

BUILDING RELATIONSHIP QUALITY IN ELECTRONIC COMMERCE

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ABSTRACT

The creation of value seems to be a key factor for a sustainable growth to any organization, especially when the market is geographically huge like the Brazilian market which remains cautious in a slow ongoing global economic recovery scenario.

Technological innovation allows different strategies to attend wants and needs of customers. Compared to traditional physical stores, electronic commerce offers an easier access and search process to the buyer, i.e., allowing them to easily find the most suitable offer, concerning brands, price, delivery and freight rates. This landscape heightens the challenge for sellers to develop a relationship quality marketing with their clients instead of a transactional marketing approach, which sometimes means one sole purchase.

So, commitment, satisfaction and trust that one inspires on ones clients appear to be even more important to e-commerce businesses, since price and other selling conditions are very similar.

In this paper we report on our studies about the construction of a model to measure the relationship quality between consumers and e-commerce sellers, exploring demographic variables, attitude, behavior and loyalty toward electronic purchase, perceived value, commitment, satisfaction and trust.

A first survey was conducted with a non-probabilistic sample extracted from a Brazilian nationwide electronic commerce vendor database covering 2009-2013 period. Around 1200 clients answered the online research about behavior and attitude toward e-commerce. Statistical tests (Chi-square, t test) were conducted to get a general overview.

We did not find evidences of action loyalty, meaning that despite the respondents declaring they believe (cognitive loyalty) and like (affective loyalty) the e-seller, their intention to buy (conative loyalty) sometimes does not transform into action. These initial findings have led us to expand our research to include perceived value, commitment, satisfaction and trust, using Structural Equation Modeling, establishing links among those constructs concerning the relationship quality between the buyer and the e-commerce seller.

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Key words: technology impact, e-commerce, buyer-seller relationship, perceived value, relationship quality, structural equation modeling

INTRODUCTION

It is widely recognized that technological innovation has brought business the potential to transform their customers' shopping experience and strengthen their own competitive positions, allowing them different strategies to better attend their clients' wants and needs.

Online trade provides firms a mechanism for broadening target markets, improving two-way communication with customers, collecting market research data, improving cost efficiency and delivering customized offers (Srinivasan et. al, 2002; Basu & Muyulle, 2003). Particularly, in an increasingly connected world, compared to traditional physical stores, electronic commerce offers an easier access and search process to the buyers, allowing them to easily find the most suitable product, taking into account brands, price, delivery and freight rates.

Despite the fact that e-commerce is at different stages of maturity around the world, preparing and delivering a valuable offer seems to be a key factor to achieve a profitable outcome. Valuable offers, i.e., custom products, promoted correctly at the most appropriated place and price, are expected to produce loyal and committed customers.

Perceived Value

Value literature over time shows that academics have just begun to understand what value means (Lindgreen, 2012). Up to 2005, most researchers sought to explain value or usefulness from the trade-off between benefits – technical, economic, service, social – and sacrifices – money, time, effort to obtain the product – associated with a good or service (Zeithaml, 1988; Holbrook, 1994; Woodruff, 1997).

As the importance of relationship marketing instead of a transactional marketing approach has increased, scholars and professionals have been paying special attention to determine the nature and process of value creation (Eggert *et al.*, 2006; Möller, 2006; Grönroos, 2008).

According to Ulaga & Eggert (2006), it is important to observe that value is a subjectively perceived construct on a high level of abstraction and value perceptions are relative to competition, i.e., the value of an offering is always assessed in relation to a competing offer.

In a previous study, those researchers stated that perceived value and customer satisfaction are two distinct yet complementary constructs (Eggert & Ulaga, 2002). They remarked that interactions between them are strong and the first one should be conceptualized as a cognitive and the second as an affective construct.

This is the very essence of marketing discipline. Voluntary market exchange only happens when all parties involved expect to be in a better situation after the exchange, if they perceive value in the exchange or the relationship (Alderson, 1957; Kotler, 2011). Customers with a strong relationship with a service provider or retailer represent a precious asset and a determinant key of profitability for service firms (Dowling & Uncles, 1997; Rigby *et al.*, 2002; Webster, 2000; Grant, 2004).

Relationship quality

Relationship quality is referred to very often on marketing literature as the strength of a relationship between two parts, however, Caceres & Paparoidamis (2007) and Athanasopoulou (2009) state there is no consensus among the researchers on the dimensions that compose the construct "relationship quality". Many researchers understand it as a higher-order construct, generally composed of satisfaction, trust and commitment (Dorsch *et al.*, 1998; Hibbard *et al.*, 2001; Wulf *et al.*, 2001; Hewett *et al.*, 2002; Ulaga & Eggert, 2006; Athanasopoulou (2009). That is the approach we adopted in this study.

Satisfaction

Researchers generally agree that expectations can be used as reference points in customers' assessment of service performance. Satisfaction studies are mainly influenced by the disconfirmation paradigm that states that customer satisfaction is the result of the comparison between the perceived performance and expectations. If the performance perceived is equal to that which was expected, the customer is satisfied. When performance exceeds expectations, the customer is very satisfied and if it is below, the customer will be dissatisfied (Parasuraman *et al.*, 1988).

Considering the consumer behavior, according to a tendency toward a cumulative view, Garbarino & Johnson (1999) and Sharma *et al.* (1999) suggest measuring satisfaction as the general level of satisfaction based on all experiences with a firm. As an affective state of mind resulting from the evaluation of all relevant aspects of the relationship, satisfaction can be viewed as a predictor of repurchase intentions, word-of-mouth and loyalty (Ravald & Grönroos, 1996; Liliander *et al.*, 1995; Fournier *et al.*, 1999).

If an individual has already experienced that a certain supplier is able and willing to fulfill his or her needs and demands and is a reliable partner, i.e., he or she is satisfied, this supplier will be probably trusted.

Trust

Trust was established by Morgan & Hunt (1994, p.23) as a key-mediating variable in relational exchanges that occurs "when one party has confidence in an exchange partner's reliability and integrity".

Among the different definitions of customer's trust it is possible to find one common notion that trust is the belief, the confidence that the partner's behavior will be in the best interest of the other partner (Anderson & Weitz, 1992; Morgan & Hunt, 1994). Trust diminishes the perceived risk in a relationship and leads to commitment to the relationship.

Commitment

Commitment is widely acknowledged in relationship marketing literature. It is considered the foundation of a relationship (Berry & Parasuraman, 1991; Moorman *et al.*, 1993, Morgan & Hunt, 1994). Customer's commitment can be described as a lasting intention to develop and maintain a long-term relationship (Anderson & Weitz, 1992; Moorman *et al.*, 1992) and according to Moorman *et al.* (1993), a high level of commitment helps to stabilize the relationship.

Commitment has three components: affective – a positive attitude towards the relationship; instrumental – it happens whenever some kind of investment, like time or other resources, are made; temporal – indicates a long lasting relationship (Gundlach *et al.*, 1995).

Loyalty

A deep commitment to rebuy or recommend a preferred product/brand consistently in the future, despite situational influences and marketing efforts that could switch the consumer behavior is the definition of loyalty (Oliver, 1997).

Oliver's proposal introduces a four-stage loyalty model: cognitive, affective, conative and actual purchase behavior. At the first stage, consumer loyalty is determined by information relating to the offering such as price and quality and it is largely influenced by his evaluative response to the perceived performance of the offering value.

Affective loyalty relates to a favorable attitude towards a specific brand and can deteriorate by increased attractiveness of competitive offerings. This attitudinal loyalty must be accompanied by a desire of intention and action, for example repurchase a certain brand. This stage corresponds to the conative loyalty. The last loyalty stage is action loyalty, when the intentions are transformed into action.

Once we have presented the relationship quality components and loyalty types, we will also briefly explore personal characteristics towards the use of electronic commerce, since Huntley (2005) remarks that technology-intensive product and service may have idiosyncratic effects on relationship quality.

Personal characteristics

We will explore attitudinal characteristics - self-efficacy, innovativeness, attitude; and behavioral characteristics - need for human interaction, need for touch, expertise.

Self-Efficacy

This refers to a person's belief that he/she is capable of performing a particular task successfully (Bandura, 1977, 1995, 1997; Dabholkar *et al.*, 2002). Van der Bijl *et al.* (2002) remark that individuals are more likely to engage in activities for which they have high self-efficacy. Self-efficacy has been thought of as a kind of self-confidence (Kanter, 2006) or a task-specific form of self-esteem (Brockner, 1988; Lunenburg, 2011).

Innovativeness

Innovativeness refers to the velocity and the extent one person adopts innovations. Zhou *et al.* (2007) state that innovativeness is related to electronic shopping, i.e. it can be understood as an innovative behavior regarding shopping at physical stores. Innovativeness also means the desire for new stimuli (Hirschman, 1980).

Attitude

Attitude is an important marketing construct that may be defined as favorableness or unfavorableness as a result of a set of beliefs, feelings and behavior intentions toward an object

(Sheth *et al.*, 1999). Attitude is an expression of like or dislike towards an object that determines an individual's intentions and attitude toward electronic purchase as a key factor to differentiate an electronic buyer from a non electronic buyer (Goldsmith & Bridges, 2000, Blackwell *et al.* 2001).

Need for human interaction

Need for social interaction is determinant to some consumers on adopting self-service technology products. It is very important (Dabholkar, 1996; Dabholkar *et al.* 2002; Simon *et al.*, 2007). On the other hand, Meuter *et al.* (2000) explain that avoiding human interaction can be a source of satisfaction to some consumers.

Need for touch

Sensorial need from the marketing point of view affects attitude as much as the buying behavior, according to Peck *et al.* (2003). The attitude towards a product can depend directly on touching and having a sensorial answer. The need for feel and touch can make the difference between adopting internet as a purchasing channel or not.

Expertise

Expertise gives to internet users skills to find what they are looking for easier, to choose the best payment modes and to identify safe virtual stores. Besides, they are able to finish the purchasing process quicker. The more time an individual spends online, the more confident and familiar he or she gets and at the same time, the more open he/she is to explore the internet services (Novak *et al.* 2000; Zhao, 2006).

This theoretical scenario supports this paper whose purpose is to propose a model to measure the relationship quality between consumers and e-commerce sellers, exploring demographic variables, attitude and behavior toward electronic purchase, perceived value, satisfaction, trust and commitment.

METHODOLOGY

Two surveys were carried out on using a non-probabilistic sample from a Brazilian nationwide electronic commerce vendor database covering 2009-2013 period. Launched in September 2000, S.com.br, as named in this study, is the electronic retail business unit of a well-known Brazilian wholesaler. They sell books, electronics & computers, home, beauty, health & grocery products and automotive parts, among other departments.

First data collection

Primarily, we conducted a research to know who those consumers were. So, an invitation to respond to a survey as to their electronic purchases behavior was sent to almost 45.000 individuals over the period from March to June 2014. This first questionnaire was designed to gather personal characteristics about attitude (self-efficacy, innovativeness, attitude), behavior (need for human interaction, need for touch, expertise) and loyalty toward e-commerce. We also asked some questions about the last electronic purchase made.

The scales used to measure attitude and behavior were based on Garcia & Santos (2011) and the scales used to evaluate loyalty were adapted from Lopes (2007). All of them have already been validated. In this study a Likert 5 Points Scale (1 - Strongly Disagree; 5 - Strongly Agree) was applied. Variables are listed in Table 1.

Table 1- Variables for questionnaire 1

Personal characteristics
Self-Efficacy
selfeff1 - I feel apt to use the internet by myself
selfeff2 - I have enough time to enjoy what internet can offer me
selfeff3 - I have the knowledge and the abilities to use internet
Innovativeness
inno1 - I always look for new ideas and experiences
inno2 - I like to change my activities constantly
Attitude
att1 - I like shopping at internet
att2 - E-stores are good places to buy products
Need for human interaction
humneed1 - Human contact makes the purchase process more pleasant for the consumer
humneed2 - I like to interact with the sales person
humneed3 - The sales person is very important to me
humneed4 - Using a machine bothers me when I can speak directly with a sales person
Need for touch
touchneed1 - I trust more in products I can touch before I buy
touchneed2 - I feel more comfortable buying a product I can examine
touchneed3 - When I visit stores I like to grab products
Expertise
exp1 - I am familiar with internet shopping
exp2 - I am familiar with using internet as a shopping channel
exp3 - I have experience in shoppingat websites
Loyalty
loy1 - S.com.br is the best e-commerce site(<i>Cognitive loyalty</i>)
loy2 - I really appreciate S.com.br services(<i>Affective loyalty</i>)

Personal characteristics
loy3 - S.com.br offers good prices(<i>Cognitive loyalty</i>)
loy4 - S.com.br as e-commerce is not as good as I thought it would be(<i>Cognitive loyalty</i>)
loy5 - I like S.com.br(<i>Affective loyalty</i>)
loy6 - I have a preference for S.com.br(<i>Affective loyalty</i>)
loy7 - I would recommend S.com.br to my friends(<i>Conative loyalty</i>)
loy8 - I am loyal to S.com.br(<i>Action loyalty</i>)
loy9 - If I could do it over again I would choose an alternative e-commerce site(<i>Action loyalty</i>)

Note: variables humneed1, humneed4, touchneed1, touchneed3,loy4 and loy9 were reverse.

Demographic data was retrieved from the S.com.br database and added to the data collected through the questionnaire: gender, age, income, education, place of residence (capital or not), average ticket and total purchases made over 2009-2013 period.

Descriptive statistics were used just to get a general overview. Frequencies and cross tabulations analysis, Chi-square and Student's T-test were conducted. 1.249 cases were validated.

Second data collection

We learned from the first data set analysis that S.com.br customers were familiar with Internet, declared they liked S.com.br but do not considered themselves as loyal to S.com.br. These findings led us to explore the relationship quality, i.e. the strength of the relationship between seller-customer.

So, an invitation to answer a second questionnaire was sent to those 1.249 customers who participated in the first survey. This data collection was conducted over the period September-October 2014. We had around 260 replies from which missing cases and outliers were excluded and 202 cases were validated. The objective of this second questionnaire was to collect data about perceived value and relationship quality expressed by satisfaction, trust and commitment.

The second questionnaire was based on a validated instrument already tested by Eggert & Ulaga (2006). A Likert 5 Points Scale (1 - Strongly Disagree; 5 - Strongly Agree) was used. Variables are presented in Table 2.

Table 2 - Variables for questionnaire 2

Variables
Perceived value
val1 - Compared with the site B, site A adds more value to the relationship overall
val2 - Compared with the site B, I gain more in my relationship with site A
val3 - Compared with the site B, the relationship with site A is more valuable
val4 - Compared with the site B, site A offers more value for me when comparing all costs and benefits

Variables
Satisfaction
sat1 - I have already regretted shopping from site A
sat2 - I am very satisfied with shopping from site A
sat3 - I am very happy with site A does for me
sat4 - I am not completely satisfied with site A
sat5 - I would still choose site A if I had to shop again
Trust
tru1 - Site A keeps the promises done
tru2 - Site A really cares about my shopping success
tru3 - I believe Site A considers my interests
tru4 - Site A is trustworthy
Commitment
com1 - The relationship with site A is very important to me
com2 - The relationship with site A is something I intend to maintain
com3 - The relationship with site A is something I care to maintain
com4 - The relationship with site A deserves my effort to be maintained

Note: the variables sat4 was reverse.

Structural Equation Modeling was chosen to explore the links among all the data collected, since this technique allows the researcher to incorporate construct latent variables, not measured directly, and to estimate dependence relations, be they multiple or interrelated or both (Hair *et al.*, 2005).

In this paper we report on our studies about the construction of a model to measure the relationship quality between consumers and e-commerce sellers, reflected by satisfaction, trust and commitment. We propose perceived value as an antecedent and demographic variables of attitude and behavior toward electronic purchase as moderators. Figure 1 shows our proposed model.

Partial Least Square (PLS) was employed because it is ideal for early stages of research, as in this one (Hulland, 1999). Based on an iterative combination of Principal Components Analysis and Regression, PLS aims to explain the variance of the constructs in the model and is more flexible than Linear Structural Relations (LISREL), concerning its assumptions as to multivariate normal distribution and sample size (Chin, 1998).

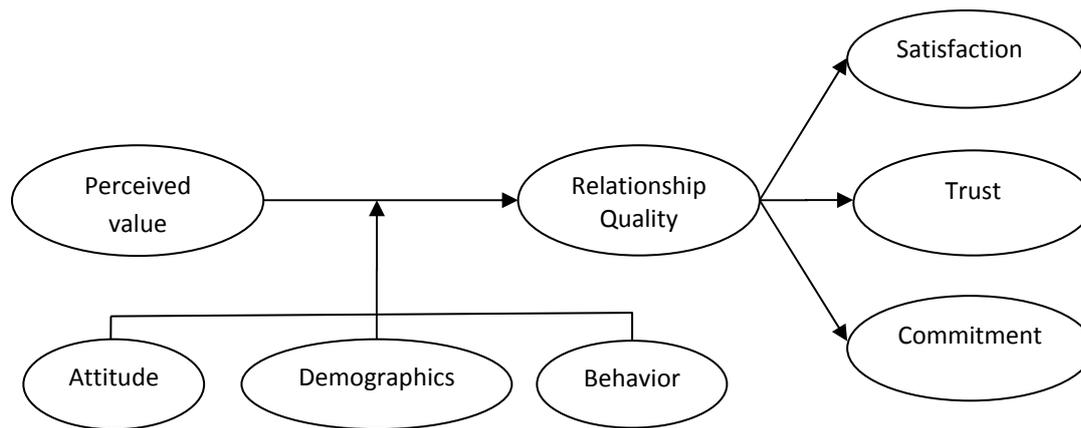


Figure 1: Theoretical model proposed, Source: authors.

RESULTS AND DISCUSSION

Firstly, descriptive analysis revealed the respondents were 41 years old on average, 89% had high school or higher degree and 93% reported feeling very comfortable using internet. 91% like to buy at internet and 90% consider online stores a good place to shop. 94% declared that they had used a personal computer or a notebook in their last electronic purchase.

We ran Chi-square tests to verify the relationship between gender and these measured variables. All tests revealed insignificant differences ($p < .05$), meaning gender and these characteristics were independent.

75% of the respondents were male, but we found no significant statistical differences ($p < .05$) between male and female attitudinal and behavioral answers, performing T-test (Table 3, Table 4).

Table 3: Attitudinal and behavioral statistics

	Gender	Mean	Std. Deviation	Std. Error Mean
Attitude	Female	4.0287	.52351	.03096
	Male	4.0938	.47414	.01600
Behavior	Female	3.4679	.41254	.05721
	Male	3.5808	.53712	.04314

Table 4: T-test for equality of means

	t	Df	Sig. (2-tailed)	MeanDifference	Std.ErrorDifference
Attitude	-1.964	1162	.050	-.06509	.03314
Behavior	-1.384	205	.168	-.11288	.08157

21% of the purchases performed from 2009 to 2013 at S.com.br originated from 4 cities located in the southeast region which is the most developed and richest part of the country and the region with the largest proportion of households connected to Internet (Brazilian Internet Steering Committee, 2014).

We perceived that 79% of all the purchases were originated from almost 600 different cities and 30% of them registered one single sale over the period 2009-2013 (Figure 2).

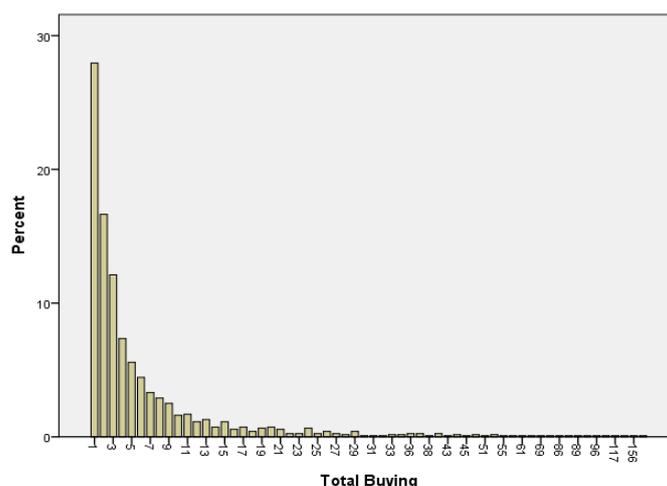


Figure 2: Total buying of S.com.br customers, Source: research

This led us to look more closely at the loyalty construct (Table 5).

Table 5: Loyalty scale means

Item	Mean
loy1 - S.com.br is the best e-commerce site(<i>Cognitive</i>)	3.16
loy2 - I really appreciate S.com.br services(<i>Affective</i>)	3.61
loy3 - S.com.br offers good prices (<i>Cognitive</i>)	3.42
loy4 - S.com.br as e-commerce is not as good as I thought it would be (<i>Cognitive</i>)	3.35
loy5 - I like S.com.br(<i>Affective</i>)	3.73
loy6 - I have a preference for S.com.br(<i>Affective</i>)	3.13
loy7 - I would recommend S.com.br to my friends(<i>Conative</i>)	3.83
loy8 - I am loyal to S.com.br(<i>Action</i>)	2.58
loy9 - If I could do it over again I would choose an alternative e-commerce site (<i>Action</i>)	3.31

The 3 higher means were for "I would recommend S.com.br to my friends" (3.83), "I like S.com.br" (3.73) and "I really appreciate S.com.br services" (3.61). They refer to conative and affective loyalty phases. "I am loyal to S.com.br" (2.58), an action loyalty item showed the lowest mean. S.com.br customers do not consider themselves loyal clients.

We also calculated each loyalty phase mean: cognitive (3.31) , affective (3.49), conative (3.83), action (2.94). As we can see, S.com.br customers' intention of buying does not turn into action. We applied t-test to assess whether those means were statistically different between men and women and it was not possible to reject H_0 at .05 level. Men and women can be considered equally not loyal. So, our sample can be considered homogeneous.

Then, we moved forward applying the second questionnaire.

First of all we evaluated the missing cases and outliers and 55 cases were removed, leaving 202 cases. The SmartPLS 3.0 software was utilized to assess the proposed model. The first step of the Partial Least Square (PLS) is the evaluation of the adequacy of measures (Hulland, 1999; Henseller, 2009), i.e., if the calculated latent variable scores show sufficient reliability and validity.

Adequacy of measures

A latent variable should explain at least 50% of each indicator variance. The absolute correlations between a construct and each of its indicators should be higher than 0.7 and standardized loadings smaller than 0.4 indicates the item should be eliminated. We first evaluated the PLS path as follows (Figure 3).

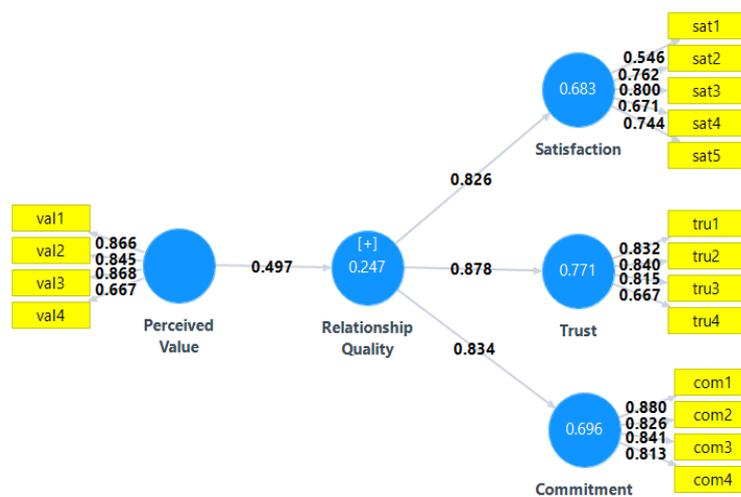


Figure 3: PLS path first model, Source: research

We also verified the significance of these estimated coefficients through the bootstrap technique with 202 cases to provide t values estimated at the level of 5% and $p=0.000$ for all of them. Then, we tested the moderators' effect, starting with demographic variables (Figure 4).

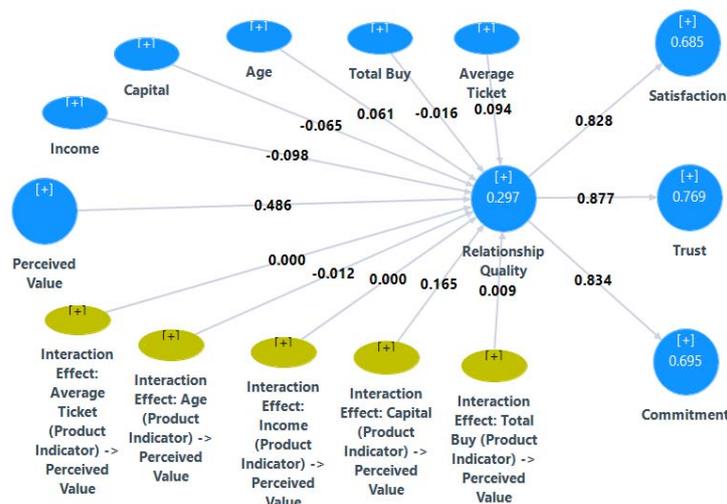


Figure 4: PLS path demographics moderators, Source: research

We did not find loadings high enough to be considered. The next step was to evaluate the behavioral variables (need of human interaction, need for touch and expertise) effect (Figure 5).

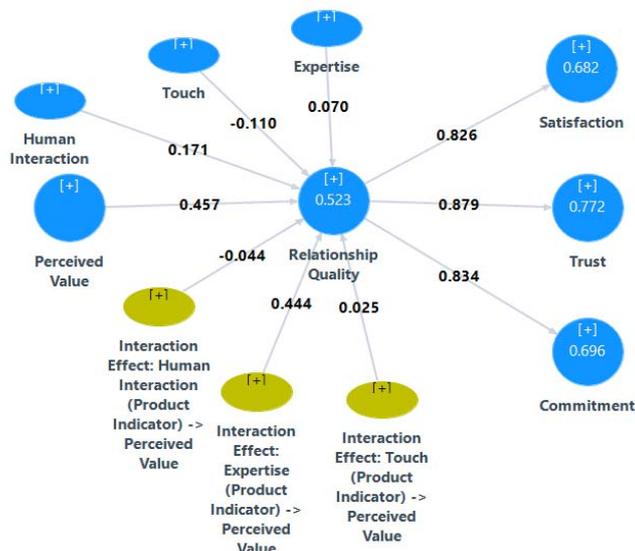


Figure 5: PLS path behavioral moderators, Source: research

Despite the interaction effect of expertise loading being higher than 0.4, the P-value for t values estimated through bootstrap was 0.06, revealing insignificant differences and expertise was discarded as a moderator.

Then, we evaluated the attitudinal variables (self-efficacy, innovativeness and attitude) effect as follows (Figure 6).

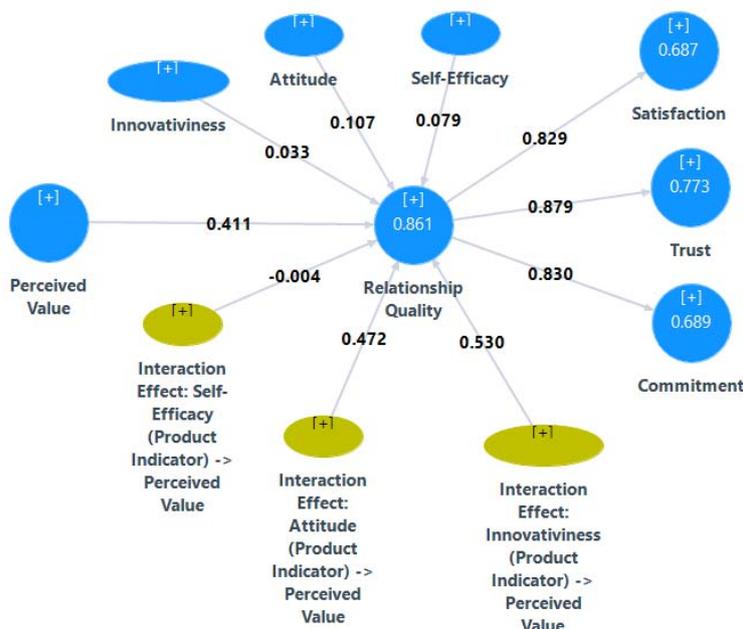


Figure 6: PLS path attitudinal moderators, Source: research

We also verified the significance of the estimated attitude and innovativeness interaction effect coefficients through the bootstrap technique with 202 cases to provide t values estimated at the level of 5%. P values are shown in Figure 7.

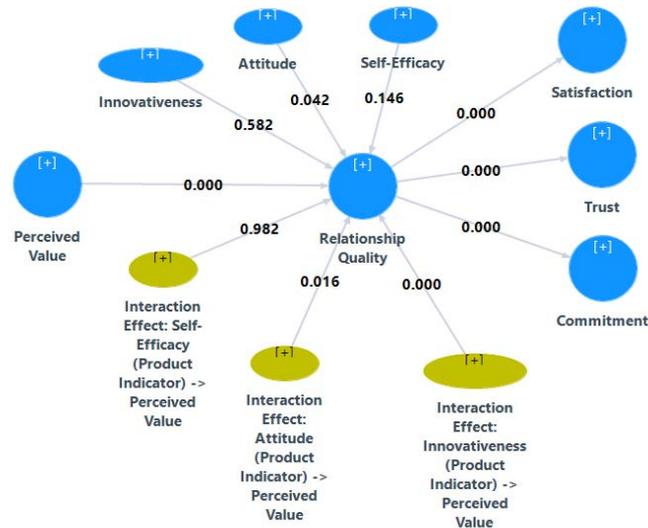


Figure 7: P-values for t-values estimated for attitudinal moderators through bootstrap, Source: research

The interaction effect of attitude and innovativeness showed statistical significance and we added them to the first model (Figure 4), resulting in the following adjusted model (Figure 8).

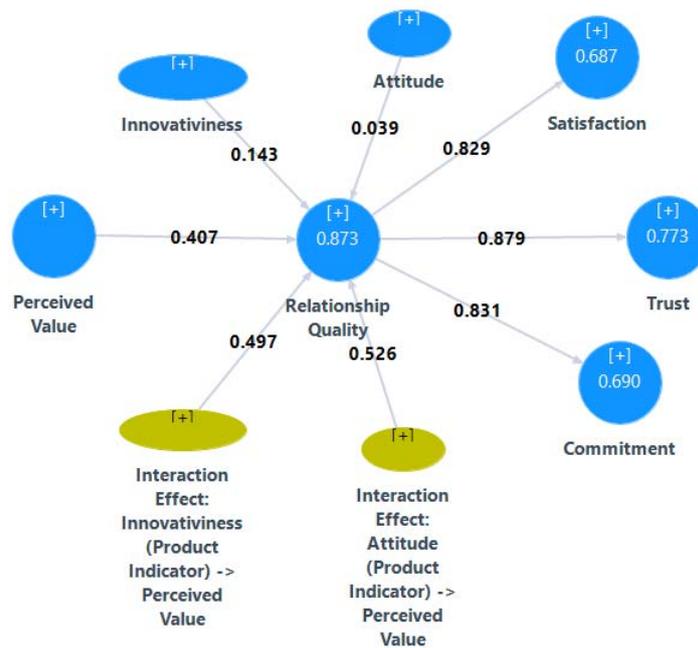


Figure 8: Adjusted model, Source: research

We verified the significance of these estimated coefficients through the bootstrap technique with 202 cases to provide t values estimated at the level of 5%. Although attitude and innovativeness loading factors were low, the interaction effect between them and perceived value were high enough. P values are shown in Figure 9.

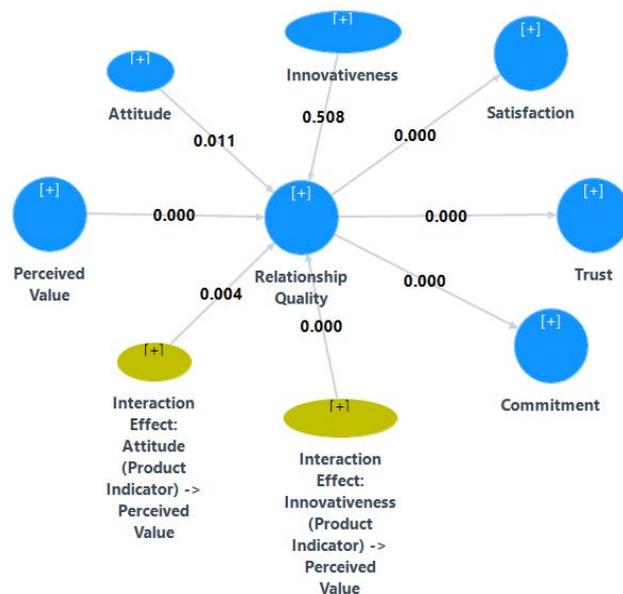


Figure 9: P-values for t-values estimated for the adjusted model through bootstrap, Source: research

Cronbach’s alpha is commonly used as an internal consistency estimate of reliability of test scores, but it does not fit well in models using PLS because it tends to underestimate the reliability. So, in Table 4 we observed the loadings of scales measuring reflective constructs (Composite Reliability). All of them approached or exceeded 0.7, as recommended (Chin, 1998; Hulland, 1999; Henseller, 2009).

After that, to assess the convergent validity we compared the Average Variance Extracted – AVE from each construct and no value under 0.5 was found (Fornell & Larcker, 1981), which indicates that more than 50 percent of the variance in the observed variable is explained by the construct.

Table 4: Composite Reliability and Average Variance Extracted

	Composite Reliability	AVE
Attitude	0.921	0.854
Commitment	0.906	0.706
Innovativeness	0.824	0.613
Interaction Effect: Attitude (Product Indicator) -> Perceived Value	0.905	0.559
Interaction Effect: Innovativeness (Product Indicator) -> Perceived Value	0.926	0.516
PerceivedValue	0.887	0.665
Satisfaction	0.834	0.505
Trust	0.869	0.627

We examined the cross-loadings and no item loaded higher on another construct than it did on the construct it was intended to measure (discriminant validity), as indicated in Table 5.

Table 5: Cross loadings

	Attitude	Commitment	Innovation	Perceived Value	Satisfaction	Trust
att1	0.975	0.054	0.138	0.210	0.272	0.216
att2	0.871	-0.025	0.068	0.096	0.164	0.111
com1	0.039	0.880	0.202	0.449	0.442	0.519
com2	0.057	0.827	0.119	0.388	0.497	0.525
com3	-0.015	0.841	0.183	0.389	0.354	0.488
com4	0.019	0.812	0.127	0.361	0.341	0.461
inno1	0.149	0.182	0.899	0.208	0.137	0.104
inno2	0.067	0.136	0.729	0.089	0.068	0.000
inno3	0.050	0.093	0.706	0.031	0.014	0.019
sat1	0.109	0.199	-0.022	0.103	0.547	0.286
sat2	0.210	0.307	0.074	0.281	0.762	0.567
sat3	0.237	0.491	0.206	0.375	0.799	0.524
sat4	0.183	0.219	0.046	0.216	0.671	0.328
sat5	0.141	0.443	0.061	0.309	0.744	0.494
tru1	0.170	0.417	-0.070	0.286	0.576	0.832
tru2	0.082	0.527	0.071	0.276	0.506	0.840
tru3	0.147	0.622	0.185	0.408	0.528	0.815
tru4	0.250	0.258	0.035	0.290	0.398	0.667
val1	0.106	0.456	0.192	0.866	0.417	0.436
val2	0.094	0.352	0.149	0.845	0.300	0.264
val3	0.121	0.407	0.184	0.867	0.271	0.295
val4	0.076	0.301	0.019	0.667	0.209	0.264

CONCLUSION

The adjusted model explained 87.3% of variation in the relationship quality, expressed by satisfaction, trust and commitment. This result can be considered very good and corroborates previous research. From the set of the proposed variables, only the interaction innovativeness-perceived value and the interaction attitude-perceived value remained as moderators.

Demographic variables – age, income, place of residence (capital or not), average ticket and total buying made over 2009-2013 period – did not show statistical significance to explain the relationship quality developed between our e-seller and their clients, not even as moderators. This is interesting because in the last decade, consumers' demographic profiles have been found to influence their online behavior (Hoffman et al., 2000; Slyke 2002; Shui and Dawson, 2004; Brengman *et al.*, 2005).

This could be explained by the Brazilian consumers process to adapt their lives to keep pace with digital advances. According to the ICT Households and Enterprises 2013, a survey on the use of Information and Communication Technologies in Brazil (Brazilian Internet Steering Committee, 2014), 21% of the population 10 years old or older, have home internet access and uses it on mobile phones. In 2011, they were only 10%.

Drawn for the study of demographic variables such as age and social class, this information shows inequalities in access, especially in remote areas and among lower income strata. The differences in the proportion of households and users connected in different regions is also significant, but as 80% of the studied sample were based on small cities over 2009-2013 period, it seems to indicate that these e-consumers could get the wanted product wherever they were.

Similarly to the demographic variables, behavioral variables – need for human interaction, need for touch, expertise – presented no statistical significance. Again, Brazilian consumers could be considered updated with internet shopping process, including the use of search engines to get the best offers of the product they want to buy.

Among the attitudinal variables (self-efficacy, innovativeness, attitude), innovativeness and attitude showed statistical significance only when interacting with perceived value. Innovativeness and attitude *per se* did not present statistical significance. They were found as moderators in our adjusted model.

Brazilian e-market is not yet consolidated. As a contribution for the studied e-seller, although only 6% of the respondents stated that they make purchases using a tablet or a mobile, the proportion of households with tablets increased from 4% in 2012 to 12% in 2013 (Brazilian Internet Steering Committee, 2014). This indicates that there is still a long way to go for S.com.br be able to lead their customers to turn their intention of buying into action. We suggest the e-seller to develop its own mobile app, increasing its offers' perceived value.

This is an ongoing research and for future studies, other perceived value scales could be tested attributing costs, paying special attention to price.

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