adjustment to validate the theoretical model. They are presented in Table 5. As noted, the GFI and AGFI do not result in satisfactory values, although the other measures (RMSEA, TLI, NFI and CFI) comply with the recommended values of reference.

Given the novelty of the proposed theoretical model which has no previous empirical evidence to enable effective comparisons, it is understood that the model, even if not with satisfactory values in all measures of adjustment, calls for maturation. This may come from its improvement with new theoretical studies or from empirical ones, therefore, the model cannot be considered as invalid.

Table 5: Measures of adjustment of the theoretical model.

<table>
<thead>
<tr>
<th>Theoretical Model</th>
<th>GFI</th>
<th>AGFI</th>
<th>RMSEA</th>
<th>TLI</th>
<th>NFI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values of the measures of adjustment</td>
<td>0.837</td>
<td>0.786</td>
<td>0.079</td>
<td>0.926</td>
<td>0.907</td>
<td>0.939</td>
</tr>
</tbody>
</table>

It is necessary to make a comment regarding the measures of fit of the model. Considering the model as acceptable if and only if such measures exceed the reference value is not a totally reliable and infallible rule because the models "do not work equally well with various levels of fitness, [different] sample sizes, estimators or [types of] distribution" (Hu & Bentler, 1995, p. 95).

Besides analyzing the fit of the model from the points of cut or from the recommended values of reference, preferably evaluating the measures together (Hulland et al., 1996), one should consider that they are reasonable, a substantive contribution to the field of study and its empirical meaning (Bollen, 1989; Mulaik et al., 1989).

For testing the assumptions inherent to the theoretical model, we examined the significance and magnitude of the estimated regression coefficients. A significant coefficient of regression indicates that the relationship...
between two variables is established empirically (Hair Jr. et al., 1998). The hypotheses, the structural paths, the non-standardized coefficients, the standard errors, the standardized coefficients, the t-values and the probabilities are shown in Table 6.

Table 6: Results of the test of hypotheses for the theoretical model.

<table>
<thead>
<tr>
<th>Hi</th>
<th>Structural Paths</th>
<th>Non-standardized Coefficients (b)</th>
<th>Errors</th>
<th>Standardized Coefficients (β)</th>
<th>t-values</th>
<th>P</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>SATISF → VALUE</td>
<td>0.897</td>
<td>0.039</td>
<td>0.981</td>
<td>22.958</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>H2</td>
<td>VALUE → REPUT</td>
<td>0.494</td>
<td>0.033</td>
<td>0.905</td>
<td>14.743</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3</td>
<td>REPUT → TRUST</td>
<td>1.221</td>
<td>0.077</td>
<td>0.977</td>
<td>12.875</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>H4</td>
<td>TRUST → RETEN</td>
<td>1.487</td>
<td>0.082</td>
<td>0.927</td>
<td>18.085</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Note: Result of the test of hypotheses to the level of significance of .05.

From these results it is concluded that all hypotheses can be accepted, that is, the customers' perceived value is positively influenced by customer satisfaction (H1). The reputation of the service provider or supplier is positively influenced by the customers' perceived value (H2). The trust or confidence in the service provider or supplier is positively influenced by the reputation of the service provider (H3) and the customer retention is positively influenced by the trust in the service provider (H4).

We have also analyzed the coefficients of determination ($R^2$) that were calculated by the squared multiple correlations of each dependent variable (Table 7). The coefficients of determination are useful to determine the relative importance of each causal relation tested (Hair Jr. et al., 1998), representing the combined effect of independent variables over the dependent variables and indicating the percentage of variance of a dependent variable which is explained by the independent variables. Correlation coefficients with high values hold a great explanatory power (Santos, 2001).

Table 7: Coefficients of determination of the theoretical model.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Coefficients of determination ($R^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VALUE</td>
<td>0.963</td>
</tr>
<tr>
<td>REPUT</td>
<td>0.820</td>
</tr>
<tr>
<td>TRUST</td>
<td>0.955</td>
</tr>
<tr>
<td>RETEN</td>
<td>0.859</td>
</tr>
</tbody>
</table>

Since the coefficient of determination indicates the proportion of the variance of a dependent variable which is explained by the independent variables, we have the following results: a) 85.90% of the variance of the Customer Retention is explained by their independent variables, in this case: reliability; supplier reputation; value and Customer Satisfaction; b) 95.55% of the variance of the Trust is explained by the supplier reputation, by the value and the customer satisfaction; c) 82.00% of the variance of the Supplier Reputation is explained by value and by customer satisfaction and d) 96.30% of the variance of the Value is explained by customer satisfaction. These results suggest a high explanatory power for the constructs included in the proposed theoretical model.

**Test and Evaluation of the Rival Model:**

The same tests implemented in the theoretical model were performed in the rival model. According to the results shown in Table 8, only the CFI obtained an acceptable value in the rival model.

Table 8: Measures of adjustment of the rival model.

<table>
<thead>
<tr>
<th>Rival Model</th>
<th>GFI</th>
<th>AGFI</th>
<th>RMSEA</th>
<th>TLI</th>
<th>NFI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values for the measures of adjustment</td>
<td>0.755</td>
<td>0.704</td>
<td>0.087</td>
<td>0.888</td>
<td>0.861</td>
<td>0.902</td>
</tr>
</tbody>
</table>

Regarding the test of hypotheses, from the five underlying hypotheses of the rival model, four were supported (H1, H2, H4 and H5) and one was rejected (H3). The result of the test of hypotheses is shown Table 9.

Table 9: Results of the test of hypotheses for the rival model.

<table>
<thead>
<tr>
<th>Hi</th>
<th>Structural Paths</th>
<th>Non-standardized Coefficients (b)</th>
<th>Errors</th>
<th>Standardized Coefficients (β)</th>
<th>t-values</th>
<th>P</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>MPPs ←→ DPC</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Accepted*</td>
</tr>
<tr>
<td>H2</td>
<td>MPPs → VALUE</td>
<td>0.861</td>
<td>0.213</td>
<td>0.677</td>
<td>4.051</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3</td>
<td>DPC → VALUE</td>
<td>0.281</td>
<td>0.179</td>
<td>0.125</td>
<td>1.572</td>
<td>0.116</td>
<td>Rejected</td>
</tr>
<tr>
<td>H4</td>
<td>VALUE → REPUT</td>
<td>0.559</td>
<td>0.039</td>
<td>1.020</td>
<td>14.232</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>H5</td>
<td>REPUT → RETEN</td>
<td>1.968</td>
<td>0.132</td>
<td>0.955</td>
<td>14.953</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Notes: 1) MPPs ←→ DPC represent a correlation between the constructs; and 2) (*) hypothesis accepted by the magnitude of the correlation between the constructs (97).

The coefficients of determination resulting from the rival model are shown in Table 10.
Table 10: Coefficients of determination of the rival model.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Coefficients of determination ($R^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VALUE</td>
<td>0.858</td>
</tr>
<tr>
<td>REPUT</td>
<td>0.995</td>
</tr>
<tr>
<td>RETEN</td>
<td>0.912</td>
</tr>
</tbody>
</table>

Comparison between the Theoretical Model and the Rival Model:

The rival model resulted in an adjustment far from acceptable. In such a way, this finding reinforces the idea of a partial validation of the theoretical model which remains immature, either by presenting better measures of fitting when compared to the rival model or by showing more parsimony over the causal relationships established. Table 11 depicts the comparison of measures of adjustment between the two models.

Table 11: Comparison between the measures of adjustment of the theoretical model and the rival model.

<table>
<thead>
<tr>
<th>Measures of Adjustment of the Models</th>
<th>Theoretical Model</th>
<th>Rival Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>GFI</td>
<td>0.837</td>
<td>0.755</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.786</td>
<td>0.704</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.079</td>
<td>0.087</td>
</tr>
<tr>
<td>TLI</td>
<td>0.926</td>
<td>0.888</td>
</tr>
<tr>
<td>NFI</td>
<td>0.907</td>
<td>0.861</td>
</tr>
<tr>
<td>CFI</td>
<td>0.939</td>
<td>0.902</td>
</tr>
</tbody>
</table>

Conclusions:

By examining the strength of causal relationships in the theoretical model, some measures of adjustment of the model (Table 5), such as the GFI (.837) and the AGFI (0.786) did not result in satisfactory values. Nonetheless, all the research hypotheses were accepted. It was confirmed that: the customers’ perceived value is positively influenced by customer satisfaction (H1); the supplier reputation is positively influenced by customers’ perceived value (H2); the trust in the supplier/service provider is positively influenced by the supplier reputation (H3); and customer retention is positively influenced by trust in the supplier/service provider (H4).

Moreover, the coefficients of determination of the theoretical model (Table 7) show a strong explanatory power of the independent variables over the dependent variables. The novelty of the theoretical model and the measures of adjustment adopted with the test of hypotheses and the coefficients of determination partially validate the model, however it needs new researches for becoming mature.

Results from the theoretical model provide some relevant conjectural contributions. The main contributions of the model are three causal relationships confirmed in the test of hypotheses. The first of them is the confirmation of value as an antecedent of trust, this relationship is mediated by the supplier/service provider reputation (H2 and H3). In the majority of the researches that insert the trust and the value, the trust appears as antecedent of the value, e.g. the works developed by Sirdeshmukh et al. (2002) and Perin et al. (2004).

By confirming the hypotheses H2 and H3, it is understood that such findings are considered as outstanding contributions for the service sector because they count the value as antecedent of the trust and not the contrary when they look at the role of mediator of the supplier reputation. Such evidence confirm the ideas of Grönroos (1998) who argues that the companies devoted to the service sector should direct their marketing activities through a strategy based on customer value. Berry (2001) also highlights the importance of being reliable and recognizable for a service provider.

The second contribution is the confirmation that the supplier/service provider reputation is a relevant construct in the context of relationship. It influences directly and positively the level of trust placed by the customer and the service provider. It also influences indirectly the customer retention. Although there is evidence that the reputation of a company is related to the trust manifested by its customers and its market credibility (Ganesan, 1994; Webley, 2003; Shmatikov & Talcott, 2005), the results do not support ultimate conclusions yet. For example, in the seminal work developed by Ganesan (1994), in which the author relates the company's reputation to its credibility and benevolence, the results do not suggest that the reputation is completely related to the trust. Thus, this study contributes for seeking a significant relationship between the supplier reputation and the trust, what can result in a higher profitability for the supplier/service provider (Webley, 2003; Alsop, 2004; Apértia et al, 2004; Carmeli, 2004).

The third contribution is the confirmation of the relationship existing in the customer retention which is directly influenced by the trust established between the client and the service provider (H4), holding 85.90% ($R^2 = 0.859$) of its variance explained by the other constructs of the model (trust, supplier reputation, value and customer satisfaction). Such evidence, for example, suggests the key role of trust in the establishment, maintenance and development of a long relationship (Morgan & Hunt, 1994), as well as in the ability for companies to expand cooperation between partners (Mayer et al, 1995), and in obtain a possible source of competitive advantage (Barney & Hansen, 1994).
Regarding the rival model, it is important to think of its comparative role in relation to the theoretical model. Not only as a simple alternative to the theoretical model, but as a way to identify and translate in a path diagram the thought and experience of business professionals, the rival model depicts how relationships and customer retention are performed in the market.

It is essential to understand the contribution of the rival model, which entails that theory and practice can and should be closer as advocated by Gummesson (2000). In the qualitative research implemented with four executives, we observed not only the expertise of these professionals but also an excellent theoretical understanding of the object of this research. Even if the measures of adjustment of the rival model were not satisfactory (Table 8), four of the five hypotheses inherent to the model were confirmed (H1, H2, H4 and H5) (Table 9).

It is undeniable that the rival model has allowed an alternative in order to understand the maintenance of relationships under a long-term perspective, addressing the trust in a two-dimensional form, that is, the trust in the MPPs and in the DPC. This approach has been gaining strength in view of the work carried out by Singh & Sirdeshmukh (2000) and Sirdeshmukh et al (2002), with replication of researches on the Brazilian market (Brei, 2001; Perin et al, 2004).

All these works have empirical research on business-to-consumer relationship. In the rival model tested in a business-to-business relationship, similar to the work of Sirdeshmukh et al (2002) and Perin et al (2004), the hypothesis (H3) where the customer perceived value is positively influenced by trust in the DPC was not supported. This hypothesis was rejected in a study developed by Brei (2001). It was partially accepted depending on the segment under consideration according to Sirdeshmukh et al (2002) and Perin et al (2004).

Considering the environment of application and the result, it is acknowledged that this study brings further evidence that the dimension of trust does not bring significant impact on customers' perceived value. In assessing the discriminant validity of the constructs, as already mentioned, we identified a relative redundancy between these two dimensions. This may indicate that perhaps the best way to introduce and operationalize the construct trust in an environment of service such as where the Group acts is in a one-dimensional approach.

It is important to mention that the theoretical model is not a definitive representation of the relational practice of the company under study but the best picture of this practice through the models analyzed (the theoretical and the rival models). Therefore, the replication of the research in other environments and with different relational features in the dyadic customer-supplier scheme could provide comparative evidence that would improve the adjustment of the theoretical model, confirming it or not, according to the research situation.

Regarding the model specification, it would be interesting to test it empirically with some relationships and alternative constructs. To do so, a relationship between the trust as an antecedent of the value could be tested, for example, adding the trust in a multidimensional way (trust in the MPPs and in the DPC), instead of the trust as a unidimensional construct. One final suggestion, besides these research possibilities, would be by adding an indirect relationship between the trust (one-dimensional and/or multi-dimensional) and the customer retention, mediated by the value or by the enduring of the relationship.

Despite the limitations of this study and the possibilities of developing future ones, it is acknowledged that the practice of relationship marketing and customer retention in service environments, and the use of structural equation modeling, by its power of statistical explanation, provide theoretical, empirical and managerial relevance to this study.

REFERENCES


