

MESTRADO EM

MARKETING

TRABALHO FINAL DE MESTRADO

DISSERTAÇÃO

E-CRM AND RELATIONSHIP QUALITY: EXPLORATORY RESEARCH IN THE PORTUGUESE BANKING SECTOR

NUNO FILIPE DA PAZ SANTOS MONTEIRO

SETEMBRO - 2013



MESTRADO EM

MARKETING

TRABALHO FINAL DE MESTRADO

DISSERTAÇÃO

E-CRM AND RELATIONSHIP QUALITY: EXPLORATORY RESEARCH IN THE PORTUGUESE BANKING SECTOR

NUNO FILIPE DA PAZ SANTOS MONTEIRO

ORIENTAÇÃO: PROF. DOUTOR JOSÉ MANUEL CRISTÓVÃO VERÍSSIMO

JÚRI:		
PRESIDENTE:	PROF. DOUTORA HELENA C. M. MARTINS GONÇALVES	
VOGAIS:	Prof. Doutor Pedro Teixeira Isaías	
	PROF. DOUTOR JOSÉ MANUEL CRISTOVÃO VERÍSSIMO	

Setembro – 2013

Aos meus pais,

ao meu irmão e sobrinhos,

à minha família,

aos meus amigos.

i

Resumo

O desenvolvimento da Gestão Eletrónica do Relacionamento com o Cliente (E-CRM) obrigou as empresas, em especial os bancos, a reavaliarem como, quando e em que extensão deverão interagir com os seus clientes. Com o advento da internet, os clientes tornaram-se mais sofisticados e focados no seu relacionamento com o sector bancário. Nesse sentido, efetuou-se um estudo exploratório, com o objetivo de compreender e avaliar os resultados da implementação do E-CRM. Efetuou-se uma revisão de literatura e desenvolveu-se um conceito chamado "Atributos de Serviços Baseados no Cliente" para medir os resultados na perspetiva do cliente, utilizando para o efeito a frequência de utilização que fazem do seu serviço de *homebanking*. Para esse efeito, foi desenvolvido e combinado um modelo de atributo de serviço com um modelo de relação de qualidade. De acordo com os resultados apurados são fornecidos indícios para análises futuras.

 Palavras-Chave:
 E-CRM; Banca; Atributos de Serviços Baseados no Cliente; Relação de

 Qualidade e Resultados

ï

Abstract

The development of Electronic Customer Relationship Management (E-CRM) has forced companies, especially banks, to re-evaluate how, when and to what extent they should interact with their customers. With the advent of the internet, customers have become more sophisticated and focused on their relationship with the banking sector. In this sense, an exploratory study was performed in order to understand and evaluate the results of the existence of E-CRM. Through a literature review a concept called "Customer Based Service Attribute" has been developed to measure these outcomes from the perspective of customers, through the frequency of their electronic banking usage. A model of service attribute and a model of Relationship Quality and Outcomes were developed and combined. Results obtained are presented for further analysis.

Key words: E-CRM; Bank; Customer Based Service Attribute; Relationship Quality and Outcomes

General Index

CHAPTER	R 1. INTRODUCTION 1	
1.1.	CONTEXT AND TOPIC RELEVANCE	
1.2.	JUSTIFICATION FOR THE RESEARCH	
1.3.	OUTLINE) -
CHAPTER	R 2. LITERATURE REVIEW	}
2.1.	CRM AND E-CRM, THE CONCEPT	}
2.2.	E-CRM DIMENSIONS)
2.2.2	1. Customer Loyalty5	5
2.2.2	2. Customer Satisfaction6	;
2.2.3	3. Trust and Commitment6	5
2.2.4	4. Personalization	7
2.2.5	5. Retention	}
2.3.	Service Attributes	}
2.4.	E-CRM AND BANKING	
CHAPTER	R 3. RESEARCH DESIGN	}
3.1.	METHODOLOGY	}
3.2.	DATA COLLECTION	}
3.3.	SURVEY	}
3.4.	STATISTICAL ANALYSIS	ŀ
CHAPTER	R 4. DATA AND METHODOLOGY15	5
4.1.	CONCEPTUAL MODEL	5

4.2.	RELATIONSHIP MARKETING AND RELATIONSHIP QUALITY	. 16
4.3.	CUSTOMER BASED SERVICE ATTRIBUTE	. 17
4.4.	E-CRM IN THE STUDY	. 17
4.5.	OBJECTIVE	. 18
4.6.	RESEARCH QUESTIONS	. 18
4.7.	HYPOTHESES	. 18
CHAPTEI	R 5. DATA ANALYSIS AND RESULTS	. 21
5.1.	SAMPLE PROFILING	. 21
5.2.	DESCRIPTIVE ANALYSIS	. 23
5.3.	COMPOSITE VARIABLES	. 24
5.4.	Hypotheses Analysis	. 28
CHAPTEI	R 6. CONCLUSIONS AND RECOMMENDATIONS	. 33
6.1.	CONCLUSION	. 33
6.2.	ACADEMIC IMPLICATIONS	. 33
6.3.	MANAGERIAL IMPLICATIONS	. 33
6.4.	LIMITATIONS	. 34
6.5.	FURTHER RESEARCH	. 34
REFEREI	NCES	. 36
ANNEXE	S	. 43
ANNEXE	1 – ONLINE SURVEY	. 43

Figures and Tables Index

FIGURE 1 – THE RESEARCH MODEL FRAMEWORK

TABLE I: CRM DEFINITIONS
TABLE II: E-CRM DEFINITIONS
TABLE III: CONSTRUCTS OF CUSTOMER-BASED SERVICE ATTRIBUTES 8
TABLE IV: COMPONENTS OF RELATIONSHIP QUALITY METACONSTRUCT
TABLE V: SOCIO-DEMOGRAPHIC DATA 21
TABLE VI: ELECTRONIC CHANNEL USAGE 22
TABLE VII: ELECTRONIC FREQUENCY USAGE 22
TABLE VIII: DESCRIPTIVE STATISTICS OF CUSTOMER BASED SERVICE ATRIBUTE
TABLE IX: DESCRIPTIVE STATISTICS OF RELATIONSHIP QUALITY OUTCOMES
TABLE X: COMPOSITE VARIABLES FOR CBSA 26
TABLE XI: COMPOSITE VARIABLES FOR RQO 27
TABLE XII: H1 - SPEARMAN'S CORRELATION TEST
TABLE XIII: H2 - SPEARMAN'S CORRELATION TEST
TABLE XIV: H3 - SPEARMAN'S CORRELATION TEST
TABLE XV: SUMMARIZING SUPPORTED HYPOTHESES

Chapter 1. Introduction

1.1. Context and Topic Relevance

Feinberg & Kadam (2002) already recognized that business was moving online, not as a matter of choice, but as a matter of necessity. Nowadays, Sivaraks et al (2011) goes further, stating that as organisations begin to migrate from a human-intensive organisation to one that emphasises multiple electronic contact points such as phone, fax, e-mail, and the Web, the ability to develop, manage, and measure customer relationships increases dramatically. Consequently, businesses have moved from off-line customer relationship management (CRM) to electronic channels, commonly called electronic customer relationship management (E-CRM).

This concept is designed to understand who the customers are and what products interest them. Only then is it possible to provide them with the products and services they want. The companies equipped with such infrastructure can continually create significant customer value, automating the "who, what, when, where, and how" of sales and marketing (Pan & Lee, 2003).

Being one of the latest paradigms reflecting a change in traditional marketing, it is one of the primary strategic initiatives in industry today. Forging the long term relationship with customers is usually viewed as the key to profitability in an increasing dynamic market, enabling firms to recreate an old fashioned one-to-one relationship with customers along with mass-market efficiencies from selling to millions of customers - the power of mass-customisation (Fjermestad & Romano, 2003; Chen & Chen, 2004; Bhanu & Magiswary 2010).

1.2. Justification for the Research

Much as been said and written about E-CRM, although unfortunately not many studies have assessed the outcomes from the customer's perspective (Sivaraks et al, 2010). In fact, most of

the academic research in this area concerns the benefits for the organizations, creating an empirical gap between these two perspectives.

Adebanjo (2003) states that the challenge for organizations is to identify and quantify the impact of E-CRM on improving the overall relationship on a customer/bank interaction. This thesis proposes to use the frequency of use of the electronic bank channel to assess that relationship.

1.3. Outline

This thesis is divided in six chapters. In the first chapter an overview of the research topic is given and its relevance is addressed. The second chapter describes the state of the art including the CRM (Customer Relationship Management) concept, the Electronic Customer Relationship Management (E-CRM) concept, current trends approaching relevant issues for this research, and the E-CRM in the bank sector. The third chapter identifies the relationship between the various constructs, presents the conceptual model and the research questions along with the hypotheses emerging from the literature review. The fourth chapter presents the methodology used in the survey, its main goals, a description of the sample selection, the data collection process and its statistical treatment for testing the hypotheses. The fifth chapter describes the analysis and results from the previous section. Finally, the sixth chapter presents the concluding remarks and future perspectives.

Chapter 2. Literature Review

2.1. CRM and E-CRM, The Concept

Although CRM is a central theme in marketing, there is no unified opinion on its concept (Kimiloglu & Zarali, 2009; Gan et al 2011). For some authors (Kotorov, 2003) it is viewed as a business strategy, for others (Payne & Frow, 2005) it is a cross-functional integration of customer-oriented processes or an integrated IT system (Karimi et al 2001). Table I presents some definitions of CRM based in the literature review:

Author	Definition
	Dominion
Pan & Lee (2003)	Approach or business strategy providing seamless integration of every area of
	business that touches the customer, through integration of people, process, and
	technology.
Kennedy (2006)	CRM is about identifying a company's best customers and maximising the value
	from them by satisfying and retaining them.
Buyut et al (2008)	Approach used to discover more about customer's needs and behaviours in order
	to develop stronger relationships with them besides helping a business in
	managing customer relationships in an organized and effective manner.
Alavi et al (2011)	Enterprise-wide approach to understanding and influencing customer behaviour
	through meaningful communication to improve customer acquisition, customer
	retention, customer loyalty, and customer profitability.
Gan et al (2011)	Process of excavating potential clients and achieving the purpose of maximizing
	profits through the methods of customer recognizing, customer identifying and
	customer reserving needs adjustment of corresponding organization and
	technology.

Table I:

CRM Definitions

Pan & Lee (2003) stated that the traditional CRM, has limitations in supporting outside multichannel customer interactions that combine telephone, the Internet, email, fax, chat, etc.

Information development and communication technology has facilitated the scale and scope of CRM leading to the growing use of E-CRM. In fact, it can achieve real-time customer interaction by various electronic means, and customers can also access online via self-service

(Vella & Caruana, 2012; Gan et al, 2011).

Table II presents some E-CRM definitions based in the literature review:

Author	Definition		
Fjermestad & Romano (2003)	The goal of E-CRM systems is to improve customer service, retain valuable		
	customers, and to aid in providing analytical capabilities.		
Lee-Kelley et al (2003) E-CRM refers to the marketing activities, tools and techniques delive			
	Internet (using technologies such as web sites email data capture warehousing		
	and mining) with a specific aim to locate, build and improve long-term customer		
	relationships to enhance their individual potential.		
Pan & Lee (2003)	E-CRM expands the traditional CRM techniques by integrating technologies of		
	new electronic channels, such as Web, wireless, and voice technologies, and		
	combines them with e-business applications into the overall enterprise CRM		
	strategy.		
Buyut et al (2008)	E-CRM emerges from the Internet and web technology to assist the		
	implementation of CRM within organizations which focusing on communications		
	between organizations and their customers via Internet or web-based systems.		
Darajeh & Tahajod (2010)	E-CRM concerns all forms of managing relationships with customers making use		
of Information Technology (IT).			
Sivaraks et al (2010); Sivaraks	E-CRM is the technological element of CRM that a customer can recognize and		
et al (2011)	acknowledge their relationship with the institution, in fact the author goes further in		
	a broader definition, as an integral part of online distribution and marketing that		
	expands the traditional CRM techniques by integrating technologies of new		
	electronic channels, such as Web, wireless, and voice technologies, and		
	combining them with e-business applications into the overall CRM strategy of an		
	enterprise.		
Keshvari (2012);	E-CRM is the combination of traditional CRM with the e-business applications		
Tarokh & Shojaie (2013)	marketplace. An E-CRM system provides financial institutions with the opportunity		
	to establish individual and need oriented customer relationships; it enables the		
	organizations to establish an effective and efficient communication channel for		
	information flow with the customer.		

Table II:

E-CRM Definitions

2.2. E-CRM Dimensions

Scullin et al (2004) states that E-CRM appeared not to change the marketing but instead to enhance it. When companies understand customer buying behaviour they can enjoy cost savings and increased customer loyalty. Identifying products that customers want is the first step in product mix expansion, new product launches and product differentiation.

Singh (2002) already recognized that in the electronic world the customer and the merchant do not meet face-to-face, and that the clients are more discerning with increased options and solutions available to them online. With the click of a mouse a customer can find another provider.

Some researchers go further and state that business is moving online, not as a matter of choice, but as a matter of necessity. The use of the Internet as a channel for commerce and information presents an opportunity for business to use the Internet as a tool for CRM/E-CRM optimizing the production and understanding of customer-related knowledge that will enable the fulfilment of their demands (Feinberg & Kadam, 2002; Liu et al, 2012).

2.2.1. Customer Loyalty

Customer loyalty, as a field of research of consumer behaviour, has remained a primary interest in the academic community for many years, occupying a central place in marketing (Toufaily et al, 2012; Donio' et al, 2006).

Zeithaml et al (1996) define customer loyalty as a customer's expressed preference for a company and the customer's intention to continue to purchase from that company and to increase business with it in the future. Bowen & Shoemaker (2003) goes further, defining it as a construct that measures the probability that the buyer will return and is ready to perform partnering activities such as referrals.

The exchange of information is one of the keys to loyalty, providing a critical bridge between state of mind and behaviour. Loyal customers are more likely to give information to the service provider (because they trust the service provider and expect the service provider to use the information with discretion and to their benefit). Managing loyalty is important because it means not only managing behaviour but also managing a state of mind (Siddiqi, 2011).

2.2.2. Customer Satisfaction

Comprehensive research has suggested that successful performance by firms is derived from customer satisfaction; indeed, it has long been recognized as playing an essential role for success and survival in today's competitive environment and as a pivotal element in maintaining long-term customer relationship (Singh & Kaur, 2011; Evanschitzky et al, 2012; Siu et al, 2013).

Broadly speaking, customer's wants, needs, and expectations move as quickly as the market itself. Nowadays, delivering effective customer service and having total customer satisfaction is a target shared by almost every successful organization (Singh & Kaur 2011).

Lee (2013) defines customer satisfaction as the degree of customer's positive feelings toward a service provider.

2.2.3. Trust and Commitment

Trust and commitment have been identified as the most important constructs in the field of relationship marketing (Morgan and Hunt, 1994).

Trust is based on past behaviour and enables consumers to think about the future and eventually become committed. When a buyer trusts a seller he is willing to make short-term sacrifices because of a strong conviction about the future potential of the relationship (Cater & Zabkar 2009). According to Moorman et al (1992), trust is a willingness to rely on an exchange

partner in whom one has confidence. An important aspect is the concept of trust as a belief, feeling or expectation about an exchange partner which can be judged from its expertise, reliability and intentions.

Commitment can be defined as an enduring desire to maintain a valued relationship (Moorman et al, 1992). In essence, customer commitment is a psychological force that links the customer to the organization with which the customer does business (Fullerton, 2005).

2.2.4. Personalization

Personalization is an important keyword to incorporate various customer needs. Major developments such as the heavy use of web-based configurators increased in popularity and as a result the customer participation won an important role-play (Takenaka et al, 2013; Fogliatto et al, 2012).

Montgomery & Smith (2009) defined personalization as the adaptation of products and services by the producer for the consumer using information that has been inferred from the consumer's behaviour or transactions.

On the other hand, Jackson (2007) stated that the concept of personalisation and CRM has expanded in scope to emphasise a much broader notion of benefits to a company. Currently various analysts and experts believe that personalisation is the key to the future of the E-Commerce revolution. Personalisation previously meant a login screen and a greeting by name at the home page, whereas now it entails the capture of user data through explicit and implicit means. Its value is clear given the magnitude of customer knowledge available.

2.2.5. Retention

Danesh et al (2012) claim that the topic of customer retention is well covered in existing literature due to its importance influencing the organization's financial profitability. In fact, they go further stating that customer retention is one of the most important indicators of the customer satisfaction.

From a managerial standpoint, best practices involving customer retention should be appropriate to the relevant field, and should be based on frequent customer feedback. Therefore, customer retention refers to a customer engaging in a contract, either formal or informal, over a period of time, which includes repeated transactions (Jeng & Bailey 2012).

2.3. Service Attributes

Researchers state that studies and interviews with experts have noted that there is a large gap between E-CRM implementation and outcomes and for that reason there must be something to link them. It is particularly important to understand the service attributes that drive positive outcomes, emphasising the valuable customer knowledge. A further assessment of the literature identified 'customer-based service attributes' as the linking construct. Customer-Based Service Attributes are defined as CRM/E-CRM outcomes in the service industry from the customer's perspective (Dagger & Sweeney, 2007; Sivaraks et al, 2011).

The following list compiles the constructs of customer-based service activities and related E-CRM outcomes.

Constructs	Author	Supports
Interaction	Peppard (2000)	The interactive element is of crucial importance since much
opportunities		business activity consists of interactions (human and
with the bank		technical communication, data gathering and collaborative

 Table III:

 Constructs of Customer-Based Service Attributes

		problem-solving). An effective channel management strateg
		requires that all channels — the call centre, direct main
		branch and the Internet to be fully integrated.
	Kos et al (2001)	The intent of CRM is to build an integrated and corporat
		wide view of the customer by tying together all of th
		customer's interactions with the organization.
Accurate	Kos et al (2001)	As marketing moves to a one-to-one environment, the nee
information		for large amounts of detailed information about customers
		becoming essential.
	Pan & Lee (2003)	One of the fundamental requirements of a successful E-CRI
		solution is the challenge of consolidating all customer-relate
		information into a single view. The information integratio
		application consolidates customer data and information fror
		different sources into integrated customer-centric information
		it allows companies to identify and respond in a time
		manner and accurately to their customers whether the
		purchase products through a physical store, call-centre or
		Website.
Relevant	Kos et al (2001)	CRM systems can be use to alert the need for service
Information		based upon customer-specific information, providir
		information relevant to company usage. Any custome
		specific information gathered by the firm should be integrate
		with their departments.
	Pan & Lee (2003)	Is expect a consistent experience from one contact point
		another, therefore E-CRM application actually integrates th
		several points of contact, leading to a single view of the mul
		channel interactions including internal personnel as well a
		external customers. To be truly effective, E-CRM application
		must provide internal personnel with a single view of th
Responsive	Kos et al (2001)	customer, regardless of how they are interacting with the company and which E-CRM applications they are using.
Responsive information	Kos et al (2001)	customer, regardless of how they are interacting with the company and which E-CRM applications they are using. To realize the full benefits of CRM, the information capture
•	Kos et al (2001)	customer, regardless of how they are interacting with the company and which E-CRM applications they are using. To realize the full benefits of CRM, the information capture needs to be available to all of the front-office functional area
•	Kos et al (2001)	customer, regardless of how they are interacting with the company and which E-CRM applications they are using. To realize the full benefits of CRM, the information capture needs to be available to all of the front-office functional area
•	Kos et al (2001) Pan & Lee (2003)	customer, regardless of how they are interacting with the company and which E-CRM applications they are using. To realize the full benefits of CRM, the information capture needs to be available to all of the front-office functional area on a real-time basis, this integration enables an organization to discern their customers present wants and needs.
•		customer, regardless of how they are interacting with the company and which E-CRM applications they are using. To realize the full benefits of CRM, the information capture needs to be available to all of the front-office functional area on a real-time basis, this integration enables an organization

Timely access to	Pan & Lee (2003)	Since, developing an information integration application is a
accurate information		dynamic process, measuring, predicting and interpreting
		customer behaviours, producing entities that have to keep up
		with every customer's interaction with the company, the
		speed and accuracy is crucial for enabling a true value
		exchange with customers.
Complete customer	Kos et al (2001)	The interactions are created by various front-office functions
information		such as sales, marketing and call centres. This single unified
		face of the customer is then made available to all areas that
		need to interact with that customer.
Personalised	Zuccaro & Savard	The information technologies form the technological
information and	(2010)	backbone of e-banking strategies witch enables the
service		identification of customers helping to develop tailor-made
		services and products to deepen and strengthen
		relationships with the clients.
Data	Peppard (2000)	The concern for consistency of service across channels is
consistency		becoming a recurring theme propagating the imperative for
		an integrated channel. CRM initiatives see the end result of a
		repository of customer information and wish to utilise data
		mining techniques seek to extract patterns from this data for
		marketing decision-making purposes. Viable customer
		relationships are based on data that have been transformed
		into actionable information which in turn becomes customer
		insight ('knowledge') to be used to create predictive models
		for active customer interaction and actual dialogue if desired.
Up-to-date	Peppard (2000)	All the information required to complete the transaction
information		should be available at the point of customer interaction,
		financial services sites have turned the relationship between
		banks and customers on its head by empowering the
		consumer through the provision of real-time information.
Contact	Peppard (2000)	Nowadays, customers can choose the channel of most
anytime		convenience, with 24 hours/day availability, allowing
		customers to access account information direct from a PC,
		mobile phone or other device.
	Buyut et al (2008)	Today customers turned out to be progressively more
	Buyut et al (2008)	Today customers turned out to be progressively more challenging; they anticipate effortless access to data anytime,
	Buyut et al (2008)	

anywhere		convenience, with 24 hours/day availability, allowing
		customers to access account information direct from a PC,
		mobile phone or other device.
	Buyut et al (2008)	Today customers turned out to be progressively more
		challenging; they anticipate effortless access to data anytime,
		anyplace with no additional fees for extra service.
One-stop service	Seiders et al (2000)	One-stop shopping convenience refers to the degree to
		which a customer perceives the time and effort necessary to
		obtain the desired products.
Purchase conditions	Feinberg & Kadam	The use of the Internet as a channel for commerce and
information	(2002)	information presents an opportunity for business to use the
		Internet as a tool, providing a platform to deliver CRM
		functions on the web.

2.4. E-CRM and Banking

Nowadays, financial institutions will not only be confined to borrowing a collection of savings and lending loans, but also forced to learn the advanced and modern rules and tools to provide convenience environment for their customers and satisfy their needs (Keshvari, 2012).

For this reason, E-CRM is a critical strategic marketing consideration today for many firms, based largely on the promise of more cost-effective models of self-service. This evolution has been accelerated by the rapid introduction of new information technologies. In fact, these companies are generally positioning themselves as exemples of customer satisfaction and relationship management (Taylor & Hunter, 2002; Zuccaro, 2010).

These huge investments in new information technologies coupled with the recent convergence of large scalable data warehouses and highly advanced data mining software programs have allowed banking analysts and strategists to develop sophisticated client segmentation and scoring models capable of bringing to fruition the promise of E-CRM (Zuccaro & Savard, 2010). Business management tools like E-CRM and similar software are used to improve business efficiency and information management. It is expected to aid business functioning and provide opportunities for future development of the business (Tarokh & Shojaie, 2013).

In this line of thought, Darajeh & Tahajod (2010) state that financial service providers are enabled with multiple channels of interactive customer contact. They can increase the number of times they are able to sense and compare customer behaviours across channels so it is always recommended to financial service providers to stay ahead of the needs of the customers.

Gan et al (2011) goes further, endorsing that it is an urgent necessity for banks to carry out CRM and provide personalized service according to the customer's specific needs. In the trend of electronic service banks have provided in-time e-service and E-CRM in order to adapt to the diversity of financial demands. By doing so the bank will improve customer's satisfaction since it will allow an effective answer to customer's reaction, and will establish good customer relationships which can effectively link internal processes and organizational management. In addition to reducing costs, it also improves customer satisfaction and loyalty, and then enhances the competitiveness and profits of the banks.

Chapter 3.Research design

3.1. Methodology

Given the exploratory purpose of the study, a quantitative methodology was used with nonprobabilistic sample, where the respondents were selected by convenience which allowed a more independent and deductive analysis, and facilitating generalization of results.

3.2. Data collection

An online survey (Annexe 1) was built using the Qualtrics platform which generated a link to access the survey. Responses at each stage were required for the regular flow of the questionnaire to the next section. Only with full completion was a message with the appropriate thanks displayed and the response recorded.

The questionnaire was made available to students and alumni from ISEG and on social networks Facebook and Linkedin using a convenience sample. The data collection took place in the week of 16 to 21 September 2013, returning 284 completed questionnaires.

3.3. Survey

The questionnaire was based on the adaptation and translation to Portuguese of studies conducted by Hennig-Thurau et al, 2002; Leverin & Liljander, 2006; Chau & Ho 2008; Liu et al 2011; Siddigi 2011 and Danesh et al 2012.

The survey was divided in four parts: the first was financial behaviour, the second was the customer-based service attributes with regard to the enquired main bank (thirteen items), the third section was relationship quality and outcome (twenty five items), and the fourth was the respondent's personal information.

The second and third parts of the questionnaire used a 5 point Likert scale rating from a "strongly disagree" to "strongly agree" revealing the main characteristics of the outcomes supported with their main bank. What should be considered their main bank was stated in the survey.

The second section, Customer-Based Service Attributes, was composed of thirteen items including the information on E-CRM outcomes that customers were able to recognise.

In the third section, Relationship Quality and Outcomes, the number of items in each construct was as follows: overall relationship quality, two items; trust, three items; satisfaction, seven items; commitment, four items; retention, one item; loyalty, four items; customization and personalization, two items; and willingness to recommend, two items.

3.4. Statistical Analysis

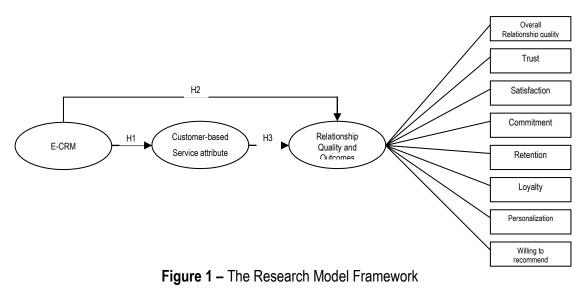
The statistics analysis was performed with the SPSS (Statistical Package for Social Science) software to validate the premises of the developed model on the third chapter and to support the data analysis, the results and the conclusions of the present study.

Chapter 4. Data and Methodology

4.1. Conceptual Model

Sivraraks et al (2011) developed a model with service attribute combining relationship quality and outcome, based in the new construct called 'customer-based service attributes' to measure E-CRM outcomes from customer's perspectives. On the other hand, Chau & Ho (2008) developed a model where personalization assumes the role of increasing interactivity, finding a positive and significant effect on perceived benefits to customers and has significantly influenced the development of an Internet banking service. He states that in response to consumer's calls banks have recently been developing personalization technologies.

The research approach of the study is inductive and empirically based. Using a three fronts approach based on the findings from the literature, field surveys and on the present chapter, a conceptual model was built, to answer the research questions, supported on the prior assumptions as stated in figure 1.



Source: Adapted from Sivaraks et al, 2011 and Chau & Ho, 2008

4.2. Relationship Marketing and Relationship Quality

Relationship Marketing activities should be directed particularly towards the most profitable customers in order to increase their satisfaction and loyalty towards the bank. These activities are ultimately evaluated on the basis of the company's overall profitability however a firm's profitability is influenced by a number of variables largely independent of relationship marketing activities, conceptualized in relationship marketing outcomes (Leverin & Liljander, 2006; Hennig-Thurau et al, 2002).

There are two popular approaches for understanding relationship marketing outcomes, the relational benefits approach and the relationship quality model. The first is founded on the assumption that for a long-term relationship to exist, both the service provider and the customer must benefit from the relationship. The second assumes that the customer's evaluation of the relationship is central to the decision to continue or to leave the relationship with a service provider (Hennig-Thurau et al, 2002).

Miceli et al (2007) state that with the intent of increasing interactivity with customers CRM should aim to collect and to process data information needed to select the desired position along the personalization continuum for each customer. They agree that Relationship Quality can be effectively analyzed only after several interactions, claiming that firms need to engage in more sophisticated analyses of customer preferences to customize both content and personalization approach.

Although there is not a common consensus regarding the conceptualization of relationship quality, there has been considerable speculation as to the central constructs comprising this overarching relational construct. It can be regarded as a metaconstruct composed of several key components reflecting the overall nature of relationships between companies and consumers (Hennig-Thurau, 2000; Hennig-Thurau et al, 2002).

The key components considered on the present thesis are summarized in table III and where referred in the Literature Review.

Table IV:

Components of Relationship Quality Metaconstruct

Constructs		
Trust	Retention	
Satisfaction	Loyalty	
Commitment	Personalization	

4.3. Customer Based Service Attribute

CRM/E-CRM strategies rely heavily on the importance of the Customer Based Service Attribute (identified in section 2.3) being the link between e-CRM implementation and its outcomes. As this link fills the existing gap found to exist between implementation and outcomes, it becomes the main reason for its choice in the development of this thesis.

4.4. E-CRM in the Study

Adebanjo (2003) states that the application of technology to CRM initiatives (E-CRM) is one of the fastest growing technological developments. According to Lee-Kelley et al (2003), and for the purpose of this research E-CRM has been defined as the marketing activities, tools and techniques delivered over the Internet (using technologies such as web sites email data capture warehousing and mining) with a specific aim to locate, build and improve long-term customer relationships to enhance their individual potential.

4.5. Objective

The main aim of this thesis is to focus on context-specific understanding of relationships between E-CRM and the acknowledgment that is perceived by the bank customer in terms of outcomes.

4.6. Research Questions

Based on literature review and the research framework stated before, three research questions were addressed for the present study:

- RQ1: Does E-CRM have a positive effect on the Customer Based Service Attribute?
- **RQ2:** Does E-CRM have a positive effect on the Quality and Outcome on customer/bank relationships?
- **RQ3:** Does Customer Based Service Attribute have a positive effect on Quality Relationship Outcome?

4.7. Hypotheses

Peppard (2000) states that integrated information is vital for successful management of customer relationships. Information is the essential enabler when based on scaleable technology as the platform — that is, information is centrally managed, company wide providing a consolidated view of the customer across all channels and products.

In fact, he goes further, stating that from a customer perspective the channel they choose at any point in time should be the one of most convenience, expecting to interact with an institution through any channel. Ideally, there should be no differentiation between the call centre, the Internet or the street branch. Indeed, the customer should be able to initiate a transaction in a call centre and perhaps complete it in a branch. Based on the prior findings the following hypotheses have been developed:

H1: E-CRM has a significantly positive relationship with customer-based service attributes.

H1a: E-CRM has a significantly positive relationship with information received by the customer.

H1b: E-CRM has a significantly positive relationship with customer convenience.

E-CRM must first identify a mean of increasing the overall level of customer satisfaction within their industry, and then begin to consider moving beyond customer satisfaction toward broader loyalty-based strategic marketing objectives to support their relationship (Taylor & Hunter, 2002).

Hennig-Thurau et al (2002) argue that the relational benefits have a focus on the benefits consumers receive apart from the core service, and relationship quality focuses on the overall nature of the relationship. All relationship marketing activities are ultimately evaluated on the basis of the company's overall profitability. Although a firm's profitability is influenced by a number of variables largely independent of relationship marketing activities. Although a multitude of constructs is discussed in the context of relationship marketing, the vast majority of the literature clearly focuses on only a few of them. Among the most common constructs are customer satisfaction, overall relationship quality, commitment, and trust.

The overall quality of customer relationships has a major importance on customer's perceptions of how well their expectations, predictions, goals, and desires concerning the whole relationship are fulfilled. Hence it is proposed that:

- **H2:** E-CRM has a significantly positive relationship with the Quality and Outcome on customer–bank relationships.
 - **H2a:** E-CRM has a significantly positive relationship with the overall quality of customer–bank relationships.
 - H2b: E-CRM has a significantly positive relationship with customer trust.
 - **H2c:** E-CRM has a significantly positive relationship with customer satisfaction.
 - **H2d:** E-CRM has a significantly positive relationship with customer commitment.
 - H2e: E-CRM has a significantly positive relationship with customer retention.
 - **H2f:** E-CRM has a significantly positive relationship with customer loyalty.
 - **H2g:** E-CRM has a significantly positive relationship with personalization.
 - **H2h:** E-CRM has a significantly positive relationship with a customer's willingness to recommend.

Kimiloglu & Zarali (2009) stated that understanding the dynamics of E-CRM and assessing its impact on the outcomes is crucial. Therefore, it is important to evaluate the performance of these activities from multiple perspectives of the customer point of view. For that reason the following hypothesis is proposed:

H3: Customer Based Service Attribute has a significantly positive effect on Relationship Quality and Outcome.

Chapter 5.Data Analysis and Results

5.1. Sample Profiling

The sample is composed of 284 individuals, whose profile of socio-demographic data, bank

channel used and frequency of internet banking usage is summarized in the following tables:

Table V:

ltem	Measure	Frequency	Percentage
Gender	Male	102	35,9
	Female	182	64,1
Marital Status	Single	130	45,8
	Married	105	37
	Civil union	23	8,1
	Divorced	22	7,7
	Apart	3	1,1
	Widow	1	0,4
Age	18-24	28	9,9
	25-34	121	42,6
	35-44	86	30,3
	45-54	29	10,2
	55-64	15	5,3
	> 65	5	1,8
Education	9 th grade	5	1,8
	12 th grade	30	10,6
	Bachelor	10	3,5
	Graduated	123	43,3
	Post-graduation	59	20,8
	Master	52	18,3
	PhD	5	1,8
Occupation	Commerce	15	5,3
	Industry	16	5,6
	Services	144	50,7
	Healthcare	33	11,6
	Education	29	10,2
	Retired	7	2,5
	Student	22	7,7
	Unemployed	18	6,3

Socio-demographic data

The survey shows that 35,9% of the respondents were male and 64,1% female. The predominant age groups are from 25 – 34 years old and from 35 – 44 years representing 42,6% and 30,3% respectively. The level of academic predominance has undergraduates representing 43,3% of the sample. Concerning to the occupation the vast majority of respondents are working in the services sector representing 50,7%, followed by health (11,6%) and education (10,2%). Regarding the marital status, the singles represent 45,8% followed by the married with 37%.

Table VI:

Channel	Utilization	Frequency	Percentage
Telephone	Yes	196	69
•	No	88	31
Mobile phone	Yes	185	65,1
	No	99	34,9
Internet	Yes	251	88,4
	No	33	11,6
ATM	Yes	268	94,4
	No	16	5,6

Electronic Channel Usage

In the matter of electronic channel usage, ATM's were identified as the electronic touchpoints that respondents were most familiar with 94,4% followed by the internet with 88,4%.

Table VII:

Electronic Frequency Usage

Frequency of use	Frequency	Percentage		
Daily	49	17,3		
2-3 times/week	96	33,8		
Once/week	55	19,4		
2-3 times/month	29	10,2		
Once/month	6	2,1		
Occasionally	24	8,5		
Never	25	8,8		

The study showed that only 8.8% of the respondents never accessed their main bank via electronic channels. In terms of frequency, 33,8% used their electronic bank 2–3 times a week.

5.2. Descriptive Analysis

To explore results Tables VIII and IX measure mean and spread for each one of the developed models.

	Ν	Minimum	Maximum	Mean	Std. Deviation
Accurate information	284	1	5	3,62	,813
Relevant information	284	1	5	3,59	,803
Responsive information	284	1	5	3,57	,885
Timely access	284	1	5	3,45	,902
Complete customer information	284	1	5	3,35	,917
Up-to-date information	284	1	5	3,79	,760
Personalised	284	1	5	3,54	1,054
Data consitency	284	1	5	3,63	,784
One-stop sevice	284	1	5	3,86	,932
Purchase information conditions	284	1	5	3,75	,830
Interaction opportunities	284	1	5	4,06	,789
Contact anytime	284	1	5	3,71	1,027
Contact anywhere	284	1	5	3,80	,929
Valid N (listwise)	284				

Table VIII:

On this table, the privileged factor was the "Interaction Opportunities" and the less important was the "Complete Customer Information" followed by "Timely Access". The factors which are the most standardized in terms of coherency of responses are "Up-to-date information" and "Data Consistency". In contrast the issues of "Personalised" and "Contact Anytime" had responses which were more evenly spread.

·			-		
	Count	Minimum	Maximum	Mean	Standard Deviation
Honest employees	284	1	5	3,72	.706
Completely trust employees	284	1	5	3,68	.752
High integrity employees	284	1	5	3,64	.726
Wise Choice	284	1	5	3,83	.793
Satisfaction on the quality of the services	284	1	5	3,77	.842
Critical situations management	284	1	5	3,60	.922
Satisfaction bank interactions	284	1	5	3,77	.801
Information on new services/products	284	1	5	3,38	.949
Strong relationship	284	1	5	2,86	.950
Willing to change	284	1	5	2,50	1.104
Needs understanding	284	1	5	3,28	.889
Needs satisfaction	284	1	5	3,61	.827
Committed	284	1	5	2,94	.899
Important	284	1	5	3,24	.992
Care about	284	1	5	2,28	.964
Maximum effort	284	1	5	2,77	.937
Never considered change	284	1	5	2,94	1.139
Considered a loyal customer	284	1	5	3,62	.960
All operations	284	1	5	3,23	1.297
Recommendation	284	1	5	3,34	1.049
Strong preference	284	1	5	3,44	1.070
Enables customize	284	1	5	3,23	.866
information presentation					
Personalized messages	284	1	5	3,01	1.057
Overall bank interaction	284	1	5	3,24	.970
Overall employee interaction	284	1	5	3,46	.910

Table IX: Descriptive Statistics of Relationship Quality Outcomes

On the previous table the most important issues were "Wise Choice" and "Satisfaction on the quality of the services" while the "Care about" and "Willing to change" were considered the less important. The greater consensus response is "Honest employees" and "High integrity employees". "All operations", "Never considered change" and "Willing to change" were the more dispersed answers.

5.3. Composite Variables

When assessing differences or relationships in data it is useful to reduce the data into a composite variable to make it more manageable. These composite variables described in table VII and VIII allowed an aggregated reading of different set of variables that make up the

hypotheses, containing a set of indicators that measure the aggregate theoretical construct and its aggregation justified theoretically.

The technique used in this analysis is the principal components analysis, an approach that considers the total variance in the data, recommended for determining the minimum number of factors with a maximum value of variance. This method, widely used in marketing studies, aims to reduce the size of information and to assist their interpretation (Malhotra e Birks, 2006).

Cronbach's Alpha is arguably the most commonly used metric to evaluate the internal consistency reliability associated with scores derived from a scale. As stated in table VII, the composite variables indicate a high level of internal reliability consistency for our scale with this specific sample, since the alpha coefficient is bigger than ,6 as quoted by Maroco & Marques (2006).

After Cronbach's Alpha test consistency, a factor analysis was conducted to assess the internal structure of correlations between variables of the composite variable created. According to Maroco (2011), this technique of exploratory data analysis aims to discover and analyze the structure of the set of interrelated variables in order to build a scale to measure the factors that somehow control the original variables.

Also used was the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity, using the most common of the rotations method - the Varimax. According to Pestana & Gageiro (2003), these two statistical tests allow measuring the quality of the correlations between variables in order to proceed with the factor analysis. Maroco (2011) argues that KMO values between, 5 and 1 indicate that the factor analysis is appropriate, the Bartlett's Test of Sphericity presented in each analysis p-value <,001 that allow to conclude that the variables are significantly correlated.

For the Customer Based Service Attribute (CBSA) composite variable extracted two components with values greater than 1, explaining 65% of the total variance; as for the Relationship Quality Outcomes (RQO) 4 factors were extracted with values greater than 1, explaining 69% of the total variance.

Table X:

Cronbach's Alpha	Factor Loading	KMO	Bartlett's
		,876	,000
,895	,806		
	,795		
	,777		
	,773		
	,766		
	,738		
	,737		
,798			
	,895		
	,856		
	,733		
	,895	,895 ,806 ,795 ,777 ,773 ,7766 ,738 ,737 ,798 ,895 ,856	,895 ,806 ,795 ,777 ,773 ,766 ,738 ,737 ,798 ,895 ,856

Composite variables for CBSA

Table XI:

Variables	Cronbach's Alpha	Factor Loading	KMO	Bartlett's	
RQO			,939	,000	
RQO – Satisfaction	,923				
Information on new services/products		,763			
Overall bank interaction		,736			
Satisfaction bank interactions		,722			
Personalized messages		,686			
Satisfaction on the quality of service		,683			
Critical situations management		,662			
Needs understanding		,661			
Overall employee interaction		,619			
Needs satisfaction		,542			
Enable customize information		,525			
RQO – Loyalty	,890				
Strong preference		,808,			
Considered a loyal customer		,797			
Never considered change		,754			
Recommendation		,678			
Wise choice		,595			
RQO – Trust	,936				
Completely trust employees		,885			
Honest employees		,884			
High integrity employees		,866			
RQO – Commitment	,785				
Important		,751			
Maximum effort		,742			
Committed		,689			
Care about		,650			
Strong relationship		,503			

Composite variables for RQO

5.4. Hypotheses Analysis

For testing the correlation based on the hypotheses referred on the chapter 2.7 and with regard to the principal components analysis, several variables were built to test the model. The principal component analysis made before on customer-based service attributes according to the survey that supported this study it allowed the building of two analysis factors – information and convenience. In the matter of the Relationship Quality Outcome, it enabled the construction of four analysis factors (Satisfaction, Loyalty, Trust, and Commitment) as illustrated in Table VI.

According to Malhotra & Birks (2006), when is needed to compute the correlation coefficient between two non-metric variables, those who not assume a normal distribution (can be ordinal or numeric), the Spearman's rho test is the measure that can be used to examine the correlation between them, this measure uses rankings rather than absolute values of the variables.

In this study the vast majority of the variables are Likert Scales (5-point scale from strongly disagree through to strongly agree) representing categories with some intrinsic rankingFor the test of the two first hypotheses of this study, the E-CRM variable will be considered via the frequency of use of the electronic bank channel by the customer.

According to this thesis's first hypothesis - E-CRM has a significantly positive relationship with customer-based service attributes - a Spearman's test was conducted as presented on Table XII.

Table XII:

			CBSA	CBSA Information	CBSA Convenience	Electronic bank channe
Spearman's rho	CBSA	Correlation Coefficient	1,000			
		Sig. (2-tailed)				
		Ν	284			
	CBSA Information	Correlation Coefficient	,898(**)	1,000		
		Sig. (2-tailed)	,000			
		N	284	284		
	CBSA Convenience	Correlation Coefficient	,669(**)	,317(**)	1,000	
		Sig. (2-tailed)	,000	,000		
		Ň	284	284	284	
	Electronic bank channel	Correlation Coefficient	-,211(**)	-,174(**)	-,211(**)	1,00
		Sig. (2-tailed)	,000	,003	,000	
		Ň	284	284	284	28

H1 - Spearman's correlation test

** Correlation is significant at the 0.01 level (2-tailed).

From the table above, it is noticeable that the variable electronic bank channel presents a negative correlation statistically significant since (p = ,000), providing evidence on the rejection of the null hypothesis.

Regarding the second hypothesis - E-CRM has a significantly positive relationship with the Quality and Outcome on customer-bank relationships - a Spearman's test was conducted as stated in Table XIII.

Table XIII:

			RQO	RQO Satisfaction,	RQO Willing,	RQO	RQO	Electronic
			RQU		-			
				Personalization, Overall	Loyalty, Retention	Trust	Commitment	bank channel
	500	0		Overall				
Spearman'	RQO	Correlation Coefficient	1,000					
s rho								
		Sig. (2-tailed)						
		N	284					
	RQO - Satisfaction,	Correlation	,919(**)	1,000				
	Personalization, Overall	Coefficient						
		Sig. (2-tailed)	,000					
		Ν	284	284				
	RQO - Willing,	Correlation	,830(**)	,685(**)	1,000			
	Loyalty, Retention	Coefficient						
		Sig. (2-tailed)	,000	,000				
		Ν	284	284	284			
	RQO – Trust	Correlation	,630(**)	,540(**)	,429(**)	1,000		
		Coefficient						
		Sig. (2-tailed)	,000	,000	,000			
		Ν	284	284	284	284		
	RQO – Commitment	Correlation	,696(**)	,507(**)	,489(**)	,302(**)	1,000	
		Coefficient						
		Sig. (2-tailed)	,000	,000	,000	,000		
		Ν	284	284	284	284	284	
	Electronic	Correlation	-,201(**)	-,163(**)	-,184(**)	-,118(*)	-,192(**)	1,000
	bank channel	Coefficient						
	Sum onumor	Sig. (2-tailed)	,001	,006	,002	,047	,001	
		N	,001 284	,006 284	,002 284	,047 284	,001 284	284
		IN	204	284	284	204	284	284

H2 - Spearman's correlation test

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

From the preceding table it is observed that the negative tendency is maintained, the E-CRM correlates negatively with the Relationship Quality Outcome featuring a negative correlation statistically significant since (p = ,001), providing evidence on the rejection of the null hypothesis.

As for the third hypothesis, Customer Based Service Attribute has significantly positive effect on Relationship Quality and Outcome, a Spearman's test was applied as illustrated on Table XIV.

Table XIV:

			CBSA	RQO
Spearman's	CBSA	Correlation	1,000	
rho		Coefficient		
		Sig. (2-tailed)		
		Ν	284	
	RQO	Correlation	,633(**)	1,000
		Coefficient		
		Sig. (2-tailed)	,000,	
		Ν	284	284

H3 - Spearman's correlation test

** Correlation is significant at the 0.01 level (2-tailed).

From the prior table it is observed that the Customer Based Service Attribute correlates positively with the Relationship Quality Outcome featuring a strong, positive correlation, also statistically significant because (p = ,000) it provides support on the rejection of the null hypothesis.

The consequences for the acceptance or rejection of the proposals formulated on the model are presented and summarized in the table below according to their Spearman's Rank Order correlation.

Hypotheses	Path	rs	Conclusion
H1	E-CRM to CBSA	-,211(**)	Support
H2	E-CRM to RQO	-,201(**)	Support
H2	A	-,191(**)	Support
H2	В	-,118(*)	Support
H2	С	-,167(**)	Support
H2	D	-,173(**)	Support
H2	E	,110	Reject
H2	F	-,110	Reject
H20	G	-,095	Reject
H2	Η	-,204(**)	Support
H3	CBSA to RQO	,633(**)	Support

Table XV: Summarizing Supported Hypotheses

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

A Spearman's Rank Order correlation test was run to determine the relationship between the E-CRM and Customer-Based Service Attribute and also with Relationship Quality and Outcomes. It is inferred that there is a statistical significance and a negative correlation.

It has been identified that sub-hypothesis H2e (E-CRM has a significantly positive relationship with customer retention), H2f (E-CRM has a significantly positive relationship with customer loyalty) and H2g (E-CRM has a significantly positive relationship with personalization) have all been rejected.

In contrast, there is a strong association between Customer Based Service Attribute and Relationship Quality and Outcome models. The statistical significance exists however it does not allow for more conclusions on the strength of the association. There is evidence of a stronger positive correlation between the two variables providing strength to the model.

The research design provides evidence for exploring this model with more powerful statistical tools as well as allowing a further understanding of the relations between the variables of the models. It was however possible to conclude through a factor analysis that both of the models have internal consistency reliability showing that both models are in fact intrinsically strong.

Chapter 6. Conclusions and Recommendations

6.1. Conclusion

The aim of this exploratory research is to show evidence demonstrating future paths and clues for new potential E-CRM approaches.

However based on this research it is possible to make some remarks. From the support model and based on the literature review where referred thirteen components that characterized the Customer-Based Service Attributes. From the factor analysis it was assessed that they could be grouped according to two factors: information and convenience. As for the Relationship Quality Outcomes (compiled into twenty five items) the factor analysis was able to arrange them into four factors (Satisfaction, Loyalty, Trust, and Commitment).

6.2. Academic Implications

The purpose of this preliminary study was to fill an empirical gap on E-CRM research from the customer's perspective, despite the specific context and methodology limiting the generalization of the findings.

This thesis provides clues on the development of a measurement model of E-CRM from the customers perspective, whereas the Customer Based Service Attribute was built on a link between the E-CRM implementation and Relationship Quality Outcomes.

6.3. Managerial Implications

On the management side, it is observed that this preliminary study contributes with a vision, although simplified, of the customer/bank relation. Through the E-CRM strategies it becomes easier to obtain information and knowledge of the customer as a whole.

It is noted that the role of new based internet technologies, on one hand as a simplifier element of the relationship customer/bank, and on the other hand enhancer of that relationship, contributes to transversal and in-depth knowledge of the customer and should be disseminated throughout the organization.

The E-CRM is seen as an efficiency inductor in organizations if they are able to successfully implement their E-CRM programs in its various stages, positioning themselves a step ahead of their competition to take advantage of the market opportunities.

When banks have E-CRM programs their customers can identify that their bank is supplying them with more information and convenience which allows them to personalize their service through various channels of contact which grant them the possibility to contact their bank anytime, anywhere.

6.4. Limitations

Naturally, the present thesis has certain limitations, since this research is limited to a non probabilistic sample creating restrictions on the generalization of the findings.

The statistical tools used on this study give signs about statistical significance; however the strength of the relationship between constructs should have further assessment, which would enable a more accurate analysis of the results of this exploratory study in the Portuguese banking sector.

6.5. Further Research

Future research should be undertaken from the customer's perspective in order to fill the existent gap on this matter. It is important to understand the customer's standpoint on how E-

CRM programs developed by services companies influence his or her perception on relationship quality.

Researchers may benefit from approaching this preliminary study with a structural equation model as well as taking advantage of available useful information from other countries.

It could lead to the development of a study focusing on the role of E-CRM in the development of multi-channel strategies, allowing a unified and transversal view of the customer through the whole organization.

References

- Adebanjo D. (2003). Classifying and selecting E-CRM applications: an analysis-based proposal. *Management Decision* 41 (6), 570-577.
- Alavi, S., Ahuja, V. & Medury, Y. (2011). ECRM Using Online Communities. *IUP Journal of Marketing Management* 10 (1), 35-44.
- Bhanu, F. & Magiswary, D. (2010). Electronic Customer Relationship Management Systems (E-CRM): A Knowledge Management Perspective. 2010 International Conference on Education and Management Technology, 409-413.
- Bowen, J. T., & Shoemaker, S. (2003). Loyalty: A strategic commitment. *Cornell Hotel and Restaurant Administration Quarterly* 44 (5/6), 31–46.
- Bryman, A., Cramer, S. (2003). Análise de Dados em Ciências Sociais Introdução às Técnicas Utilizando o SPSS para Windows", 3ª Ed. Lisboa: Celta.
- Buyut, V. Q., Siadat S.H. & Abidin, W. Z. (2008). Electronic Customer Relationship Management for VoIP Service. 2008 International Conference on Computer and Electrical Engineering, 419-423.
- Cater, B. & Zabkar, V. (2009). Antecedents and consequences of commitment in marketing research services: The client's perspective. Industrial *Marketing Management* 38, 785– 797.
- Chau, P. Y. K. & Ho, C. K. Y. (2008). Developing Consumer-Based Service Brand Equity via the Internet: The Role of Personalization and Trialability. *Journal of Organizational Computing and Electronic Commerce* 18, 197-223.
- Chen, Q. & Chen, H. (2004). Exploring the success factors of ECRM strategies in practice. Journal of Database Marketing & Customer Strategy Management 11 (4), 333-343.

- Dagger, T. S. & Sweeney, J. C. (2007). Service Quality Attribute Weights How Do Novice and Longer-Term Customers Construct Service Quality Perceptions? *Journal of Service Research*, 10 (1), 22-42.
- Danesh, S. N., Nasab, S. A. & Ling, K. C. (2012). The Study of Customer Satisfaction, Customer
 Trust and Switching Barriers on Customer Retention in Malaysia
 Hypermarkets. *International Journal of Business and Management* 7 (7), 141-150.
- Darajeh, M. R. & Tahajod, M. (2010). Benefits of E-CRM for Financial Services Providers. 2010 International Conference on Financial Theory and Engineering, 95-98.
- Donio', J., Massari, P. & Passiante, G. (2006). Customer satisfaction and loyalty in a digital environment: an empirical test. *The Journal of Consumer Marketing* 23 (7), 445-457.
- Evanschitzky, H., Sharma, A. & Prykop, C. (2012). The role of the sales employee in securing customer satisfaction. *European Journal of Marketing* 46 (3), 489-508.
- Feinberg, R. & Kadam, R. (2002). E-CRM Web service attributes as determinants of customer satisfaction with retail Web sites. *International Journal of Service Industry Management* 13 (5), 432-451.
- Fjermestad, J. & Romano, N. C. Jr. (2003). Electronic customer relationship management: Revisiting the general principles of usability and resistance--an integrative implementation framework. *Business Process Management Journal* 9 (5), 572-591.
- Fogliatto F. S., da Silveira, G. J. C. & Borenstein D. (2012). The mass customization decade: an updated review of the literature. *Intenational Journal of Prod Econ* 138(1), 14–25.
- Fullerton, G. (2005). The service quality–loyalty relationship in retail services: does commitment matter? *Journal of Retailing and Consumer Services* 12, 99-111.
- Gan M., Gao, L. & Xiao Q. (2011). The Critical Success Factors for the Banks Implementing E-CRM. 2011 International Conference on E -Business and E -Government (ICEE), 1-4.

- Hennig-Thurau, T. (2000). Relationship Quality and Customer Retention through Strategic Communication of Customer Skills. *Journal of Marketing Management* 16 (1/3), 55-79.
- Hennig-Thurau, T., Gwinner, K. P. & Gremler D. D. (2002). Understanding Relationship Marketing Outcomes An Integration of Relational Benefits and Relationship Quality. *Journal of* Service Research 4 (3), 230-247.
- Jackson, T. W. (2007). Personalisation and CRM. Journal of Database Marketing & Customer Strategy Management 15, 24–36.
- Jeng, D. J. & Bailey, T. (2012). Assessing customer retention strategies in mobile telecommunications Hybrid MCDM approach. *Management Decision* 50 (9), 1570-1595.
- Kennedy, A. (2006). Electronic Customer Relationship Management (E-CRM): Opportunities And Challenges in a Digital World. *Irish Marketing Review* 18 (1/2), 58-68.
- Keshvari, R. S. (2012). The Impact of E-CRM on Customers Attitude and Its Association with Generating Competitive Advantages in Iranian Financial B2B Context. *International Business Research* 5 (4), 34-54.
- Kimiloglu, H. & Zarali, H. (2009). What signifies success in E-CRM? *Marketing Intelligence & Planning* 27 (2), 246-267.
- Kos, A. J., Sockel, H. M. & Falk, L. K. (2001). Customer Relationship Management Opportunities. Ohio CPA Journal 60 (1), 55- 57.
- Kotorov, R. (2003). Customer relationship management: Strategic lessons and future directions. *Business Process Management Journal* 9 (5), 566-571.
- Lee, H. S. (2013). Major Moderators Influencing the Relationships of Service Quality, Customer Satisfaction and Customer Loyalty. *Asian Social Science* 9 (2), 1-11.
- Lee-Kelley, L., Gilbert, D. & Mannicom, R. (2003). How E-CRM can enhance customer loyalty. *Marketing Intelligence and Planning* 21 (4/5), 239-249.

- Leverin, A. & Liljander, V. (2006). Does relationship marketing improve customer relationship satisfaction and loyalty? *International Journal of Bank Marketing* 24 (4), 232-251.
- Liu, C-T., Guo, Y. M. & Lee, C-H. (2011). The effects of relationship quality and switching barriers on customer loyalty. *International Journal of Information Management* 31, 71-79.
- Liu, C., Tseng, H., Chuang, L. & Huang, C. (2012). A study of the impact of the E-CRM perspective on customer satisfaction and customer loyalty-exemplified by bank sinopac. *Journal of Economics and Behavioral Studies* 4(8), 467-476.
- Malhotra, N. K., Birks, D. F. (2006). *Marketing Research An Applied Approach*, Updated Second european Edition, Prentice-Hall, Inc.
- Maroco, J. (2003). Análise Estatística com a utilização do SPSS, 1ª Ed., Lisboa: Edições Sílabo.
- Maroco, J. (2011). Análise Estatística com utilização do SPSS, 5ª Ed., Pêro Pinheiro: Repornumber.
- Maroco, J., Marques, T. G. (2006). Qual a fiabilidade do alfa de Cronbach? Questões antigas e soluções modernas?, Laboratório de Psicologia 4 (1), 65-90.
- Miceli, G., Ricotta, F. & Costabile M. (2007). Customizing Customization: A Conceptual Framework for interactive Personalization. *Journal of Interactive Marketing* 22 (2), 6-25.
- Montgomery, A. L. & Smith, M. D. (2009). Prospects for personalization on the internet. *Journal of Interactive Marketing* 23 (2), 130–137.
- Moorman, C., Zaltman, G. & Deshpande (1992). Relationship between Providers and Users of Market Research: The Dynamics of Trust within and between Organizations. *Journal of Marketing Research* 29 (3), 314-328.
- Morgan, G., Leech, N., Gloeckner, G., & Barrett, K. (2004). SPSS for Introductory Statistics, 2nd Ed., New Jersey: Lawrence Erlbaum Associates, Inc.

- Morgan, R., Hunt, S. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing* 58 (2), 20–38.
- Payne, A. & Frow, P. (2005). A Strategic Framework for Customer Relationship Management. *Journal of Marketing* 69, 167–176.
- Pan, S. L., & Lee, J. N. (2003). Using E-CRM for a unified view of the customer. *Communications* of the ACM 46 (4), 95–99.
- Peppard, J. (2000). Customer Relationship Management (CRM) in Financial Services. *European Management Journal* 18 (3), 312–327.
- Pestana, M. H., Gageiro, J. N. (2003). Análise de Dados para as Ciências Sociais A Complementaridade do SPSS, 2ª Ed., Lisboa: Sílabo.
- Reis, E. (1990). Análise Fatorial das Componentes Principais: Um Método de Reduzir sem Perder Informação, Lisboa: Giesta/ISCTE.
- Scullin, S.S., Fjermestad, J. & Romano, N. C. Jr. (2004). E-relationship marketing: changes in traditional marketing as an outcome of electronic customer relationship management. *Journal of Enterprise Information Management* 17 (6), 410-415.
- Seiders, K., Berry, L. L. & Gresham, L. G. (2000). Attention, retailers! How convenient is your convenience strategy? *Sloan Management Review* 41 (3), 79–89.
- Siddiqi, K.O. (2011). Interrelations between Service Quality Attributes, Customer Satisfaction and Customer Loyalty in the Retail Banking Sector in Bangladesh. *International Journal of Business and Management* 6 (3), 12-36.
- Singh, J. & Kaur, G. (2011). Customer satisfaction and universal banks: an empirical study. International Journal of Commerce & Management 21 (4), 327-348.
- Singh, M. (2002). E-services and their role in B2C e-commerce. *Managing Service Quality* 12 (6), 434-446.

- Siu, N. Y., Zhang, T. J. & Yau, C. J. (2013). The Roles of Justice and Customer Satisfaction in Customer Retention: A Lesson from Service Recovery. *Journal of Business Ethics* 114 (4), 675-686.
- Sivaraks, P., Krairit D. & Tang J. C.S. (2010). Measuring E-CRM Implementation and Outcomes from the Customer's Perspectives. *Technology Management for Global Economic Growth* July 2010, 1-10.
- Sivaraks, P., Krairit D. & Tang J. C.S. (2011). Effects of E-CRM on customer bank relationship quality and outcomes: The case of Thailand. *Journal of High Technology Management Research* 22 (2), 141–157.
- Takenaka, T., Koshiba, H., Motomura, Y., Ueda, K. (2013). Product/service variety strategy considering mixed distribution of human lifestyles. *CIRP Annals -Manufacturing Technology* 62 (1), 463-466.
- Tarokh, M. J. & Shojaie, S. E. (2013). Developing new Strategies for Improvement of Electronic-CRM Factors using Quality Function Deployment Model. *Interdisciplinary Journal of Contemporary Research In Business* 4 (9), 923-932.
- Taylor, S. A. & Hunter, G. L. (2002). The impact of loyalty with E-CRM software and eservices. *International Journal of Service Industry Management* 13 (5), 452-474.
- Toufaily, E., Ricard L. & Perrien, J. (2013). Customer loyalty to a commercial website: Descriptive meta-analysis of the empirical literature and proposal of an integrative model. *Journal of Business Research* 66, 1436-1447.
- Vella, J. & Caruana, A. (2012). Encouraging CRM systems usage: a study among bank managers. *Management Research Review* 35 (2), 121-133.
- Welkowitz, J., Cohen, B.H. & Ewen, R.B. (2006). *Introductory Statistics for the Behavioural Sciences*", 6th Ed., New Jersey: John Wiley and Sons, Inc.

- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioural consequences of service quality. *Journal of Marketing* 60, 1–46.
- Zuccaro, C. (2010). Classification and prediction in customer scoring. *Journal of Modelling in Management* 5 (1), 38-53.
- Zuccaro, C. & Savard, M. (2010). Hybrid segmentation of internet banking users. *The International Journal of Bank Marketing* 28 (6), 448-464.

Annexes

Annexe 1 – Online survey

Este questionário, para o qual desde já agradeço a sua colaboração, servirá de base à realização de um estudo no âmbito da dissertação de Mestrado em Marketing no Instituto Superior de Economia e Gestão (ISEG-UTL), intitulado: Gestão Eletrónica do Relacionamento com o Cliente: a Perspectiva do Cliente no Mercado Bancário Português. A sua participação é fundamental para o desenvolvimento do presente estudo. As respostas são totalmente anónimas e confidenciais e servem apenas para propósitos académicos. Pretende-se que responda com sinceridade, não existindo respostas certas ou erradas. A realização deste inquérito tem a duração de 5 minutos. Obrigado, Nuno Monteiro I37041@aln.iseg.utl.pt

Dos seguintes canais de contato com o seu banco, quais já utilizou?

	Sim	Não
Telefone	0	Ο
Telemóvel	0	O
Internet	0	O
Multibanco	0	Ο

Com que frequência utiliza a banca eletrónica?

- O Diariamente
- 2-3 vezes por semana
- Uma vez por semana
- 2-3 vezes por mês
- Uma vez por mês
- O Esporadicamente
- O Nunca

Atente ao seu banco principal, aquele com o qual efetua mais transações. As seguintes afirmações estão relacionadas com informação, conveniência e comunicação do seu banco, indique para cada uma delas o seu grau de concordância:

Seu grau de conce	Discordo	Discordo (2)	Nem	Concordo (4)	Concordo
	Totalmente (1)		Concordo Nem Discordo		Totalmente (5)
			(3)		
O meu banco apresenta-me informação precisa	0	0	0	0	О
O meu banco apresenta-me informação relevante	Ο	О	Ο	Ο	О
O meu banco apresenta-me informação compreensível	0	0	0	0	О
O meu banco apresenta-me informação em tempo oportuno	0	0	0	0	О
O meu banco apresenta-me informação completa	0	0	0	0	О
O meu banco apresenta-me informação atualizada	0	0	0	0	О
O meu banco oferece-me um serviço personalizado	0	0	0	0	О
O meu banco oferece-me informação coerente	0	0	0	0	О
O meu banco oferece-me a possibilidade de tratar de tudo no mesmo local	0	0	0	0	О
O meu banco oferece-me as condições e informações dos seus	0	0	0	0	Э

produtos e ou serviços					
O meu banco permite-me acesso a diferentes canais de contato	0	0	0	0	о
O meu banco permite-me contato a qualquer hora	0	0	0	0	o
O meu banco permite-me contato em qualquer local	0	0	0	0	о

As seguintes afirmações estão relacionadas com a forma como vê o seu banco. Atendendo ainda ao seu banco principal, e tendo em conta as seguintes afirmações, indique para cada uma delas, o seu grau de concordância:

concordancia.	Discordo Totalmente (1)	Discordo (2)	Nem Concordo Nem Discordo (3)	Concordo (4)	Concordo Totalmente (5)
Os funcionários do banco são honestos	О	О	0	O	О
Os funcionários do banco são confiáveis	0	0	О	0	О
Os funcionários do banco são íntegros	0	0	О	О	O
A minha escolha pelo banco foi uma escolha acertada	0	0	0	0	О
Estou satisfeito com a qualidade dos serviços do banco	0	0	0	0	О
Quando experienciei situações imprevistas, o banco conseguiu resolvê-las de forma satisfatória	0	0	0	0	О
Estou satisfeito com as interações que tenho com o Banco	0	0	O	О	о
Acredito que o banco me informa sobre os novos produtos e serviços	Ο	0	Ο	Ο	O

As seguintes afirmações estão relacionadas com a forma como vê o seu banco. Atendendo ainda ao seu banco principal, e tendo em conta as seguintes afirmações, indique para cada uma delas, o seu grau de concordância:

concordancia.	Discordo Totalmente (1)	Discordo (2)	Nem Concordo	Concordo (4)	Concordo Totalmente (5)
			Nem Discordo (3)		
Possuo uma relação muito forte com o banco	0	0	0	0	o
Estou propenso a mudar para outro banco num futuro próximo	0	0	0	0	О
O banco entende as minhas necessidades	0	0	0	0	О
O banco satisfaz as minhas necessidades	0	0	0	0	О
A minha relação com o banco é algo em que eu estou muito empenhado	0	0	0	0	Э
é algo que eu estou muito comprometido.	0	0	0	0	О
A minha relação com o banco é algo que me causa ansiedade	0	0	0	0	Э
A minha relação com o banco merece o meu esforço máximo de manutenção	0	0	0	0	О

As seguintes afirmações estão relacionadas com a forma como vê o seu banco. Atendendo ainda ao seu banco principal, e tendo em conta as seguintes afirmações, indique para cada uma delas, o seu grau de concordância:

concordancia:					
	Discordo Totalmente	Discordo	Nem Concordo Nem Discordo	Concordo	Concordo Totalmente
Nunca considerei mudar de banco	0	0	0	0	О
Considero-me um cliente fiel do banco	0	0	0	0	O
Realizo todas as minhas operações bancárias neste banco	0	0	0	0	О
Recomendo o banco a amigos e conhecidos	0	0	0	0	О
Tenho uma forte preferência por este banco	0	0	О	0	О
O banco permite-me customizar o conteúdo e apresentação da informação de acordo com as minhas necessidades pessoais	0	0	0	0	Э
O banco envia- me mensagens personalizadas	0	0	0	0	О
No geral, diria que a qualidade da sua interação com o banco é excelente	0	0	O	0	Э
No geral, diria que a qualidade da sua interação com os funcionários do banco é excelente	0	0	0	0	Э

Género

- Masculino
- Feminino

Estado Civil

- O Solteiro(a)
- Casado(a)
- O Unido(a) de facto
- Divorciado(a)
- Separado(a)
- O Viúvo(a)

Idade

- **O** 18 24
- **O** 25 34
- **O** 35 44
- **O** 45 54
- **O** 55 64
- Mais de 65

Habilitações Literárias

- 4.º ano
- O 6.º ano
- 9.º ano
- O 12.º ano
- O Bacharelato
- O Licenciatura
- O Pós-graduação
- O Mestrado
- O Doutoramento

Setor de atividade profissional

- O Comércio
- O Indústria
- O Serviços
- O Saúde
- O Educação
- O Reformado
- O Estudante
- ${\bf O} \ \ \, {\rm Desempregado}$

Rendimento Anual (opcional)

- O Menos de 7.000€
- O De 7.000€ a 20.000€
- O De 20.000€ a 40.000€
- O De 40.000€ a 80.000€
- O Mais de 80.000€