#### Received on

September 04, 2015 Approved on December 09, 2015

#### 1. Iná Futino Barreto

Doctor in Administration FEA / USP (Brazil) [inafb@usp.br]

#### 2. Edson Crescitelli

Doctor in Administration FEA / USP (Brazil) [edson@usp.br]

#### 3. Júlio César Bastos

Figueiredo Doctor in Physical IFUSP / USP (Brazil) [jfigueiredo@espm.br]



Review of Business Management

DOI:10.7819/rbgn.v17i58.2692

# Relationship Marketing results: proposition of a cognitive mapping model

Iná Futino Barreto, Edson Crescitelli

Graduate program in Business Administration, Faculty of Economics, Management and Accounting, Universidade de São Paulo, SP, Brazil

## Júlio César Bastos Figueiredo

Master and Doctorate Program in International Management, Escola Superior de Propaganda e Marketing, SP, Brazil

Responsible editor: Guilherme de Farias Shiraishi, Dr. Evaluation process: Double Blind Review

## RESUMO

**Objetivo** – This research sought to develop a cognitive model that expresses how marketing professionals understand the relationship between the constructs that define relationship marketing (RM). It also tried to understand, using the obtained model, how objectives in this field are achieved.

**Método** – Through cognitive mapping, we traced 35 individual mental maps, highlighting how each respondent understands the interactions between RM elements. Based on the views of these individuals, we established an aggregate mental map.

**Fundamentação teórica** - The topic is based on a literature review that explores the RM concept and its main elements. Based on this review, we listed eleven main constructs.

**Resultados** – We established an aggregate mental map that represents the RM structural model. Model analysis identified that CLV is understood as the final result of RM. We also observed that the impact of most of the RM elements on CLV is brokered by loyalty. Personalization and quality, on the other hand, proved to be process input elements, and are the ones that most strongly impact others. Finally, we highlight that elements that punish customers are much less effective than elements that benefit them.

**Contribuições** – The model was able to insert core elements of RM, but absent from most formal models: CLV and customization. The analysis allowed us to understand the interactions between the RM elements and how the end result of RM (CLV) is formed. This understanding improves knowledge on the subject and helps guide, assess and correct actions.

**Palavras-chave** – Relationship Marketing; Customer Lifetime Value (CLV); Cognitive mapping



#### **1** INTRODUCTION

In a scenario that is highly competitive and reveals rapid erosion of competitive advantages based on products, relationship marketing (RM) emerges as an alternative way of developing superior value by understanding customer needs and offering products that are suitable to each individual customer. RM is actually a set of practices that aim to guide companies towards an understanding of their customer bases (in the most individual way possible) and towards adjustment of supply, so as to retain current customers (Gordon, 1998; Vavra, 1993).

However, RM actions require large investments. It is necessary to adapt organizations to receive, store and disseminate customer information (Gordon, 1998; Vavra, 1993); to develop ways of adapting supply to customer needs (Gordon, 1998; McKenna, 1992); and, perhaps the most complex and profound effort of all, to change the focus and culture of companies, transforming them into companies that are focused on relationships (Vavra, 1993). These changes are only justified if companies can get back all the benefits that RM actions can bring. And, for this to be so, we need clear understanding of how these results can be achieved.

Therefore, it would be adequate to develop a model that reflects the various constructs involved in RM activities and their relationships with each other. A formal model of relationship marketing is useful to visualize the elements that make up RM, the interactions between them and the results of this activity. Only through deep understanding of how RM activities' actions' results are achieved can these actions be properly guided and, moreover, assessed and corrected.

There are several methodological possibilities for developing an RM model. Here, we chose to use a cognitive mapping method. The focus is, therefore, on identifying how stakeholders involved with the relationship activity understand its dynamics so as to, based on the cognitive models of various stakeholders, map a possible RM model.

Thus, the objectives of this research are: (a) to identify, through a systemic approach, the interactions between the elements that make up the main results of relationship marketing, especially CLV, according to the vision of the surveyed professionals, and (b) to propose an aggregate cognitive map that represents the overview of the surveyed individuals as to how CLV is formed through the interaction between relationship marketing elements.

#### **2 RELATIONSHIP MARKETING**

RM is a set of practices that aim to retain current customers through narrowing of the company-customer relationship. To this end, it is necessary to be able to identify each of the individual customers, to sustain with them a constant, two-way dialogue and, through the accumulated information provided, to adapt supplies to the needs expressed by customers (Gordon, 1998; Vavra, 1993).

However, in order to justify companies' engagement in RM, it is crucial that they perceive solid results. Therefore, a first step in the analysis of the RM activity is understanding what results it may bring.

Since the search for continuing negotiations with the same customers is a pillar of the RM activity, the importance of encouraging loyalty is clear (Edvardsson, Johnson, Gustafsson, & Strandvik, 2000; Gordon, 1998; Vavra, 1993; Zeithaml & Bitner, 2003). It is common to find in literature (Anderson & Mittal, 2000; Berger & Nasr, 1998; Berry, 1995; Edvardsson et al., 2000; Mulhern, 1999; Peppers & Rogers, 2005) evidence that increased customer loyalty brings about increased company profitability. According to the authors, increased profitability is due to the increased individual profitability of each customer over time. What is highlighted is that loyal customers would be more profitable to companies



than customers who are not loyal, due to their increased Customer Lifetime Value, or CLV.

Therefore, here we understand customer loyalty and the increase in their CLV as the main results of the RM activity. However, CLV is highlighted as a second-degree result, or as a later consequence of loyalty in the following sequence: RM elements  $\rightarrow$  loyalty  $\rightarrow$  CLV. Thus, we understand that there is in fact one great end RM result: CLV. This end result is in turn brokered by loyalty.

Having defined the main objective of RM actions, we must then identify which initial customer-company relationship assessment elements could, together, lead to its end results. As we said before, however, although CLV is understood as the end of the process, it is highlighted as a second-degree result, or as later consequence of loyalty. Therefore, in order to identify which initial elements of RM lead to its end results, we need to understand how loyalty is formed.

Different studies point to several possible relationships between the initial elements of RM and its ultimate goals, as can be seen in Figure 1. Multiple analyzes of the interactions between RM elements can be carried out from the study of existing models. In this paper, however, the focus is only on identifying the antecedents of loyalty. Analyzing all the found models, we are able to identify the elements that have a direct impact on loyalty. Table 1 shows these antecedents.



FIGURE 1 A - Main models surveyed on the subject of loyalty





FIGURE 1 B - Main models surveyed on the subject of loyalty



	Satisfaction	Commitment	Switching costs	Trust	Persona-lization	Quality	Response to errors	Perceived value	Communication	Image
	0	Ŭ	Sw		Per		Resp	Per	Co	
Morgan and Hunt (1994)		Х		Х						
Fornell et al (1996)	Х									
Zeithalm et al (1996)						Х	Х			
Gabarrido and Johnson (1999)		Х		Х						
Pritchard et al (1999)			Х							
Edvardsson et al (2000)	Х									
Szymanski and Henard (2001)	Х									
Burnham et al (2003)	Х		Х							
Caruana (2004)			Х							
Lam et al (2004)	Х		Х					Х		
Baptista (2005)	Х	Х								
Brei and Rossi (2005)								Х		
Fullerton (2005)		Х								
Ball et al (2006)	Х			Х	Х		Х		Х	
Jones et al (2007)		Х								
Vesanen (2007)					Х					
Kristensen and Eskilden (2012)	Х					Х				Х
Ranjbarian et al (2012)	Х					Х				
Tong et al (2012)	Х		Х		Х					

TABLE 1 - Meta-analysis of antecedents with a direct impact on loyalty

In Table 1, we can observe that, among the elements with a direct impact on loyalty, the most mentioned are satisfaction, quality, commitment, trust, personalization and switching costs. These are, then, the initial RM elements considered potential paths towards loyalty.

To analyze the relationships between RM elements it is also necessary to have a clear definition of each construct. For this reason, based on extensive analysis of existing literature, Table 2 presents the definition of how each element in this study was understood.

We should note that certain activities referring to RM, especially Customer Relationship

Management (CRM) activities, will not be discussed. This is because we strove to identify how the results of RM actions communicate with each other. Activities such as CRM work, the learning relationship and the segmentation of the customer base are actions that allow these RM results to occur, that is, they enable its operation and lead to the narrowing of the companycustomer relationship. The focus of this work is on the relationship of results and not in activities themselves. Therefore, constructs identified in Table 2, below, will be considered for this study.

1376

	Subdivision	Definition	Source		
Satisfaction	-	Satisfaction is the pleasant feeling that the package of consumption events concerning a given product or brand has met a certain goal or desire. Satisfaction occurs when a product provokes positive expectations in consumers, meets these expectations and receives positive affect. Satisfaction can occur both as to products themselves and to consumers' relationships with companies/employees.	Oliver (1980); Surprenant and Solomon (1987); Vavra (1993); Fornell <i>et al</i> (1996); Garbarino and Johnson (1999); Oliver (1999); Szymanski and Henard (2001); Zeithaml & Bitner (2003)		
ment	Affective	Affective commitment occurs when consumers in fact like a given supplier, and thus resist abandoning it.	Garbarino and Johnson (1999); Pritchard, Havitz and Howard (1999); Baptista (2005); Fullerton (2005)		
Commitment	Calculative	Calculative commitment occurs when consumers feel that terminating their relationship with a given supplier may lead to economic or social sacrifices.	Garbarino and Johnson (1999); Baptista (2005); Fullerton (2005)		
	Procedural	Costs that may deter consumers from switching to a different supplier because of the time spent in doing so.			
Switching costs	Financial	Costs that may deter consumers from switching to a different supplier because of financial losses (such as loyalty program points, or initialization costs, such as enrollment or adaptation of specific assets).			
Switc	Relationship	Costs that may deter consumers from switching to a different supplier because of the emotional losses inherent to doing so.			
Trust	-	Trust is the intention a party has to present himself as vulnerable to actions by another party. Trust occurs when one realizes that the other party possesses skills (competencies), benevolence (tendency to do good to the other party involved) and integrity (respects principles and values).	Morgan and Hunt (1994); Mayer, Davis and Schoorman (1995); Ball, Coelho and Machas (2004); Brei and Rossi (2005); Baptista (2005); Ball, Coelho and Vilares (2006)		
Personalization		Personalization is the supplying company's effort towards making products be as close as possible to the individual needs of each customer. Personalization can occur both in the product itself as well as in the contact/communication between customers and suppliers.	Surprenant and Solomon (1987); Gordon (1998) Ball, Coelho and Vilares (2006); Vesanen (2007); Tong, Wong and Lui (2012)		
Quality	-	To what extent a product (both the product itself and the way it is carried out and delivered – the relationship between suppliers and customers) approaches the ideal and presents few errors.	Gronroos (1995); Fornell <i>et al</i> (1996); Zeithaml and Bitner (2003); Baptista (2005)		
Loyalty	-	Loyalty refers to brand preference, even in situations where there is pressure towards substitution. The following are consequences of loyalty and, therefore, are ways to ascertain if it does in fact exist: i) repurchase; ii) indication; iii) preference; and iv) willingness to pay more.	Jacoby and Chestnut (1978); Zeithalm, Berry and Parasuraman (1996); Oliver (1999); Lejeune (2001); Ball, Coelho and Vilares (2006)		
CLV	_	Customer Lifetime Value is the total sum of the values brought by the client throughout his life consumption, in a particular company. Customer Lifetime Value is a value that has already been achieved by the company, but not converted as yet. That is, customers have a certain predisposition for revenues and costs; increasing this value means bringing larger portions of this customer's purchases to the company.	Berger and Nasr (1998); Mulhern (1999); Rust, Zeithaml and Lemon (2001); Jain and Singh (2002); Pfeifer, Haskins and Conroy (2005); Ryals and Knox (2005); Peppers and Rogers (2005)		

## TABLE 2 – List of considered constructs

## **3 FIELD RESEARCH METHOD**

In order to achieve the outlined goals, we chose to develop a model obtained through cognitive mapping. Despite the different uses of the term "cognitive map", and the different approaches to its preparation and analysis, in a similar way to Markóczy and Goldberg (1995), Bastos (2002), Scavarda (2004) and Bouzdine-Chameeva (2007), in this research cognitive



mapping is understood as the representation of the understanding of an individual concerning a researched subject.

Causal maps are particularly a subtype of cognitive map focused specifically on identifying constructs that have causal relationships with each other. Causal maps are widely used to capture the understanding of managers and researchers (Markóczy, 1994) and can be very useful for risk analysis, for developing strategy and construction research or theory testing (Markóczy & Goldberg, 1995; Scavarda *et al*, 2004).

#### 3.1 Stages of the causal mapping process

The first step in the development of a causal map is identification of constructs referring to the subject to be studied; in the case of this study, RM constructs and their end results. It is important to ensure that all constructs are clearly defined, so that they may be understood in the same way by everyone. The second step is presentation of the constructs, listed for the experts who are to be interviewed and will point out the relationships between them (Bouzdine-Chameeva, 2005; Clarkson & Hodgkinson, 2005; Markóczy & Goldberg, 1995; Scavarda, Bouzdine-Chameeva, Goldstein, Hays, & Hill, 2005). Next, the individual maps of respondents are developed (Bouzdine-Chameeva, 2005; Clarkson & Hodgkinson, 2005; Markóczy & Goldberg, 1995); Finally, we present a consolidated map of all respondents (Bouzdine-Chameeva, 2005; Scavarda et al., 2005). The sequence of stages is presented in Table 3.

TABLE 3 - Stages of research

1	Research of list of constructs referring to RM and its results
2	Selection of experts to be interviewed
3	Identification of connecting arcs between constructs e signs of causality
4	Creation of individual maps
5	Creation of an aggregated map

For the first step, the main techniques mentioned for researching constructs are the

following: formal or informal brainstorming (Andersen & Richardson, 1997), web research techniques (Scavarda, 2004), individual interviews (Bouzdine-Chameeva, 2005; Bouzdine-Chameeva & Durrieu & Mandják, 2001; Eden, 1988), or document analysis and analysis of existing theory (Bouzdine-Chameeva et al., 2001; Markóczy, 1994).

In this study we followed the proposal of Markóczy (1994): using existing theory analysis, we developed a pre-defined list of constructs, which was then presented to respondents along with a brief explanation about each construct (as observed in Table 2). Using a pre-defined list, according to the author, allows all respondents to work with the same universe of constructs and, more importantly, to understand all the indicated constructs in the same way.

The list was developed in two stages. First, we created an initial list according to existing theory analysis (Table 2). Then, that list was presented to two experts in the field for content validation (namely, to a scholar with articles published in magazines classified as A1 or A2 by CAPES' Qualis system on the subject RM; and a market expert, a consultant involved in RM, whose agency was awarded the best agency of the year in CRM/DBM: a prize awarded by the Brazilian Association of Direct Marketing/ ABEMD). We asked the experts to verify whether they felt any constructs were missing and should be added to the list, if they correctly understood the meaning of all listed constructs and if they believed that any of the presented constructs should be joined to another. Thus, we validated the list with 11 constructs presented in Table 2, which was then used in the interviews.

Once the list of constructs had been defined, the next step of the process was to choose the respondents. As pointed out by Groesser and Bruppacher (2007), this choice does not intend to build a representative result, but should be guided by pursuit of the greatest possible variability. For this reason, we chose to focus on three categories of stakeholders: consultants/agencies focused on RM, managers and scholars involved in RM. However, there was no control to ensure the same amount of responders in each group.

To select the companies (and individuals) who would be targeted by the research, we considered, at first, RM service providers who are most remembered by Brazilian companies, according to research published by the Portal Do Mundo do Marketing (2013). They are as follows: Market Data; The Group; Accentiv'Mimética; Expertise; Casa Nova; Omnion; Rapp Digital; CSU; Total On Demand; E/OU. We contacted the directors, partners and/or presidents of each of these companies. Of these, six agreed to participate. From then on, we asked each respondent to suggest other names who were intensely focused on RM (Snowball technique). At the end, we had contacted 82 potential respondents, of which 35 actually participated in the study, as shown in Table 4 (in the Table, information that, at the request of respondents, had to be omitted, was replaced by XX).

Steps 3 and 4 (Identification of connecting arcs between constructs and Creation of individual maps) were carried out simultaneously. Since this research works with prior establishment of a list of constructs, listing the arcs was done using that same list. Despite the many proposed procedures that are present in theory, this study

approaches what was presented by Markóczy (1994), Markóczy and Goldberg (1995) and Bouzdine-Chameeva et al (2001). To define which constructs (nodes) will be in the causal map, the authors suggest that respondents are requested to select, among the listed constructs, those they deem most important to the topic that is being studied. Markóczy (1994) and Markóczy and Goldberg (1995) suggest that respondents select the 10 most relevant constructs. Bouzdine-Chameeva et al (2001) limit the choice of respondents to a total 20 to 40 constructs. Crescitelli and Figueiredo (2010), who conducted a study based on the methodology proposed by Markóczy and Goldberg (1995), also work with a total 10 constructs selected by respondents.

In this project, however, since there are only 11 listed constructs, all were compulsorily used by the respondents. Since 11 constructs is a value that is very close to the lowest number of constructs used by the authors we consulted, the risk of the field procedure becoming excessively dull and time consuming is very small, and, at the same time, there is no forced exclusion of relevant constructs. If there were constructs that respondents judged as not having any impact on others, all they had to do was not point out any links to them.

Company	position	category	focus	service/good
XX	Autonomous third sector professional	manager	B2B	service
E/OU	Director - Business Development Director	consultant/agency	B2C	service
Boanerges & Cia	President	consultant/agency	B2B/B2C	service
Peppers	Senior Consultant	consultant/agency	B2B	service
NetPoints	Vice-President/Partner	manager	B2B/B2C	service
Indico; ESPM; ABEMD; LABSSJ	Director; Professor	consultant/agency	B2B/B2C	service
IBM	Smarter Commerce & Distribution Executive	manager	B2C	service
Omnioin	President	consultant/agency	B2B/B2C	service
CSU Market System; FGV; ABEMD	Chief Operating Officer; Professor; Council Member	consultant/agency	B2C	service
XX	Professor; CRM Manager	scholar and manager	B2C	service
ABEMD	Director; ABEMD Course Coordinator	consultant/agency and scholar	B2B/B2C	service

TABLE 4 – List of respondents



Iná Futino Barreto / Edson Crescitelli / Júlio César Bastos Figueiredo

Company	position	category	focus	service/good
MasterCard	Vice-President Loyalty Solution	manager	B2C	service
XX	Head of FIHL Consultant Team	consultant/agency	B2B	service
Smiles	Vice-President	manager	B2C	service
The Group	Partner	consultant/agency	B2C	service
XX	Director/ Partner	consultant/agency	B2B/B2C	service
XX	Analytics Controller; Professor	manager and scholar	B2B	service
USP	Professor	scholar	B2B/B2C	service
Markestrat; FGV	Partner; Professor	consultant/agency and scholar	B2C	service
Smiles	President	manager	B2B/B2C	service
PUC	Professor	scholar	B2B/B2C	service
Loyalty; FGV	Director; Professor	consultant/agency and scholar	B2C	service
XX	CRM Manager	manager	B2B	service
XX	CEO	consultant/agency	B2B	service
Saraiva	Customer director	manager	B2C	service
Horux Consultoria e Treinamento Ltda; ESPM	CEO; Professor	consultant/agency and scholar	B2C	service
Natura	CRM Director	manager	B2C	good
Múltiplos	President	manager	B2B/B2C	service
Papsolutions	CEO	consultant/agency	B2B/B2C	service
ESPM	Coordinator Stricto Sensu Postgraduate courses	scholar	B2C	service
CSU Market System	Strategic Planning Head	consultant/agency	B2B/B2C	service
XX	Director	manager	B2C	service
XX	Latin America Product Director; Professor	manager and scholar	B2B/B2C	service
XX	Senior Diretor of CRM Products Latin America	manager	B2B/B2C	service
XX	Account Executive Professor	manager and scholar	B2B/B2C	service

Thus, all respondents were given a list of constructs (as shown in Table 2); next, the interviewer presented and discussed each element with the respondent. After ensuring that there were no doubts, respondents were asked to evaluate the direct influence of construct 1 on construct 2, in order to identify the relationship links between the constructs. If the respondent indicated that there was an influence, he was asked about the strength of this influence in a scale of -5 (strong negative influence) to +5 (strong positive influence). To present the ordered pairs, we developed supporting software which presented the constructs under analysis randomly - software implemented in C from algorithms developed by Goldberg (1996).

The fifth and final step of the cognitive mapping process used in this paper is the development of an average map, to indicate the aggregate vision of all respondents, together. One issue to be defined, however, is how to identify the links between the nodes in the average map. To work around this point, some possibilities can be considered. The simplest possibility is to indicate in each link the average of the links mentioned by each of the respondents. In this case, however, virtually all possible links would be shown in the average map, since almost all of them were mentioned by at least one of the respondents, except for the link between the constructs "switching costs procedural" and "quality", which presented average zero. If we had chosen



this type of aggregation, the average map would have to have, in all, 109 links, which would make it confusing and inefficient for understanding the main relationships. Another possibility is to consider only the links listed by at least a given number of respondents, for example, those listed by at least half of the respondents. In this case, however, definition of what is the limit to be considered (10%, 40% or 50% of respondents) would be arbitrary.

To solve this situation, one possibility would be to consider only the links that presented statistical significance. So, we then carried out a t-test with each of the average links and considered only those which – with a 0.05 significance level – were different from 0. Thus, excluding the nonsignificant ones, the number of links considered in the average map was reduced to 83, as shown in Table 5.

	1	2	3	4	5	6	7	8	9	10	11	Capt	ion:
1	0,0	3,7	3,1	1,3	0,8	3,2	3,2	0,0	1,1	4,1	3,3	1	satisfaction
2	2,1	0,0	2,5	1,4	0,0	3,9	2,9	0,6	0,9	3,7	3,0	2	affective commitment
3	0,0		0,0	1,4	0,6	2,4	0,0			1,7	1,5	3	calculative commitment
4	0,0		2,7		1,9					1,3	2,3	4	procedural switching costs
5	0,0	0,0	3,2	2,2	0,0					2,1	1,8	5	financial switching costs
6		1,6	3,4	0,9	0,6					2,6	2,7	6	relationship switching costs
7	3,3	3,6	2,8	1,1	0,0	3,3	0,0		1,3	4,2	3,7	7	trust
8	3,8	3,7	2,7	1,8	1,7	3,6	3,3	0,0	2,9	3,7	2,3	8	personalization
9	4,2	3,9	3,1	1,7	0,0	3,2	4,3	1,3	0,0	3,9	2,9	9	quality
10	1,8	2,7	3,1	2,4	0,9	3,9	2,6	1,8	1,6	0,0	4,6	10	loyalty
11	0,7	0,8	0,0	1,1	1,1	0,9	0,9	2,0	1,7	1,3	0,0	11	CLV

TABLE 5 – Average of all links with at least 0,05 significance in relationship averages

Even so, however, the number of links is quite large. Furthermore, there are links with very low values. For example, the link between construct 3 - "calculative commitment" – and construct 5 - "financial switching costs" – is only 0.6. Considering that the scale ranged from -5 to +5, this means that the impact of "calculative commitment" on "financial switching costs" is small.

Thus, it is useful to exclude from the average map links with very low values, in order to consider only the relationships that are not simply significant, but also strong. It was necessary, therefore, to establish a criterion for the cut-off point to be considered. The criteria we established was, then, to list links that, with a significance level of at least 0.05, have a modulus that is equal or superior to 3. We established the value 3 because it is the median in the range of 5 possible points of link intensity. Thus, we got to the average map with only 17 links. These are exactly the strongest and most significant links mentioned by respondents.

## **4** ANALYSIS OF RESULTS

We consolidated the visions of the 35 experts who were interviewed and, on based on this, designed a cognitive map that represents the overview of all the individuals analyzed. This aggregate map is here called the "average map."

The average map can be displayed with two different layouts: as a diagram and as an associative matrix. Since each of these presentations offers certain advantages and disadvantages, the average map is shown here in two ways (Table 6 and Figure 2). In the matrix, each construct is presented by



the title numbers of rows and columns. A nonzero number in the matrix body means there is a link between the construct of that line (cause) and the construct of that column (effect).

	1	2	3	4	5	6	7	8	9	10	11	Capti	on:
1	0,0	3,7	0,0	0,0	0,0	0,0	0,0	0,0	0,0	4,1	0,0	1	satisfaction
2	0,0	0,0	0,0	0,0	0,0	3,9	0,0	0,0	0,0	3,7	0,0	2	affective commitment
3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	3	calculative commitment
4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	4	procedural switching costs
5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	5	financial switching costs
6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	6	relationship switching costs
7	0,0	3,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	4,2	3,7	7	trust
8	3,8	3,7	0,0	0,0	0,0	3,6	0,0	0,0	0,0	3,7	0,0	8	personalization
9	4,2	3,9	0,0	0,0	0,0	0,0	4,3	0,0	0,0	3,9	0,0	9	quality
10	0,0	0,0	0,0	0,0	0,0	3,9	0,0	0,0	0,0	0,0	4,6	10	loyalty
11	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	11	CLV

TABLE 6 – Average map association matrix

Through analysis of the average map (Figure 2), we first observed that there is no kind of link – feedback situations (Pidd, 2001), nor amplifier, nor self-control. The absence of links means that there is no kind of strong feedback on the system.

There are also prominent points regarding nodes and links. Accordingly, first of all, we observed that CLV is, in fact, a final element of the RM activity. In the model, we see that CLV is essentially a system output. We confirmed that, as was pointed out in the literature review, CLV is the end result of RM work and should be regarded, therefore, as its primary goal.

As with CLV, relationship switching costs appears as a system output. However, unlike CLV, relationship switching costs is not a goal to be pursued by companies and thus is not a result to aim for.

Loyalty, on the other hand, is the node that most receives impacts from the others (it is impacted by five other constructs: satisfaction, affective commitment, trust, personalization and quality). Also, the strongest link in the entire model is the influence between fidelity and CLV, worth 4.6. Importantly, in addition to being the strongest link, it is also the link that withstood the most rigorous test of significance. When testing the links that, with a significance level of 0.01, had a modulus value of at least 4, the link between loyalty and CLV is the only one that reveals itself as significant. It is, therefore, a link that is considered consistently strong by the interviewed individuals.



FIGURE 2 – Average map diagram

This confirms what was pointed out by the meta-analysis carried out based on many different models in literature, that is, most of the RM elements have an impact on the CLV that is mediated by loyalty. Five elements (except for loyalty) have a direct or indirect and extremely intense impact on CLV, and all are in some way mediated by loyalty. Of these five, three have an impact on CLV only through loyalty (satisfaction, affective commitment and personalization); one, quality, has an impact on CLV mediated by loyalty and trust; and the fifth one, trust, has a direct impact on it and is mediated by loyalty. Therefore, it is quite reasonable to conjecture that the RM process should be understood by the sequence: RM elements  $\rightarrow$  loyalty  $\rightarrow$  CLV indicated in this paper.

At another extreme, early on in the process, we identified that personalization and quality are

exogenous variables, that is, they do not receive impacts from any other elements. This result is important, since these are the two variables that actually face the decision and control of the company. All the other elements (trust, satisfaction, loyalty, CLV, etc.) must be earned by the company. Quality and personalization are, therefore, the starting point in the narrowing of the relationship between a company and a customer. Quality and personalization are also the nodes that have a strong influence on the widest array of other nodes. With specific regard to personalization, it is interesting to note this result, since, according to Ball, Coelho and Vilares (2006), the effects of personalization have not much researched. Similarly, in the researched literature after 2006, only a few formal models actually included personalization; we only highlight Tong, Wong and Lui (2012).



As for the less relevant nodes, the generated model shows that calculative commitment and switching costs (the three types) do not have a strong impact on any other construct. In fact, calculative commitment and procedural and financial switching costs do not impact and are not significantly affected by any other node, and were therefore excluded from the final model. This shows that, according to what we have observed, these elements are less important and should be less focused on in the search for the final results of the company-customer relationship.

Interestingly, positive elements (such as personalization, quality, satisfaction) have far greater impact than elements of penalty, such as switching costs and calculative commitment. This indicates that, according to the surveyed individuals, customer benefits tend to have better results than penalties. This does not mean, of course, that penalty elements have no impact on the CLV, but that, in an effort to prioritize and allocate scarce resources, the impacts of these elements will be smaller.

As well as identifying how the final elements of relationship marketing are formed, average map analysis also allows us to observe relationships between the mean elements. Accordingly, we can observe that:

Satisfaction is strongly formed by quality, as widely noted and discussed (Baptista, 2005; Fornell, Johnson, Anderson, Cha, & Bryant, 1996; Kristensen & Eskilden, 2012; Ranjbarian, Sanayei, Kaboli, & Hadadian, 2012; Szymanski & Henard, 2001), and by pesonalization. Also as to satisfaction, this study validated the direct impact of satisfaction on loyalty, as pointed out by Fornell *et al* (1996) – Figure 1C – Edvardsson *et al* (2000) – Figure 1F – Burnham Frels and Mahajan (2003) – Figure 1G – Lam *et al* (2004) – Figure 1I – Baptista (2005) – Figure 1J – Ball, Coelho and Vilares (2006) – Figure 1M – and Tong, Wong and Lui (2012) – Figure 1P.

As pointed out in the theory (Jones *et al*, 2007; Fullerton, 2005), affective commitment was also shown here as an antecedent of loyalty (impact 3.7). As for the shapers, affective

commitment is strongly formed by the junction of personalization, quality, satisfaction and trust.

Trust, on the other hand, appears as a direct shaper of loyalty, as indicated by Gabarino and Johnson (1999) and Ball, Coleho and Villares (2006) – Figure 1M, but is rejected by Baptista (2005) – Figure 1J and Brei and Rossi (2005) – Figure 1K. We also confirmed the commitmenttrust theory of Morgan and Hunt (1994), in which trust has an influence on commitment. We highlight the direct impact of trust on the CLV, which was not shown by researched theory. As for its shapers, in the model developed here, the only element with a strong impact on confidence is quality, as pointed out only by the Baptista model (2005) – Figure 1J.

Besides the main objective of analyzing the relationship between RM elements, it could be interesting to analyze whether there is some sort of difference in the thoughts of individuals with different characteristics. In order to explore this possibility, we carried out cluster analysis of individual maps of all 35 respondents. However, no formation of groups with different patterns of behavior was observed. In fact, after the formation of two small groups (the first comprised by eight respondents, and the second of three respondents), which then come together, we basically added one respondent at a time to one same larger group. Thus, there is no evidence, in this research, to suppose that the thoughts of scholars, managers and consultants is different from each other's; or that individuals with greater experience in the B2B or B2C markets make up groups that have different thoughts.

## **5 FINAL CONSIDERATIONS**

Considering the objectives proposed in this research, we presented RM concepts and its main elements. The elements considered here were: satisfaction, affective commitment, calculative commitment, procedural switching costs, financial switching costs, relationship switching costs, trust, personalization, quality,



loyalty and CLV; and CLV as the ultimate goal of relationship actions. Each one of these elements was analyzed in the light of theory. In addition, we listed existing and tested theoretical models to indicate the relationship between the surveyed elements.

Based on this survey, a final list of RM constructs was developed. In order to identify the relationships between these elements, we employed cognitive mapping, to find out how Brazilian professionals who are highly involved in relationship management with customers see the interactions between the formed factors of loyalty and, consequently, the ultimate goal: CLV. Besides individual maps expressing how each of the surveyed experts understand the relationships between the constructs, an average map was drawn. This average map shows the average pooled overview of all respondents and it is through it that we carried out our analysis.

As for the main findings, first, we emphasize that CLV, considered throughout the research as the ultimate goal of the RM activity, was confirmed as an output variable in the model. This means that the method adopted in this study validated the hypothesis that conceptual CLV should be understood as the final result of the RM activity.

This finding is important, since it is in line with the central concept that RM activity cannot exist if it does not bring higher returns. Furthermore, it allowed the inclusion of CLV in the structural models of the company-customer relationship. The inclusion of CLV in the structural model developed in this research is relevant because, although it is a central concept, CLV is not part of the structural models identified in the developed theoretical review.

The analyzes carried out allowed us to understand the interactions between the various RM elements and, in particular, how its final element is formed: CLV. Instead of analyzing formulas to estimate the individual CLV of each client, such as most CLV models research do, this study investigated the relationship between elements that form it. The identification of the aggregate map and of the elements with higher and lower importance in the formation of CLV can be useful to increase awareness on the issue and assist managers to better invest their efforts and optimize results. We were able to identify, for example, where better to invest to maximize results on CLV, or performance indicators of intermediate elements that can predict future variations of CLV in the customer base.

While this study was able to point out the results or output elements referring to RM, it was also able to identify key input elements. Personalization and quality appear as exogenous elements in the designed model. That is, even considering low intensity impacts, personalization and quality are much more strongly causative constructs than consequences, and at the same time have an important impact on the other process elements. These two elements should be, therefore, the starting points of relationship efforts with customers.

Some limitations, however, need to be identified. The first refers to the type of research and to the research universe. Through the method we used, we only identified how the field experts see the interrelationships between constructs that are relevant to RM. We could not, however, assess whether consumers in fact behave the way the experts point out. To this end, it would be necessary to list the opinions of consumers. This type of verification would be quite rich to validate the model that was developed here and is highlighted as a suggestion for future studies.

The second limitation still refers to data collection. As pointed out by Markóczy (1994) and Ensslin and Montibeller (1999), causal maps cannot claim to be a perfect representation of reality, nor even a perfect representation of the mental model of respondents. The maps identify what a given respondent was able to access in a research meeting. It is possible that another interviewer, researching the same subject at another time, could establish a different causal map. Causal maps must bring the representation, as close as possible, of what the respondent believes and can express at the time of research.



Finally, the third limitation we consider important to emphasize refers to the variables analyzed. Only the constructs regarding the RM activity were analyzed, and that could somehow influence their results. There are, however, a number of other exogenous factors that can enhance the impact of these elements. As examples, we can mention the exogenous variables that we did not deal with: customer engagement with the purchase, number of previous purchases (Johnson & Sivadas; Gabarino, 2008) and the degree of market competitiveness (Lee & Lee and Feick, 2001).

## REFERENCES

Andersen, D., & Richardson, G. (1997). Scripts for group model building. *System Dynamics Review*, 13(4), 107-129.

Anderson, E. W., & Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, 3(2), 107-120.

Ball, D., Coelho, P. S., & Machás, A. (2004). The role of communication and trust in explaining customer loyalty: An extension to the ECSI model. *European Journal of Marketing*, *38*(9/10), 1272-1293.

Ball, D., Coelho, P. S., & Vilares, M. J. (2006). Service personalization and loyalty. *Journal of Services Marketing*, *20*(6), 391-403.

Baptista, P. P. (2005) *Lealdade do consumidor e os seus antecedentes: Um estudo aplicado ao setor varejista na internet* (Tese de doutorado). Universidade de São Paulo, São Paulo, SP, Brasil.

Bastos, A. V. (2002). Mapas cognitivos e a pesquisa organizacional: Explorando aspectos metodológicos. *Estudos de Psicologia*, *7*, 65-77.

Berger, P. D., & Nasr, N. I. (1998). Customer lifetime value: Marketing models and applications. *Journal of Interactive Marketing*, *12*(1), 17-30. Berry, L. L. (1995). Relationship marketing of services—growing interest, emerging perspectives. *Journal of the Academy of Marketing Science*, *23*(4), 236-245.

Bouzdine-Chameeva, T. (2005). Ancom- 2: A support tool for collective decisions based on causal mapping. *Cahier de Recherche Cerebem: Centre de Recherché de Bordeaux Ecole de Management,* 5(87).

Bouzdine-Chameeva, T. (2007). The Ancom-2 solution to support knowledge work. *International Business Management*, 1(2), 12-19.

Bouzdine-Chameeva, T., Durrieu, F., & Mandják, T. (2001) Application of causal mapping methodology to measure business relationship value. *Euro-Gdss Annual Worksho*, La Rochelle, França.

Brei, V. A., & Rossi, C. A. V. (2005). Confiança, valor percebido e lealdade em trocas relacionais de serviço: Um estudo com usuários de internet banking no Brasil. *Revista de Administração Contemporânea*, 9(2), 145-168.

Burnham, T. A., Frels, J. K., & Mahajan, V. (2003). Consumer switching costs: A typology, antecedents, and consequences. *Journal of the Academy of Marketing Science*, *31*(2), 109-126.

Caruana, A. (2004). The impact of switching costs on customer loyalty: A study among corporate customers of mobile telephony. *Journal of Targeting, Measurement and Analysis for Marketing, 12*(3), 256-268.

Clarkson, G. P., & Hodgkinson, G. P. (2005). Introducing Cognizer<sup>m</sup>: A comprehensive computer package for the elicitation and analysis of cause maps. *Organizational Research Methods*, 8(3), 317-341.

Crescitelli, E., & Figueiredo, J. (2010). Uso de diagramas causais na construção de um modelo de brand equity. Florianópolis/SC: EMA.

Eden, C. (1988). Cognitive mapping. *European Journal of Operational Research*, *36*(1), 1-13.



Edvardsson, B., Johnson, M. D., Gustafsson, A., & Strandvik, T. (2000). The effects of satisfaction and loyalty on profits and growth: Products versus services. *Total Quality Management*, *11*(7), 917-927.

Ensslin, L., & Montibeller, N. (1999). *Inferência causal em mapas cognitivos*. Rio de Janeiro: ENEGEP.

Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: nature, purpose, and findings. *The Journal of Marketing*, 60, 7-18.

Fullerton, G. (2005). How commitment both enables and undermines marketing relationships. *European Journal of Marketing*, *39*(11/12), 1372-1388.

Garbarino, E., & Johnson, M. S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. The Journal of Marketing, 63(2), 70-87.

Goldberg, J. (1996). The distrat/askmap suite of programs for cause map analysis A user's guide. Unpublished manuscript. United Kingdom: Cranfield University Computer Centre. Recuperado de goldmark.org/jeff/programs/ distrat/software/drdoclet.ps.gz

Gordon, I. H. (1998). *Relationship marketing: new strategies, techniques and technologies to win the customer you want and feet them forever*. Toronto: John Wiley & Sons Canada.

Groesser, S. N., & Bruppacher, S. (2007, July). Decisions in the Construction Planning Process: Development of a Dynamic Model about Individual's Energy Efficiency Intention over Time. *Proceedings of the International Conference of the System Dynamics Society*, Boston, USA, 25.

Gronroos, C. (1995). *Marketing: Gerenciamento e serviços*. Rio de Janeiro: Campus.

Jacoby, B., & Chestnut, R. (1978) *Brand Loyalty: Mesurement and manegement.* New York: John Wiley & Sons. Jain, D., & Singh, S. S. (2002). Customer lifetime value research in marketing: A review and future directions. *Journal of Interactive Marketing*, *16*(2), 34-46.

Johnson, M. S., Sivadas, E., & Garbarino, E. (2008). Customer satisfaction, perceived risk and affective commitment: An investigation of directions of influence. *Journal of Services Marketing*, 22(5), 353-362.

Jones, M. A., Reynolds, K. E., Mothersbaugh, D. L., & Beatty, S. E. (2007). The positive and negative effects of switching costs on relational outcomes. *Journal of Service Research*, *9*(4), 335-355.

Kristensen, K., & Eskildsen, J. (2012). The relationship between SERVQUAL, national customer satisfaction indices, and consumer sentiment. *The Quality Management Journal*, *19*(2), 47.

Lam, S. Y., Shankar, V., Erramilli, M. K., & Murthy, B. (2004). Customer value, satisfaction, loyalty, and switching costs: An illustration from a business-to-business service context. *Journal of the Academy of Marketing Science*, *32*(3), 293-311.

Lee, J., Lee, J., & Feick, L. (2001). The impact of switching costs on the customer satisfaction-loyalty link: mobile phone service in France. *Journal of Services Marketing*, *15*(1), 35-48.

Lejeune, M. A. (2001). Measuring the impact of data mining on churn management. *Internet Research*, *11*(5), 375-387.

Markóczy, L. A. (1994). Barriers to shared belief: The role of strategic interest, managerial characteristics and organisational factors (Doctoral dissertation). The University of Cambridge, Cambridge, United Kigdom.

Markóczy, L. A., & Goldberg, J. (1995). A method for eliciting and comparing causal maps. *Journal of management*, *21*(2), 305-333.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational

Iná Futino Barreto / Edson Crescitelli / Júlio César Bastos Figueiredo

trust. Academy of management review, 20(3), 709-734.

Mckenna, R. (1992) *Marketing de relacionamento: Estratégias bem-sucedidas para a era do cliente*. Rio de Janeiro: Campus.

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *The Journal of Marketing*, 58, 20-38.

Mulhern, F. J. (1999). Customer profitability analysis: Measurement, concentration, and research directions. *Journal of Interactive Marketing*, 13(1), 25-40.

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17, 460-469.

Oliver, R. L. (1999). Whence consumer loyalty? *The Journal of Marketing*, *63*(1), 33-44.

Peppers, D., & Rogers, M. (2005) *Retorno sobre clientes: Um modo revolucionário de medir e fortalecer o seu negócio.* Rio de Janeiro: Elsevier.

Pfeifer, P. E., Haskins, M. E., & Conroy, R. M. (2005). Customer lifetime value, customer profitability, and the treatment of acquisition spending. *Journal of Managerial Issues*, *17*(1), 11-25.

Pidd, M. (2001). *Modelagem empresarial: Ferramentas para tomada de decisão*. Porto Alegre: Bookman.

Portal mundo do marketing - *Conheça a visão e praticas de marketing de relacionamento no Brasil.* recuperado em 03 agosto, 2013, de http:// www.mundodomarketing.com.br/reportagens/ relacionamento/27530/conheca-a-visao-epraticas-de-marketing-de-relacionamento-nobrasil.html

Pritchard, M. P., Havitz, M. E., & Howard, D. R. (1999). Analyzing the commitment-loyalty

link in service contexts. *Journal of the Academy of Marketing Science*, *27*(3), 333-348.

Ranjbarian, B., Sanayei, A., Kaboli, M. R., & Hadadian, A. (2012). An analysis of brand image, perceived quality, customer satisfaction and repurchase intention in Iranian department stores. *International Journal of Business and Management*, 7(6), 40-48.

Rust, R. T., Zeithaml, V. A., & Lemon, K. N. (2001). *O valor do cliente.* Porto Alegre: Bookman.

Ryals, L. J., & Knox, S. (2005). Measuring riskadjusted customer lifetime value and its impact on relationship marketing strategies and shareholder value. *European Journal of Marketing*, *39*(5/6), 456-472.

Scavarda, A. J. R. R. (2004). *Metodologia evocativa* para mapeamento causal e sua perspectiva na gerência de operações com aplicações via internet em gestão da cadeia de suprimento e administração de serviços (Tese de doutorado). Pontifícia Universidade Católica do Rio de Janeiro-PUC-Rio, Rio de Janeiro, RJ, Brasil.

Scavarda, A., Bouzdin-Chameeva, T., Goldstein, S., Hays, J., & Hill, A. (2004, April). A review of the causal mapping practice and research literature. *Proceedings of the Second World Conference on POM and 15th Annual POM Conference*, Cancun, Mexico.

Scavarda, A. J., Bouzdine-Chameeva, T., Goldstein, S. M., Hays, J. M., & Hill, A. V. (2005). A methodology for constructing collective causal maps. *Decision Sciences*, *37*(2), 263-283.

Surprenant, C. F., & Solomon, M. R. Predictability and personalization in the service encounter. *Journal Of Marketing*, *51*(02), 86-96.

Szymanski, D. M., & Henard, D. H. (2001). Customer satisfaction: A meta-analysis of the empirical evidence. *Journal of the Academy of Marketing Science*, *29*(1), 16-35.

Tong, C., Wong, S. K. S., & Lui, K. P. H. (2012). The influences of service personalization,

customer satisfaction and switching costs on e-loyalty. *International Journal of Economics and Finance*, 4(3), 105-114.

Vavra, T. G. (1993). *Marketing de relacionamento: Aftermarketing*. São Paulo: Atlas.

Vesanen, J. (2007). What is personalization? A conceptual framework. *European Journal of Marketing*, 41(5/6), 409-418.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *The Journal of Marketing*, *60*(2), 31-46.

Zeithaml, V. A., & Bitner, M. J. (2003). *Marketing de serviços: A empresa com foco no cliente*. Porto Alegre: Bookman.

