The Republic of Turkey

University of Istanbul

Institute of Social Sciences

School of Business Administration

Department of Business Administration in English

Master of Science Thesis

Electronic Customer Relationship Management: An Application In E-Retailing Sector

İbrahim Sünney

2504030013

İstanbul - 2007

The Republic of Turkey

University of Istanbul

Institute of Social Sciences

School of Business Administration

Department of Business Administration in English

Master of Science Thesis

Electronic Customer Relationship Management: An Application In E-Retailing Sector

İbrahim Sünney

2504030013

Supervisor: Assoc. Prof. Dr. Fatih Semercioöz

İstanbul - 2007

TEZ ONAY SAYFASI

ABSTRACT

Electronic Customer Relationship Management concept emerged with the evolution in Customer Relationship Management technologies. Electronic Customer Relationship Management has become the latest strategy for organizations to meet the changing needs and expectations of online-customers. The purpose of this thesis is to explain the necessary implementation factors, important strategies and evaluation methods of Electronic Customer Relationship Management and to investigate the Electronic Customer Relationship Management activities in two organizations operating in electronic retailing . In the first chapter traditional and Electronic Customer Relationship Management and E-Commerce concepts are defined and explained. In the second chapter necessary implementation steps, strategies and measurement criterias of Electronic Customer Relationship Management are explained. For practical research, the Electronic Customer Relationship Management activities of two electronic retailing organizations are investigated

ÖZ

Müşteri İlişkileri Yönetimi teknolojilerinin evrimiyle beraber Elektronik Müşteri İlişkileri Yönetimi kavramı ortaya çıkmıştır. Elektronik Müşteri İlişkileri Yönetimi, organizasyonların çevrimiçi müşterilerinin beklentilerini ve ihtiyaçlarını karşılamak için kullandıkları en son strateji olmuştur. Bu tezin amacı Elektronik Müşteri İlişkileri Yönetiminin gerekli adımlarını ,stratejilerini ve değerleme kriterlerini açıklamak ve Elektronik Müşteri İlişkileri Yönetimi yürüten şirketlerde pratik anlamda bir araştırma yapmaktır. Tezin birinci bölümünde geleneksel ve elektronik müşteri ilişkileri yönetimi ve elektronik ticaret kavramları açıklanmaktadır.İkinci kısımda ise elektronik müşteri İlişkileri yönetimi anlayışının gerekli uygulama adımlarından,stratejilerinden ve değerleme yöntemlerinden bahsedilmiştir. Pratik araştırma olarak ise bu yönetim metodunu benimseyen ve elektronik perakende sektöründe faaliyet gösteren iki organizasyondaki elektronik müşteri ilişkileri uygulamaları araştırılmıştır.

FOREWORD

In today's business world organizations are challenging with continuously evolving and changing environments. For the competitive edge in their sector organizations must differ from each other. As the differences between products and services decrease organizations change their focus from products to customers. Mass production and traditional marketing views are not enough to keep profitable customers. With a customer relationship management program, organizations can focus on their most profitable customer segment by gathering customer information, evaluating customer segments and offering customized products to their customers., Traditional customer relationship management become incapable of meeting the demands and needs of online-customers,as online marketplace has grown to a level that could not be underestimated. Electronic customer relationship management evolved with the advances in information technologies and helps companies to interact their customers in the most efficient way. The purpose of this thesis is to explain the electronic customer relationship approach, its implementation steps,strategies and performance measures. The emprical research purpose is to investigate these activities in organizations which enable electronic customer relationship management approach.

With this purpose, the thesis formed by 3 chapters. In the first chapter definitions, components, characteristics, types, benefits, challenges and comparisons of traditional and electronic customer relationship management and e-commerce concepts are given. In the second chapter, the implementation stages are explained with the important success factors, the major strategies are given and also the performance measures are explained later in this chapter. In the third chapter, the electronic customer relationship management implementation factors, strategies and measurement methods of two electronic retailers are explored.

CONTENTS

LIST OF FIGURES

LIST OF TABLES

INTRODUCTION

Electronic Customer Relationship Management (e-CRM) is the newest phenomenon in the Customer Relationship Management (CRM) approaches. In today's business world, where the improvements in technology led to a decrease in quality differences between products and services and an increase in the competition and globalization, customer retention and attraction has become the most important business initiatives for organizations. As the focus have shifted from product-oriententation to customer-orientation, organizations implement customer-oriented projects to differentiate from competitors, meet customer needs and maintain longevity in both traditional and electronic area. Today not only the pure web based organizations, but also the traditional organizations implement organizational web sites. And therefore in today's business world the strategic importance of online presence can not be denied as with the internet based e-CRM technologies and tools enable organizations to gain the capability of acquiring and retaining valuable customers. With the e-CRM concept organizations manage business transactions between their customers in the most efficient and effective way as the internet acts as a major player in the organizations online strategies. Online environment increases conveniency for strategies like mass customizing products and services and advanced personalization strategies like personalized one-to-one web sites. E-CRM projects can meet all these organization's needs, if it is succesfully implemented. Higher e-CRM expenditures doesn't always count to profit as e-CRM is also popular with its high failure rates. Achieving positive returns on investment from an e-CRM Project accounts for issues which are unique for each organization. These issues must be implemented carefully with the organizational commitment and efficiency.

In the first part, firstly the basics and definitons of CRM concept is given with some historical data of how CRM emerged as a dominant competitive perspective in today's business world. Electronic commerce concept is explained later with historical informations and business models active on internet. e-CRM concept is explained later with its definition and also the reasons, goals and possible expected

benefits from implementation is given with some organizations which implemented e-CRM successfully. In the second part, the technology selection options, the organizational integration dimensions of e-CRM and various different e-CRM technologies available are explained.Later, dominant and advanced strategies of e-CRM are mentioned and finally the measurement methods and efforts are explained with the possible e-CRM failures.The third part consists of investigation of e-CRM activities of Mybilet and Estore organizations which operate in electronic retailing sector.These activities are investigated in three dimensions as: e-CRM implementation,e-CRM marketing strategies and e-CRM performance measurements.

1. CUSTOMER RELATIONSHIP MANAGEMENT AND ELECTRONIC COMMERCE

1.1. Customer Relationship Management

Customer Relationship Management (CRM) has become the leading business strategy in the highly competitive business environment. CRM is increasingly found at the top of corporate agendas,as organizations large and small across a variety of sectors are embracing CRM as a major element of corporate strategy. CRM is becoming a priority due to very powerful economic, technological, and social forces that have effectively made the traditional business models irrelevant in the existing business and technological environment. CRM is a concept that enables organizations to systematically build up and extend the knowledge of their customers, thus empowering organizations to actively manage the business relationships with their customers.

1.1.1. The Emergence of Customer Relationship Management

Businesses began applying information technologies to their general operations in large numbers during the 1960s and 1970s, with the automation of internal processes such as manufacturing, purchasing, and payroll. The software to automate these “back office” functions was first written as custom programs for mainframe computers and eventually evolved into the packaged-applications category known as enterprise resource planning (ERP). By the 1980s, packaged software aimed at “front office” customer-relationship functions began to appear. There were two main categories of products: sales force automation (SFA) and customer service and support (CSS). SFA software addressed selling and marketing functions such as managing leads and customer contacts, generating proposals,

configuring products for price quotations, and telemarketing. CSS software addressed after-sale activities such as help desks, call centers, and field service operations. The first wave of CRM applications, in the late 1980s, typically focused on specific and narrow functions such as laptop-based contact managers, and many were designed for a particular industry or customer group. Created by small independent software developers, these applications were intended to improve the efficiency of customer-facing employees like customer-service representatives, salespeople and field-service technicians. Unlike ERP applications, CRM technology enabled organizations to generate more sales. These tools gave early adopters of CRM technology a competitive advantage. SFA systems, for example, enabled salespeople to find and retrieve product information far more quickly than they could by consulting paper catalogs or datasheets; this greater efficiency translated into the ability to make more calls and increase sales.[1]

The new framework for organization activities that emerged in 1990s, characterized by the globalization of markets, technological development, the larger number of competitors, and increased customer demands, obliged organizations to renew their management systems in order to adapt themselves to the new competitive environment. The dynamic of the change was based on both methodological and technological elements. Firstly, concepts and methodologies directed towards reducing costs and improving the quality of operational activities, such as business processes reengineering , supply chain management, and so forth, were improved. Secondly, innovative technologies became available, thus allowing organizations to manage an increasing volume of information in an efficient manner. One of the most important of these technologies was the enterprise resource planning (ERP) computer programs.[2]

[1] Adrian Payne, "**HANDBOOK OF CRM:Achieving Excellence in Customer Management**", Oxford, Butterworth-Heinemann,2005,p.7.
[2] Ricardo Chalmeta, "Methodology for customer relationship management," **Journal of Systems and Software** ,Vol.79,No.7,2006,p.1015.

Consequently, organizations have achieved a high level of maturity in the use of computer applications to improve the efficiency of the organization's everyday activities. It is therefore very common, depending on their size or the sector, for their operational level activities in the areas of accounting, sales, purchasing, warehousing, logistics, production and human resources to be computerized. The implementation of ERP produces an improvement in the quality and efficiency of business processes. However, when the majority of organizations in a sector have optimized their internal processes, this improvement becomes a condition that is necessary to remain in the market, but lacks from competitive advantage. [3]

In today's business world, differentiation from competitors is going to be based on the speed with which a organization is capable of responding to the requirements and demands of the market with innovative products and services. As a result, current competitive challenges induced by globalization and advances in information technology have forced organizations to focus on managing customer relationships, and in particular customer satisfaction, in order to efficiently maximize revenues. Organizations are learning more about their customers and their preferences, needs, and expectations, as the essence of the information technology revolution and, in particular, the world wide web is the opportunity afforded organizations to choose how they interact with their customers. In addition, from the technological point of view, this new customer-focused organizational model makes it necessary to complement the ERP applications that have played a key role in the processes of optimizing internal procedures and external processes relating to supply chain management with CRM solutions which are essential in customer management procedures.[4]

[3] Olaf Boon,Brian Corbitt,"Identifying some of the Prerequisites for CRM Implementation from an Organisations Perspective:a Review of the Literature," **School Working Papers Series**,No.57,2002,p.5,(online) http://www.deakin.edu.au/buslaw/infosys /docs/ workingpapers/ archive/ Working_Papers_2002/2002_working_papers.htm,5 February 2006.
[4] Yurong Xu; David C Yen; Binshan Lin; David C Chou, "Adopting customer relationship management technology," **Industrial Management and Data Systems**,Vol.102,No.8,2002,p.444.

1.1.2. Definitions of Customer Relationship Management

There is no universal explanation of what CRM is, since the area is fairly new and still under development. It is therefore important to know that numerous attempts of defining CRM exist and many organizations adapt the definition to their own business and their unique needs.Various CRM definitions are given with the statements below as:

- CRM is a broad term for managerial efforts to manage business interactions with customers by combining business processes and technologies that seek to understand a organization's customers[5]
- CRM is an ongoing process that involves the development and leveraging of market intelligence for the purpose of building and maintaining a profit-maximizing portfolio of customer relationships[6]
- CRM is a comprehensive approach for creating, maintaining and expanding customer relationships.[7]
- CRM is a broad term for managing a business' interactions with customers. Effective CRM is about acquiring, analyzing and sharing knowledge about and with your customers. Total CRM covers organization's direct business contacts with customers, channel partners' indirect contacts with customers, and customer contact management in your supply chain. More importantly, it allows a business to focus on the customer.[8]

---

[5]Jonghyeok Kim; Euiho Suh;Hyunseok Hwang,"A Model for Evaluating the Effectiveness of CRMusing the Balanced Scorecard," **Journal of Interactive Marketing** Vol.17, No.2,2003, p.5.

[6] Alex R. Zablah, Danny N. Bellenger, Wesley J. Johnston,"An evaluation of divergent perspectives on customer relationship management: Towards a common understanding of an emerging phenomenon," **Industrial Marketing Management** ,Vol.33,No.6,2004,p.480.

[7]KristinAnderson,Carol Kerr**,"Customer Relationship Management**",New-York,McGraw-Hill,2002,p.2

[8] Dawn Jutla,James Craig,Peter Bodorik,"Enabling and Measuring Electronic Customer Relationship Management Readiness,"**34th Annual Hawaii International Conference on System Sciences (HICSS-34)**,Volume 7, 2001,p.7023

From the attempts of definitions and conceptualizations, it is suggested that the dominant perspectives of CRM can be given as process, strategy, philosophy, capability, or a technological tool. These divergent views contribute the understanding of CRM concept in essential ways.[9]

1.1.2.1. CRM as a Process

A process refers to a collection of tasks or activities that together result in a desired business outcome. The groups of tasks can be subdivided or aggregated into lower and higher level processes, the specific nature of a business process depends on the level of aggregation used to define it.When viewed as a process, CRM has been defined at two different levels of aggregation. Some have defined it as a higher level process that includes all activities that organizations undertake in their quest to build durable, profitable, mutually beneficial customer relationships. Yet, others have defined as a process that is concerned with managing customer interactions for the purpose of promoting the establishment and maintenance of long-term, profitable relationships.[10]

1.1.2.2. CRM as a Strategy

The strategic view of CRM emphasizes that all customers are not equally valuable and , therefore, maximum profitability can only be achieved when available resources are invested in customer relationships that provide a desired level of return. The main implication from the strategic perspective is that organizations must continually assess and prioritize customers based on their expected lifetime value, if they are to build long-term, profitable customer relationships. The focus of this view of CRM is not on how relationships are developed and maintained, but more so on how building the right type of relationships can have positive impact on corporate profitability.Closely associated with this view of CRM is the notion that customer

[9] Zablah,**a.g.e**., p.476.
[10] Thomas H. Davenport,Michael C. Beers,"Managing information about processes," **Journal of Management Information Systems**,Vol.12,No.1,1995,p.57

relationships should be treated as a portfolio of assets or investments that need to be actively managed to maximize profitability.[11]

1.1.2.3. CRM as a Philosophy

When defined as a philosophy, CRM refers to the idea that the most effective way to achieve customer loyalty is by proactively seeking to build and maintain long-term relationships with customers. Rather than treating periodic transactions between buyers and sellers as isolated events, the philosophical view of CRM stresses that a loyal customer base can only be achieved if interactions are viewed within the context of an ongoing relationship. As a business philosophy, CRM is linked to the marketing concept, which emphasizes that organizations must organize around and be responsive to their customers and their changing needs. The philosophical perspective suggests that in order to achieve long lasting customer relationships organizations must build a customer-centric culture which enables organizations to continually deliver what their customers value. In order to summarize this view, it is mentioned that to build long-term, profitable relationships, organizations' day-to-day activities must be driven with an understanding of customers' evolving needs. [12]

1.1.2.4. CRM as a Capability

Capabilities, on the other hand, refer to the capacity for a team of resources to perform some task or activity. While resources are the source of a organization's capabilities, capabilities are the main source of its competitive advantage. The capability perspective on CRM highlights the fact that organizations must invest in developing and acquiring a mix of resources that enables them to modify their

[11] Emmanuella Plakoyiannaki,Nikolaos Tzokas.: "Customer relationship management: A capabilities portfolio perspective," **Journal of Database Marketing**,Vol.9,No.3,2002,p.235.

[12] Darrell K.Rigby,Frederick F.Reichheld,Phil Schefter,"Avoid the four perils of CRM",**Harvard Business Review**,Vol.80,No.2,2002,p.105.

behavior towards individual customers or groups of customers on a continual basis. Although the capability view of CRM has not received widespread support in the literature, it does serve to emphasize that a certain mix of resources are needed to effectively manage customer relationships. After all, organizational capabilities are what enable the execution of a organization's day-to-day activities. [13]

1.1.2.5. CRM as a Technology

Few researchers today would argue that CRM is simply a technological tool that enables organizations to build customer relationships. In fact, it is usually mentioned in the literature that CRM is much more than technology and that a lack of understanding about its true nature would result with the failure of CRM initiatives. This argument is supported by recent studies which suggest that CRM technology only has a moderate to weak impact on the overall success of organizations' relationship building efforts. Still, it is important to emphasize that technology does play a substantial role in CRM efforts by seamlessly linking front and back office functions to provide for the efficient and effective management of interactions across different customer touch-points. In addition, CRM tools enable organizations to control the customer database, data mining, and interactive technologies to collect and store remarkable amounts of customer data, build knowledge from that data, and spread the resulting knowledge across the organization. [14]

1.2. Electronic Commerce

Organizations continue to face challenges about how to effectively operate in order to provide customers with the needed goods and services, maintain or increase

[13] Robert M. Grant,The Resource-Based Theory of Competitive Advantage: Implications for Strategy, **California Management Review**; Vol.33,No.3,1991,p. 114.
[14] Anne P. Massey,Mitzi M. Montoya-Weiss,Kent Holcom, "Re-engineering the customer relationship: Leveraging knowledge assets at IBM," **Decision Support Systems**, Vol.32,No.2, 2001,p.160.

market share, and be profitable with enhancing shareholder value. The Internet has introduced a whole new dimension to the competitive landscape, as organizations are challenged to discover how they can leverage the technology to better achieve their goals. Electronic commerce (E-commerce) is the electronic exchange of information, goods, services and payments over telecommunications networks, primarily the World Wide Web (WWW). E-commerce activities include the establishment and maintenance of online relationships between an organization and its suppliers, dealers, customers, strategic partners, regulators and other agents related to traditional delivery channels.

E-commerce is about using the power of digital information to understand the needs and preferences of each customer and each partner to customize products and services for them, and then to deliver the products and services as quickly as possible. Personalized, automated services offer businesses the potential to increase revenues, lower costs, and establish and strengthen customer and partner relationships. To achieve these benefits, many organizations today engage in electronic commerce for direct marketing, selling, and customer service; online banking and billing; secure distribution of information; value chain trading; and corporate purchasing.[15]

1.2.1. Electronic Commerce Before 2000

Although the general public has become familiar with e-commerce only in the last decade , e-commerce has actually been around for over 30 years. E-commerce was made possible by the development of electronic data interchange (EDI), the exchange of business documents from one computer to another in a standard format. EDI originated in the mid-1960s, when organizations in transportation and some retail industries were attempting to create paperless offices. As the first generation of e-commerce, EDI allowed organizations to exchange information, place orders, and

[15] Pete Loshin,John Vacca, **Electronic Commerce**, Charles River Media, 2004,p.6

conduct electronic funds transfer through computers. However, the diffusion of EDI was slow. The huge expense for getting connected to an EDI network and some technical problems limited the diffusion of EDI. [16]

The second generation of e-commerce is characterized by the transaction of goods and services through the Internet,which started as a research tool, but has generally evolved into a commercial tool. By the end of the 1980s, the Internet had still maintained its noncommercial nature.The primary users were still scientists and engineers working for the government or for universities.As a matter of fact, academics or researchers were the only ones capable of using the Internet, because a complex understanding of computer science and a high level of computer skills were necessary for Internet use at that time. It was the development of a graphical user interface (GUI) and the navigability of the World Wide Web that changed the nature of Internet use. And with the increasing number of Internet users, the Internet became attractive to the business world. Perhaps the most significant milestone, however,came in 1991, when the National Science Foundation Network (NSFNET) of USA decided to lift commercial restrictions on the use of the network, and thereby opened up opportunities for e-commerce. [17]

With NSFNET's restrictions removed, private organizations took a leading role on the Internet. Commercial use of the Internet slowly became the dominant form of Internet use in the mid-1990s. Also in 1995,Amazon.com, the world's largest online bookstore,was launched. Just 1 year later,it became a multimillion dollar business with a database of 1.1 million books searchable by title,author,subject, or keyword and favored by both publishers and customers. Two months after Amazon's debut, eBay, the world's first online auction site, was launched.In 1996, Dell began to sell personal computers directly to customers on the Internet and, in 1997, the commercial domain (.com) replaced the educational domain (.edu) as the largest in

[16] Stuart Sawabini ,"EDI and the Internet"**, The Journal of Business Strategy**; 22, 1; 2001,p. 41
[17] Merrill Warkentin,Akhilesh Bajaj,"The On-Demand Delivery Services Model for E-Commerce," **Managing business with electronic commerce:issues and trends**, Ed.by. Aryya Gangopadhyay, Hershey,Idea Group Publishing,2002,p.132.

use. The Internet became the fastest growing technology in economic history. Investors, businesses, and customers were attracted by e-commerce during that period. From 1995 to 1999, many organizations built their Web presence and began to conduct transactions online. From October 1998 to April 2000,more than 300 Internet organizations made initial public offerings. Advertising on the Internet increased from $267 million in 1996 to $907 million in 1997 and to $3 billion in 1999. The sales of Amazon increased from less than $16 million in 1996 to $1.6 billion in 1999, and the daily sales of Dell increased from under $1 million to $40 million in less than 3 years.[18]

1.2.2. Electronic Commerce From 2000 to Present

The "gold rush" of the late 1990s came to be known as the "dot-com bubble," and 2000 and 2001 saw the bursting of that bubble.From March 10 to April 14, 2000, the NASDAQ,the high-tech stock exchange, dropped 34.2%, and the Dow Jones Composite Internet Index dropped 53.6%. The stock price for all the 20 leading Internet stocks dropped,including Amazon.com by 29.9%, eBay by 27.9%,Internet Capital by 72.1%, and VeriSign by 59.2%. Many Internet organizations were forced to cancel their Internet public offerings,and organizations such as Boo.com and Value America had to file for bankruptcy. In the San Francisco Bay Area, 80% of dot-coms went out of business in 2000 and 2001, which led to a loss of 30,000 jobs directly related to the Internet. The dot-com crash in 2000 and 2001 has been attributed to the unrealistic expectations for e-commerce and Internet organizations. The stocks for Internet organizations were overvalued. The bubble finally burst, which meant decreases in investment, a slow-down in economic and productivity growth, and decreasing corporate revenues.[19]

The burst of the dot-com bubble may actually have brought about a more rational and sustainable approach to e-commerce.Ironically,despite the dramatic rise

[18] Yan Tian,Concetta Stewart,"History of E-Commerce," **Encyclopedia of E-Commerce, E-Government, and Mobile Commerce,**Ed.By.Mehdi Khosrow-Pour,Idea Group,2006,p.560
[19] **Ibid**

and fall of Internet organizations,e-commerce has shown continuous growth in sales. The estimated total retail B2C e-commerce sales in USA for 2001 were $34 billion,a 22.1% increase compared with the total retail B2C e-commerce sales for 2000. The increase of e-commerce sales during the dotcom crash suggests that although e-commerce and Internet organizations may have been overvalued in the 1990s, e-commerce itself was still reliable and growing. E-commerce continued to grow after the burst of the dotcom bubble. Some Internet organizations that survived the 2000 and 2001 crash have become very successful. For example, Amazon.com has won some of highest customer satisfaction scores in the history of retail industry. eBay has significant sales in second-hand cars, which were once looked upon as inappropriate commodities for online transactions. Wal-Mart, the world's largest retailer, conducts all the business with suppliers through a B2B network. Estimated total e-commerce sales reached $45.6 million for 2002 and $54.9 billion for 2003. This trend continued in 2004, with e-commerce sales for the third quarter of 2004 estimated to have increased 21.5% from the same period in 2003. However, e-commerce still does not represent a large proportion of the economy. E-commerce sales are less than 2% of the total sales in the United States.[20]

1.2.3. E-commerce Models

E-commerce is conceptualized in different ways depending on the scope of the definition of the term. It is broadly classify them into non-Internet based e-commerce and Internet-based e-commerce. The non-Internet based e-commerce includes traditional means for conducting business transactions, whereby the information transmitted is coded in electronic form. This includes electronic data interchange (EDI), video-conferencing,and etc. On the other hand, more generally accepted model the Internet-based e-commerce is the one for which the Internet serves as the medium through which transaction information is transmitted. Thus, e-commerce entails use of the Internet to facilitate trade in goods and services between

[20] U.S. Census Bureau**," 2004 E-commerce Multi-sector Report", (online)** http://www.census.gov/eos/www/ebusiness614.htm, 15 July 2006.

two or more parties. Different levels of transaction can be considered: transactions of personal items between two individuals, transactions between an individual and an organization, and transactions between and among organizations. Several models of e-commerce have been developed to represent or formalize the various practices of various entities. The two major classifications of Internet-based e-commerce that have been articulated are B2C and B2B e-commerce. Figure 1 presents linkages between entities involved in various e-commerce models[21]

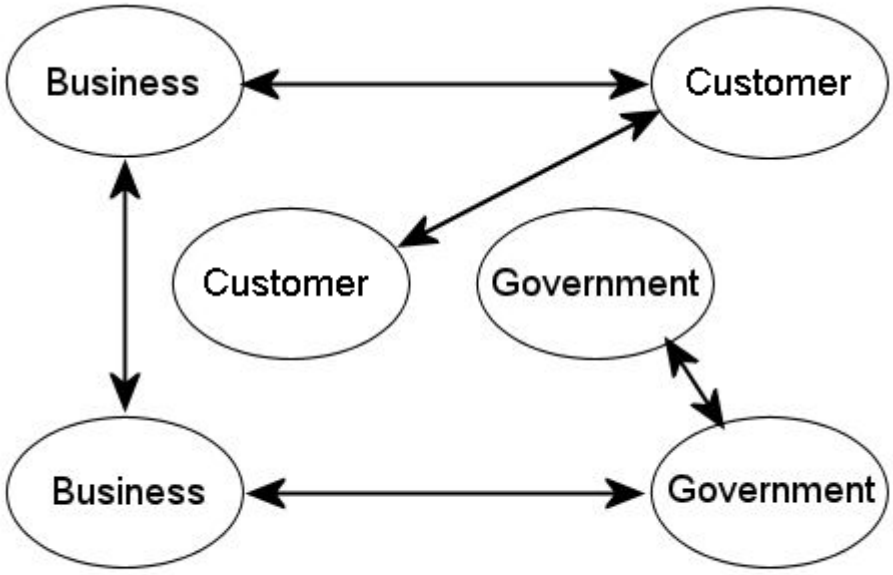

Figure 1. E-Commerce Models

1.2.3.1. Business-to-Business Electronic Commerce

In B2B e-commerce, organizations conduct business with their suppliers, distributors, and other partners through electronic networks.Although B2C is the better known to the general public,B2B is the form that actually dominates e-commerce in terms of revenue. The notion of B2B e-Commerce is not new, but its scale and scope has increased rapidly with the emergence of B2B exchanges.

[21] Aigbedo,Henry: "Managing Operations in the E-Commerce Era:Requirements and Challenges," **Intelligent Enterprises of the 21st Century**, Ed.By. Jatinder Gupta, Sushil Sharma, Hershey,Idea Group Publishing,2004,p.283.

The low cost of Internet-based e-Commerce increases the scope of B2B exchanges to touch all organizations regardless of the size, nature of business and relationship. Therefore, since B2B exchanges redefine how organizations interact with each other, it is important to understand how organizations can benefit from B2B e-Commerce through their participation in these exchanges. B2B exchanges provide an easy accessible structure for virtual relationships by enabling an easier identification and selection of suppliers and products, lower transaction costs, and more integrated supply-chain management compared to traditional channels. Most B2B exchanges have substantially different characteristics in terms of their industry and product focus, the type of relationships and power differences between buyers and suppliers, and type of product sourcing.[22]

1.2.3.2. Business-to-Customer Electronic Commerce

In B2C e-commerce, organizations sell products and services to customers. B2C e-commerce focuses on transactions between a organization and an individual customer. Customers are able to purchase goods and services such as books,computer products, music, at any convenient time.

As one of the key benefits of e-commerce is the offered convenience to customer ,which is day and night trading in 365 days of the year, customers are still concerned about purchasing over the Internet for trust concerns. Building trust in e-commerce cannot be fulfilled by any individual web site. Rather, it can be fulfilled at group level. Facing the new way of shopping, customers decide whether or not to purchase on-line before deciding which web site to purchase from. That is, they will have to evaluate the trustworthiness of B2C e-commerce as a whole, before they come to the stage of evaluating the possibility of any web site. Compared to the B2B market, the small but rapidly growing B2C market may require different types of

[22] John M. Gallaugher,Suresh C. Ramanathan,"Online Exchanges and Beyond: Issues and Challenges in Crafting Successful B2B Marketplaces",**Business to Business Electronic Commerce:Challenges and Solutions**,Ed.By.Merrill Warkentin,Hershey,Idea Group Publishing,2002,p.53.

relationships, information, and contact approaches:[23]

- The B2C relationships are typically shorter term with shorter sales-cycles and more transaction driven.
- The B2C customer may be seeking a mix of convenience, price, and product capabilities.
- The information gathered about the customer typically include demographics, past and current purchase behavior, preferences, and psychographics.
- The contact strategy includes using past purchase patterns to anticipate new needs and wants that can be targeted with new offers as well as two-way communication on the Internet that offers more immediate and direct customer feedback.

1.2.3.3. Other E-commerce Models

- **Customer-to-Customer (C2C) e-commerce** is represented by two scenarios: an individual selling an item to another individual through websites such as eBay; and a scenario whereby two customers exchange products or services using the Internet as the medium.
- **Business-to-Government (B2G) e-commerce** represents the transactions that occur between a government agency and a business organization.
- **Government-to-Government (G2G) e-commerce** occurs between governments of different countries using the internet as a medium , the level is expected to increase as more and more countries get linked into the World Wide Web
- **Customer-to-Government (C2G) e-commerce** is an other form of e-

[23] Loshin, **a.g.e.,**p.360, Yi,H.,Corbitt B.J.,Thanasankit T.: "Trust and Consumers in B2C eCommerce", **School Working Papers Series**, 2002, (online) http://www.deakin.edu.au/ buslaw/ infosys/docs/workingpapers/archive/Working_Papers_2002/2002_working_papers.htm,5 February 2006

commerce that involve transactions with the government

1.3. Electronic Customer Relationship Management

As the Internet continues to redefine the rules of doing business by eliminating transaction inefficiencies, reducing costs, and lowering barriers to entry, more and more online organizations are turning to customer relationship management as a means of securing their survival in the Internet economy. E-CRM is a new customer-centric business model that reorients organization operations around customer needs in order to improve customer satisfaction, loyalty, and retention. The term "Electronic Customer Relationship Management" (e-CRM or ECCRM) refers to the application of CRM in electronic commerce, when business relationships are maintained via the Internet.

E-CRM also has no universal definition like the CRM concept as the key point is that e-CRM takes on many forms depending upon the organization's objectives. Most generally it is a combination of hardware, software, people, processes, applications, and management commitment. The focus of e-CRM is not about technology or software ,it is about aligning business processes with customer strategies supported with software and technology. It is suggested that the main purpose of e-CRM is about attracting and keeping economically valuable customers while eliminating economically invaluable ones. If it is needed to make a classification of e-CRM, two main types of e-CRM emerges: operational e-CRM and analytical e-CRM:[24]

- **Operational e-CRM** is concerned with the customer touch points. These can be inbound contacts through a telephone call or a letter to an organization's customer service center or outbound contacts such as a sales person selling to

[24] Anol Bhattacherjee**,"An empirical analysis of the antecedents of electronic commerce service continuance"**, Decision Support Systems,Vol.32,2001,p.201, ,Jerry,Fjermestad Nicholas C Romano: "Electronic customer relationship management :Revisiting the general principles of usability and resistance--an integrative implementation framework",**Business Process Management Journal**, 2003, Vol.9,No.5, p.574.

a customer or an e-mail promotion. Thus, customer touch points can be everything from in-person, web-based, e-mail, telephone, direct sales, fax and etc.

- **Analytical e-CRM** requires technology to process large amounts of customer data. The purpose is to build new business opportunities by analyzing customer information like customer demographics, purchasing patterns and etc.

1.3.1. The Evolution Of Electronic Customer Relationship Management

E-CRM evolution began with the explosive rise of the World Wide Web in the middle of 1990s, which changed CRM technology in three critical respects:[25]

- Firstly, the web transformed how organizations and customers interacted, both in the quality and quantity of their contacts. organizations needed to manage an increasing number of web-based customer relationships, and CRM technology had to meet those needs. For example, organizations wanted their information systems to provide customer-facing employees,assuming a call-center operator, with a single, real-time view of a customer's relationship with the organization, including all relevant information about past purchases, service calls,and etc.

- Second, the web empowered customers.Customers now have rapid access to information and could perform more transactions online. These rising expectations of self-service,like the ability to view a credit card statement or to book an airline reservation over the web, pressed organizations to make their own information systems accessible to customers. But conventional

[25] Garth Saloner,A. Michael Spence,Eric Marti,"Siebel Systems, Inc.",1999,(Online) https://gsbapps. stanford. edu/cases/detail1.asp?Document_ID=1202, 23 May 2005

CRM tools were not designed to enable customers to serve themselves. In the new era of web-based interactivity, however, CRM technology would have to extend more control to the customer.

- Third, the web presented a new platform for corporate computing. The easy to use web browser was becoming the universal tool for accessing computing resources. Web-based computing differed from client/server computing in several respects. Organizations derived these benefits from web-based computing;

    - Users did not have to learn to navigate multiple interfaces
    - The cost and administrative burden of keeping each desktop in the organization up to date were reduced because fewer applications needed to be stored and maintained on them.
    - Web-centric applications also allowed hundreds of thousands of clients to be served simultaneously.

1.3.2. The Reasons of Electronic Customer Relationship Management Implementation in Organizations

There are several reasons for online organizations to implement e-CRM, as this concept becomes an important competitive advantage for organizations to differentiate from competitors. Some of these reasons for e-CRM implementation can be described as:[26]

- Improving online customer experience is a more effective and unique differentiation strategy in the online marketplace than the more common cost leadership strategy which has already led to decrease in revenue margin,

[26] Nelson Massad, Robert Heckman,Kevin Crowston,"Customer Satisfaction with Electronic Service Encounters",**International Journal of Electronic Commerce**,2006,Vol.10,No.4, p.73, Bhattacherjee, **a.g.e.,** p.210

reduced profitability and collapse of many online organizations.

- It is believed that satisfied customers are a less expensive and more effective advertising channel than the print or mass media,as they share their associated positive personal experiences with the organization.

- The online marketplace becomes increasingly fragmented and competitors are just a mouse-click away, retaining profitable customers and attracting new customers become more critical for organizations to keep revenue base, profitability and market share.

- In some industries, where direct customer contacts occur such as electronic retailing, building and maintaining customer relationships has been perceived as an enabler of electronic commerce.

1.3.3. Electronic Customer Relationship Management Goals of Organizations

The organizational approach to e-CRM should be strategic since it should be determined by the vision and goals of the organization. Vision and goals of organizations will differ depending on type of industry, competition and company resources. Therefore some organizational goals could be given as common for most organizations as nearly most e-CRM projects share the same principles in terms of organizational profitability , customer acquisition, customer loyalty, customer satisfaction and customer retention. Some of the goals for e-CRM implementation can be given as: [27]

[27] Frederick F Reichheld,Robert G Markey,Christopher Hopton,"The loyalty effect - the relationship between loyalty and profits",**European Business Journal**,Vol.12,No.3,2000,p.135,Calin Gurau, Ashok Ranchhod,Ray Hackney,"Customer-Centric Strategic Planning: Integrating CRM in Online Business Systems",**Information Technology and Management**,Vol.4, No.2,2003, p.204, Jutla, **a.g.e**., p.7025, Bart Larivie`re,Dirk Van den Poel,"Predicting customer retention and profitability by using random forests and regression forests techniques",**Expert Systems with Applications**, Vol.29, No.1, 2005,p.482.

- **To better satisfy customers**: Satisfied customers are a less expensive and more effective advertising channel than the print or mass media, due to the greater believability associated with personal experiences.

- **To improve customer loyalty:** As it is still argued that the most loyal customers are not necessarily the most profitable ones,studies show that new customer acquisition is known to be a more expensive and risky strategy. As it can be assumed that switched customers are more vulnerable to continue their disloyalty in the near future.

- **To increase customer retention rates**: It costs five times as much to attract a new customer as it does to keep a current customer satisfied.In addition, it is proposed by "80/20 principle" that a few heavy users can account for much of a product's consumption. Customer retention provides additional revenue opportunities via cross-selling selling new products or services to existing customers or upselling enhancing customers' use of existing products or services. The literature studies showed that a small increase in the retention rates would result a big increase in net profits of the organization.For example, a 5% increase in customer retention rates increases profits by 20% to 100%. Also past customer behavior variables play an important role in predicting future customer behavior and profitability,as therefore it is more profitable to retain the most profitable customers of the organization.

- **To build trust:** Trust is a necessary enabler to e-CRM and e-commerce.Studies have shown that trust is an integral part of the selling equation to customers. Customers need to trust the business before they decide purchasing. Furthermore, the more trust the customers put in the business, the easier it is for the organization to retain them as customers**.**

- **Calculate Customer Lifetime Value (CLV) to target profitable customers:** The CLV consists of taking into account the total financial

contributionof a customer over his or her entire life of a business relationship with the company. CLV helps organizations to model the current and the potential value of each customer

1.3.4. Electronic Customer Relationship Management Benefits

The implementation of e-CRM will involve changes in the organization and operation of each organization, resulting in an expected improvement in its performance and competitiveness. The most notable improvements that can be predicted with the e-CRM implementation can be given as:[28]

- The customer contact costs are reduced by making customer details readily available to the customer contact staff. Also the staff will have more time opportunities to resolve customer enquiries with the deduction of other productive work.

- Administrative and operational costs are reduced by transferring some responsibility to the customer with the options like product or service configuration, order tracking and online customer details collection. Also these features increase the value that an e-CRM solution will deliver to the organization.

- The efficiency and workflow of the organization is improved with the integration of e-CRM applications with back-office systems such as production, finance and supply chains. For example, field salespeople could use hand-held devices to initiate orders, check stock, track orders, request

[28] Philip Bligh,Douglas Turk**,"CRM Unplugged:Releasing CRM'sStrategic Value",**New Jersey,John Wiley & Sons,2004, p.53,Adebanjo,Dotun: "Classifying and selecting e-CRM applications: An analysis-based proposal",**Management Decision**,Vol.41,No.5-6,2003,p.6, Selda Eke,"CRM-Müşteri İlişkileri Yönetimi",**Active**,No.37,2004,p.80.

invoices and check production status with minimal effort and cost.

- The e-CRM applications have the potential to improve sales by customer profiling, automated campaign management, e-mail marketing and etc.

- Improving the overall interaction with customers would lead to better service and improve customer satisfaction,loyalty and customer lifetime value.

- e-CRM can enhance the value of the relationship for both customers and the organizations. Customers can receive more products and communications that are better suited to their needs and lifestyles, and the organization can benefit from a group of high-value repeat customers. Also improving and extending customer relationships will generate new business opportunities.

- Knowing how to segment customers, differentiating profitable customers from those who are not, and establishing appropriate business plans for each case.

1.3.5. Examples of Electronic Customer Relationship Management Enabled Organizations

- **American Airlines**

Before e-CRM Implementation: The organization collected huge amounts of customer data , but the data was not used as the airline had permission to use it. Customers' service expectations from the organization were increased after they had been asked detailed questions about their travel-related needs. Such customers naturally assumed that since American Airlines (AA) knew a lot about them and their preferences, they would receive better services. Satisfying such expectations, however, was not easy.

After e-CRM Implementation: e-CRM systems allowed AA to customize communications and services more finely and in cost-effective ways as well as offered the ability to conduct transactions. The new systems let AA customize web pages according to the customer's status (Gold or Platinum) and location. Personalized Web pages allowed American Airlines to try out offers on small test groups, and this proved successful. American Airlines is working on integrating the customer profile database with the AAdvantage frequent-flyer program database across the organization. American Airlines expects that giving all its call center reservation agents a complete view of the customer will allow the organization to increase efficiency, and speed up the ticket-buying process at airports. American Airlines established a partnership with AOL to boost customer loyalty via the Web. AOL rewards program and AAdvantage program were combined.As a result web traffic yielded nearly $500 million in booked revenues. Web-based transactions were running 5% of total annual revenue of over $ 10 billion.[29]

- **MyTwinn**

Before e-CRM Implementation: My Twin makes and sells a highly specialized products as personalized one-of-a-kind dolls that resemble their owners. Because of strong seasonality in demand, My Twin outsources call center operations. Call center agents, however, have to be knowledgeable and friendly since the product is personalized and complicated. Outsourced call centers have high turnover rates. Outsourced agents are often unfamiliar with the products, and not brimming with empathy for customers.

After e-CRM Implementation: To overcome these problems, My Twin installed a web-based virtual call center as the supported the outsourced call center agents greater flexibility than a traditional call center. Much of the information that the agents need is delivered from the internet channel. This improved the agents

[29] "Window seat", **CIO Magazine**, 15 July 2000,(online), http://www.cio.com/archive/071500/window.html,06 Jun 2006.

stasifaction level which lead in to customers satisfaction. The system even supported the monitoring of agents from home. It allowed My Twin to see online what the agents are doing. My Twin supervisors managed the virtual call center via the web. It is possible to train the agents through the web and motivate them to provide superior customer service. Agents can use the customer order processing system and report via the web and upload customer data directly to the database. With the virtual call center, agents converted 30% more inquiry calls into orders than before. Agent turnover rate decreased by 88%, and that led to reductions in training costs. The escalated calls, letters, and e-mails from angry customers dropped by 90%. [30]

- **Wells Fargo & Co.**

Before e-CRM Implementation: In its education loan business, Wells Fargo bank had a hard time finding the right customer paper files while dealing with college loan customers. What is worse, some files even got lost in the rising mountain of paper. As a result customers had to wait a long time until the loan request was confirmed.

After e-CRM Implementation: Wells Fargo started retaining loan records for customers' life span so as to build better customer relationships. The manual process was reengineered and became highly streamlined. High-volume scanners were deployed to scan all hard-copy documentation coming into the mailroom within two hours of arrival. The scanned documents were then tied to the student/parent's account and moved into workflow queues for processing. Online loan applications submitted through web site and fax machines converged with the imaged documents to join the queue. A team reviewed the documents, and expedited approvals, within hours or even minutes. For loan applications transmitted electronically by schools, a hard copy of a partially completed promissory note was generated and sent to the borrower for signing. Once the signed copy was returned, the document moved to a

[30] "Hello,dolly!",**CIO Magazine**,15 May 2001,(online), http://www.cio.com/archive/051501/hello.html, 06 Jun 2006.

review queue in workflow and the loan was flagged as ready to be paid out.As a result the bank was able to reduce simultaneously the approval time and error rate. Customers could use the Web site to get loan approvals online. With the new system, Wells Fargo provided its employees with a clean and paperless working environment. Student loans increased from $800 million to $2.1 billion. [31]

In this chapter, the theoretical backgrounds of CRM, e-commerce and e-CRM concepts are given. Since CRM and e-commerce concepts help for better understanding of e-CRM concept, the theretical background of e-CRM concept contributes as a milestone of e-CRM implementation factors, strategies, technologies and measurement methods which are explained in chapter 2.

[31] "paperless tigers",CIO Magazine,15 February 2004,**CIO Magazine,** http://www.cio.com/archive/021501/crm.html, 06 jun 2006.

2. ELECTRONIC CUSTOMER RELATIONSHIP MANAGEMENT TECHNOLOGIES , STRATEGIES AND MEASUREMENTS

2.1. Electronic Customer Relationship Management Implementation

Once a organization has identified the need for e-CRM, it can begin to plan for implementation. The starting point within an e-CRM project is always the analysis of the organization's objectives and its culture. The fact that an organization is already functioning and has satisfactory financial results does not mean it is efficient, nor does it mean that it has its objectives and responsibilities properly defined. Because of this, it is fundamental before beginning any e-CRM project, to understand and spell out the organization strategy, defining where the organization is, where it wants to go and where it is actually going, as well as analysing its culture and the level of organization and internal control.[1]

2.1.1. Technology Selection

Selecting the appropriate hardware, software and systems can be a challenging task with the enormous range of technology options and the open ended structure of every business situation. With the growth of offered e-CRM tools and technologies from vendors, further complicates the questions of what makes the best e-CRM solution and whether to source the technological infrastructure externally or to construct it using internal expertise. Whatever the option or the combination of options is chosen ,the fundemental principle is that the tecnological infrastructure should create a control center, integrating different customer data into customer interactions that create superior customer experiences.[2]

---

[1] Ricardo Chalmeta, "Methodology for customer relationship management," **Journal of Systems and Software** Volume 79 , Issue 7, 2006.
[2] Adrian Payne,Pennie Frow,**"A Strategic Framework for Customer Relationship Management",** Journal of Marketing,Vol.69,No.4,2005,p.178.

2.1.1.1. On-Premise and On-Demand Models

On-premise model,also known as in-house model, exists when an organization decides to invest a vendor's related services or technologies by its own resources. An on-demand service,which is also known as hosted service, occurs when an application provider lets customers to use its software by charging them an annual fee .For that fee, the service provider handles all hardware and software maintenance, security issues and upgrades.

In the past, the investment of enterprise-class business technologies could not be very cost effective as there were many expenditures not only for the software but also for the hardware and as well as for consultants to install and configure it. But with the on-demand option, organizations of any size are now able to implement strategies reaching a worldwide audience. On-demand services allow small businesses to be innovative and radical in a shorter time span and with fewer costs. On-demand technologies allow businesses to focus on their core expertise and not on maintaining or installing software.[3]

On-demand service model also affected e-CRM sector. As only the biggest organizations could afford to implement enterprise-level e-CRM technologies a few years ago today with the on-demand solution prices have come down dramatically, and the technologies are much easier to use and configure. But integration, data control, training and even privacy issues could be some serious barriers for on-demand e-CRM model. Also there are many e-CRM vendors offering on-demand e-CRM solutions with the major ones like Siebel/Oracle,Salesforce.com,RightNow and NetSuite

As it is easy to be attracted by the low first year costs for on-demand e-CRM, the total costs of both on-demand and on-premise e-CRM solutions over a three-year

[3] Brent Leary,"On-Demand Services",**Network Journal**,Vol.13, No.6,2006, pg. 28.

period are virtually identical. However, at the end of three years the organization using on-demand e-CRM does not own the system. Also the on-demand solution can not be customized,evolve or grow with the needs of the business. On-demand e-CRM can be a great choice for organizations with no IT support and expertise to manage a strategic information technology system. For smaller organizations, or organizations looking for generic sales force automation support, on-demand e-CRM is the right solution. For more complex organizations that require robust sales, marketing, and service functionality, and strong customization and integration capabilities, on-demand e-CRM just doesn't make sense.[4]

2.1.1.2. Complexity of Technology

The implementation complexity increases with respect to the cost of purchase of e-CRM technologies, Generally, basic stand-alone technologies are cheapest to buy and implementation can be somewhat the right choice if the key integration requirements are with a database only. Modular implementation of e-CRM technologies developed by legacy system vendors is seamless as there is little or no requirement for middleware or significant amounts of integration manpower. Modular technologies cost more than basic technologies and would require external expertise to integrate with the legacy ERP systems. However, the compatibility of the module with the legacy ERP system means only a limited amount of expensive external expertise will be required. "Best of breed" and bespoke E-CRM technologies are typically more expensive as a result of the service and integration considerations. "Best of breed" technologies typically come in standard packages that can then be configured for the requirements of the organization. Configuration would typically involve making some changes to the application's functionality to make it more suitable for the organization. The integration of such technologies is increasingly becoming more manageable as vendors develop software with open systems architecture or that can be integrated using middleware. Bespoke E-CRM

[4] Rob Kane,"The Top 10 Myths of Hosted CRM"(online) http://www.aplicor.com/ pdf/10myths_ hostedCRM_ whitepaper.pdf, 25 February 2006.

technologies involve specific development of the software for an organization. The requirement for high cost manpower implies that these are typically the most expensive type of e-CRM technologies to develop. Where these have to be integrated with legacy systems, implementation manpower requirements and complexity associated with interface management of two or more technologies may be high.[5]

2.1.1.3. Time Frame of Technology Implementation

When considering the amount of time required to implement e-CRM technologies, the implementation timeframe of stand-alone technologies and full ERP deployment is shortest. Although full ERP deployment may involve lack of functional clarity, the implementation of all the technologies is carried out at the same time. Consequently, an organization could choose to set up a central database and install several modular technologies such as e-CRM, supply chain management, purchasing and finance all at the same time. This could be accomplished in a few months. In contrast, modular Implementation of ERP-based e-CRM technologies is carried out over a period of time with the organization adding new modules as required. Consequently, the deployment could take place over years with the need for some external expertise each time a new module is installed. The difference in implementation cost between full ERP deployment and modular deployment is not completely visible. In some cases full deployment can be more expensive as many technologies are being implemented at orne with a higher possibility of deployment challenges.[6]

The implementation of “best of breed” and “bespoke’ technologies is typically the most expensive and can take longest to implement. A key reason for this is that integrating one of these technologies with legacy systems requires the development of new business rules and the use of middleware. The business rules

[5] Dotun Adebanjo,**"Classifying and selecting e-CRM applications: An analysis-based proposal"**,Management DecisionVol.41,No.5,2003,p.573.
[6] Payne,**a.g.e**.,p.271.

would align the application with the processes of the organization and as such may have to be newly developed. Middleware is important to ensure that such technologies are compatible with legacy systems, such as databases, with which they have to exchange information on a routine basis. If an organization later decides to integrate another application, the legacy business rules and middleware would have to be undone and new ones that integrate the new application developed.

2.1.1.4. Configurability of Technologies

The factors that impact the usability of e-CRM technologies include database compatibility, process alignment, user definition and user interface. Basic standa-lone technologies are typically the least configurable followed by modular ERP systems. “Best of breed” and bespoke technologies are usually most configurable as these can be modified or built to exact user definition, presentation preferences and process alignment. Modular ERP systems typically can be reconfigured within some limits with the standard features of the module. Best of breed and bespoke technologies can be configured fully to fit in with the organization processes and user interfaces.[7]

2.1.2. The Integration Dimensions of Electronic Customer Relationship Management Technologies

It is clear that e-CRM integration has a number of dimensions. Successful e-CRM implementation refers that all dimensions need to be managed to a lesser or greater degree depending on the organization involved. This is because the emphasis placed on the different dimensions of integration will vary from organization to organization. even though all dimensions would be represented. For example, a travel agency installing a call centre solution is likely to focus on the ability of the application to recognize customer details, and automatically mail tickets or highlight

[7] Fjermestad,**a.g.e.,**p.574.

outstanding payments as well as be user-friendly. In contrast, an organization that is setting up an e-mail marketing facility is more likely to be interested in linking the application with the e-mail database and perhaps, to a lesser extent, the ability to send personalized offerings. The key dimensions of e-CRM integration are described below:[8]

2.1.2.1. Technical Integration Dimension

E-CRM technologies need to be compatible with existing technology and, furthermore, comprise an open architecture that would facilitate integration with other e-business technologies that may be introduced in future. Compatibility should ideally be across the architecture like databases, business logic and user interfaces.

2.1.2.2. Functional Integration Dimension

The ability of e-CRM technologies to improve current business processes is a key factor in successful implementation. Generally speaking, the more configurable the application, the closer it can be tailored to the requirements of the organization. Functional integration analysis needs to consider the "fit" that the application would have on other processes or functions within the organization. Where this 'fit" is uncomfortable, then the organization faces the option of changing its processes around to fit in with the technology. This creates the risk of confusion and operational inefficiencies.

2.1.2.3. Cultural Integration Dimension

Organizational culture is perhaps the most important element in successfully managing the implementation of an e-CRM strategy. To meet customer expectations it is necessary to develop a culture that is customer oriented. A change in employee

[8] Adebanjo,**a.g.e**.,p.574,**Payne,a.g.e.,**p.180.

attitude to businesses is often inevitable. Customer orientation is a type of organizational culture and it makes organizations more responsive to customer needs. Furthermore, a customer-oriented culture is essential for the quality and extension of customer-knowledge creation and dissemination. As it has been argued that a customer-oriented culture positively affects customer satisfaction,every department in an organization should realize that customer satisfaction is a component for building strong relationships, and that this depends on the delivered quality of the value-added goods or services.[9]

2.2. Electronic Customer Relationship Management Technologies

There is currently no accurate approach for classifying e-CRM technologies on such a wide-ranging basis. In this study the e-CRM technologies are classified under two levels:Web site features,Call center technologies and analytic e-CRM tools

2.2.1. Web Site Features

In the online marketplace customers engage in service encounters with a business by visiting its Web site, navigating through it,searching for product and service information, communicating with customer service representatives, and perhaps purchasing a product or service. The quality of the interaction between customers and service providers during the service encounter is important because it is at this level that customers judge the services provided to them. As the features of the organizational web sites hold strategic importance for achieving success in online marketplace,the 24 web site features of a typical e-CRM organization are identified

[9] Nikolaos Tzokas; Michael Saren, "Competitive advantage, knowledge and relationship marketing: where, what and how?," **The Journal of Business & Industrial Marketing**, 19, 2, 2004, p. 124.

and classified into three areas as general web site features,e-commerce web-site features and post-sales web site features:[10]

2.2.1.1. General Web Site Features

General web site features of an e-CRM organization are important for an organization as these features are the first step of turning a non-customer into customer, and therefore these features are :

- **Introduction for first-time users** :Visitors, who enter the site for the first time, can surf to an introduction page. This page contains information about how to use the site most efficiently.

- **Site personalization**: Sites that offer personalization features allow users to filter the content they see. The future of truly e-CRM will be the completely "one-to-one" web sites as when properly personalized on the first visit, on a next entry the customer, can choose to see only his/her own preferences. One of the most important advantages of e-CRM is the volume of information available to the browsing customer. Unfortunately, the sheer volume of information can be one of the weaknesses of e- CRM design since the user may not be able to readily access the needed information.

- **Alternative Channels:** These features consist of different ways for customer to contact the organization. For instance a customer can contact the organization by sending an e-mail, using fax,calling toll-free numbers ,sending traditional mail to the postal address of the organization, making

[10] Richard A Feinberg, et.al.,"The state of electronic customer relationship management in retailing",**International Journal of Retail & Distribution Management**,Vol.30, No.10, 2002,p. 470, Richard Feinberg, Rajesh Kadam,"E-CRM Web service attributes as determinants of customer satisfaction with retail Web sites",**International Journal of Service Industry Management**,Vol.13,Iss.5, 2002, p.434, David A.Collier,Susan M. Meyer, "A service positioning matrix",**International Journal of Operations & Production Management**,Vol.18, No.12,1998,p.1235.

customer representatives to contact customer if customer pushes the call-back button in the web site ,using cost effective voice over IP service of web site to call organization and by leaving user comments, recommedations and requests to electronic bulletin board supported by web site.

- **Local search engine**:This feature allows the visitor to search on key words to quickly locate the required content on the Web site. This feature is helpful for those site visitors who are looking for a specific piece of information.

- **Membership**:The visitor can request a password. With this password he can continue surfing on password protected web pages within the web site.The visitor can request a password. With this password he can continue surfing on password-protected Web pages within the Web site. This feature allows the organization to collect personal information from users, when the user registers for the membership. It also allows them to track the customer's behavior at the site over time. This knowledge allows the business to assess which customers are worth retaining by looking at current and prospective customer profit and customer defect patterns.

- **Mailing list**:To receive more information, the visitor can add the e-mail address to a list to receive automated e-mails. Often, this is called a newsletter. This feature allows the organization to build a database of e-mail addresses of potential users of the organization's product or service.

- **Site tour**:The visitor can follow a tour through the Web site. The visitor can follow a tour through the Web site. This allows users to get familiar with the Web site contents.

- **Site map:**This is a hierarchical diagram of the pages on the Web site, also called a site overview, site index, or site map.

- **Web Chat**:A main advantage of the Internet is its self-generating advantage. By allowing visitors to interact with each other and with the site, they create content for the site. The chat feature allows a visitor to enter a real-time conferencing between two or more users on the Web site. This feature allows a visitor to chat real-time with others. Specifically, this could mean chatting other visitors on the site or with the customer service personnel. This feature, while not used widely yet, is likely to see a marked increase in use, as Internet penetration increases and bandwidth constraints decrease globally.

- **Electronic bulletin board:**Script-driven forums allow visitors to share information with others and can help shape a web site to better serve the customer needs. A visitor can post a message or can respond to a posted message on a special web page. This interaction, over time, creates a community of users around the organization's service or product.

- **Posted privacy policy**:Privacy concerns are coming to the front with increased Internet penetration. Today, most sites have a privacy policy and post it on their Web site. This not only assures the customer that the information is protected, but will also protect the organization from lawsuits from perceived privacy violations.

2.2.1.2. E-commerce Features

The general e-commerce features of an e-CRM web site are important for organizations because with these features organizations try to turn shopping customer into loyal repeated customers.Therefore the features can be given as:

- **Online purchasing**: Visitors are able to purchase services or products online. This feature is probably the most critical part of the Web site.

- **Product information online**: Visitors can read product information on the Web site. This feature is critical since Web surfers gather product information on the Web and subsequently buy the product from a brickand-mortar store.

- **Product highlights**:The benefits of a particular products/services are highlighted. This feature allows the organization to highlight products or services that may be relevant in a particular context. The context could be a particular festival or a season, among others as this feature also prompts a repeat traffic in the web site.

- **Quick order ability**:This feature basically allows the user to check out the product within three-clicks. Amazon.com pioneered this feature. Because of intellectual property issues, other sites use variants of Amazon's 3-click process.

- **Customization possibilities**:Visitors can customize their service or product online before ordering if this feature is enabled in the web site.For instance, a visitor may want to assemble online a configuration of a computer that is not listed on the Web site or a jeans pant buyer may want to design a pant that fits his or her body shape exactly.

- **Purchase conditions**: The purchase and contractual conditions can be viewed online. Purchase conditions contain shipping policies, return policies, warranty, guarantee and other organization commitments.

- **Preview product**:The product can be viewed before purchase. The product can be viewed in a motion picture or a demo.

- **External Links**:With this feature the visitor can easily and seamlessly be linked to the external links of complementary products from other organizations.

2.2.1.3. Post-Sales Support Features

With the post-sales features of an e-CRM web site organizations improve customer trust and satisfaction by preserving the customer rights. The post-sale support features of web sites are:

- **Ability to track order status**:This feature allows the user to find out which stage of the shipping process his/her order is in. Customers are more likely to feel satisfied if they know of the status of their order than if they do not..

- **Frequent asked questions (FAQs)**:FAQs and their answers are available for reading. This feature acts as self-help for customers looking for answers to their queries. Like other information on the Web site, this could potentially help in reducing contact center traffic.

- **Problem solving**:Customers can solve problems with products or services themselves with online self-help routines. This feature is not very prevalent since customers show resistance to using this feature.

- **Complaining ability:**Complaints and problems can be detailed online. The Web site has a specific area for customers to log in their complaints and get action.

- **Spare parts**:It is possible to order spare parts and complementary products online. It is possible to order spare parts and complementary products online. In addition to repeat customer service, this feature ensures repeat traffic to the site.

2.2.2. Call Center Technologies

Call centers provide a single contact for customers who may try to reach a organization via multiple channels: e-mail, Web chat, fax, phone, or voice over Internet protocol (VOIP). Call centers, often called contact centers to reflect the multiple points of access, provide staff with consistent information throughout an integrated system. These centers capture data from across the organization and consolidate customer-related information into a central database. This integration improves the customer's interaction and satisfaction and enhances the efficiency of the business operation.Call centers require the integration of several different technologies to maximize the use of information and to streamline the activities of call center operators. There are 3 major technologies that are required to support an effective, high-productivity call center operation:Computer telephony integration (CTI) ,Call distribution technology (ACD) and Database software

2.2.2.1. Computer Telephony Integration

Computer telephony overcomes the traditional limitations of either of the component technologies and brings them together in a way that improves them both, by bringing more information to both parties in a communication environment. When CTI is well integrated to the call-center it can dramatically improve the way a organization interacts with its customers, the fundamental purpose for implementing a call center.Telecom servers extend the range of services available to the CTI application developer. Basic call control can be integrated with digital signal processor (DSP) cards to deliver the enhanced CTI services like:[11]

- **Voice processing**:Voice response systems were discussed briefly as one of the call-handling features enabled by CTI.

[11] Duane E. Sharp,**Call Center Operation-Design, Operation, and Maintenance**,Amsterdam,Digital Press,2003.p.25.

- **Interactive Voice Response(IVR) Systems**: IVR applications allow users to create structured scripts that guide the caller through a series of menu options to obtain a final response. The IVR will play digitally stored messages and solicit a response from the caller at each step, The response will then cause the next set of messages to be played, according to the script.

- **Speech recognition**:Speech recognition gives the computer the capability to analyze digitized voice signals, compare them with other voice patterns, and recognize the words being spoken.

- **Text-to-speech technology**:Text-to-speech or speech synthesis technologies are another resource card option, enabling the computer to produce speech from written or spoken information. This capability is useful for e-mail or free-form messages when a terminal is unavailable

- **Fax processing**: The fax image can be downloaded over the LAN and converted by the fax card, then transmitted over the digital trunk to the network.

- **Media conversion**:Media conversion, along with other technologies, has the potential to improve access to information from anywhere, a useful feature for mobile workforces.

- **Optical character recognition(OCR):**OCR is another DSP-based technology that converts a scanned image into text. When used with fax images, it can convert an incoming fax to a document that can be edited or pass it to a text-to-speech application to be read aloud

2.2.2.2. Automatic Call Distribution

Automatic call distribution(ACD) is a function performed by software and hardware components in a call center. ACD essentially involves taking incoming calls and moving them to the available customer service responsible's desktop

computer screen. Behind this simple description of the function of an automatic call distributor are a number of underlying processes and technologies, including voice mail systems,auto-attendant routing,CTI ,IVR ,Public networks and Workforce management software.

2.2.2.3. Database Software Tools

Software is a driving force behind call center development. Although call centers have traditionally been telecom entities, the growth and maturation of CTI have led to computing-based centers and applications. Software is one of the best and most widely used tools for translating business parameters into technological terms. Call center software can fulfill a number of functions, including the following key applications:[12]

- Retrieving customer information
- Managing queues
- Providing sales scripts and product information
- Acting as an interconnection to back-office applications

2.2.2.4. Major Benefits of Call Centers

Call centers are an essential part of any business that deals frequently with customer queries. Integrated call centers decrease customer waiting time, improve customer access, and improve call routing. The end result is that organizations benefit from satisfied customers who come back for more business. In spite of the high costs of a call center, most organizations, large or small, that value customer service and strong customer relationships need to have one.

[12] Sajal Kabiraj, "Electronic Customer Relationship Management: Origin and Opportunities", **Managing Technologically Driven Organizations: The Human Side of Innovation and Change**,2003,p.485.

A call center's services can be essential for the smooth running of a business. Once a call center is in place, it integrates technology from customer databases, order-entry systems, fulfillment, and knowledge databases, enabling call center CSRs to respond with current information when communicating with customers. Technology provides many features to assist in the communication process, including providing quick access to customer information for the CSR and call management.[13]

2.2.3. Analytic Electronic Customer Relationship Management Tools

Analytical e-CRM systems store and evaluate knowledge about customers for a better understanding of each customer and his behavior. Analytical e-CRM requires technology to compile and process the mountains of customer data to facilitate analysis and new business processes to refine customer-facing practices to increase loyalty and profitability.

Analytical e-CRM tools are instrumental in sorting data and extracting meaning from it to guide the development of management strategies. In identifying customer and market trends, techniques such as data mining can help to clarify budget inefficiencies and the most useful allocation of resources. Segmentation and predictive modelling can be used to identify new customer groups to enhance propositions, or to provide an early warning system. Importantly, the ongoing development and utilization of the data warehouse also facilitates the exchange of information and knowledge between the organization and customers. There are 3 major types of analytic e-CRM tools: Data warehousing, data mining and online analytic processing.[14]

[13] Sharp,**a.g.e**.,p.28.
[14] Payne,**a.g.e**.,p.255.

2.2.3.1. Data Warehousing

Data warehouse can be described as subject-oriented, integrated, time variant and nonvolatile collection of data used in strategic decision making. The data warehouse acts as the central point of data integration - the first step toward turning data into information. Due to this organization focus, it serves the following purposes:[15]

- First, it delivers a common view of organization data, regardless of how it may later be used. Since it is the common view of data for the business customers, it supports the flexibility in how the data is later analyzed. The data warehouse produces a stable source of historical information that is constant, consistent, and reliable for any customer.

- Second, because the organization as a whole has an enormous need for historical information, the data warehouse can grow to huge proportions like 100 terabytes or more. The design is set up from the beginning to accommodate the growth of this information in the most efficient manner using the organization's business rules for use throughout the organization.

- Finally, the data warehouse is set up to supply data for any form of analytical technology within the business community. That is, many data marts can be created from the data contained in the data warehouse rather than each data mart serving as its own producer and customer of data.

2.2.3.2. Data Mining

Data mining is defined as a sophisticated data search capability that uses statistical algorithms to discover patterns and correlations in data. The term is an analogy to gold or coal mining as data mining finds and extracts knowledge buried

[15] Catherine Ma, David C. Chou, David C. Yen,"Data warehousing, technology assessment and management",**Industrial Management + Data Systems**,Vol.100,No.3,p.127.

in corporate data warehouses, or information that visitors have dropped on a website, most of which can lead to improvements in the understanding and use of the data. The data mining approach is complementary to other data analysis techniques such as statistics, on-line analytical processing (OLAP), spreadsheets, and basic data access. In simple terms, data mining is another way to find meaning in data.[16]

Data mining discovers patterns and relationships hidden in data but does not, however eliminate the need to know the business, understand the data, or be aware of general statistical methods. Data mining does not find patterns and knowledge that can be trusted automatically without verification. Data mining helps business analysts to generate hypotheses, but it does not validate the hypotheses.

An example of data mining application is the detection of behavioural models on the web. Typically, when users interact with a web service, they provide enough information on their requirements: what they ask for, which experience they gain in using the service, how they interact with the service itself. Thus, the possibility of tracking users' browsing behaviour offers new perspectives of interaction between service providers and end-users. Such a scenario is one of the several perspectives offered by web mining techniques, which consist of applying data mining algorithms to discovery patterns from web data. A classification of web mining techniques can be devised into three main categories:[17]

- **Web Structure mining**: It is intended here to infer information from the topology of the link structure among web pages. This kind of information is useful for a number of purposes: categorization of websites, gaining an insight into the similarity relations among websites, and developing suitable metrics for the evaluation of the relevance of web pages.

[16] Chris Rygielski,Jyun-Cheng Wang, David C. Yen, **"Data mining techniques for customer relationship management"**,Technology in Society,Vol.24,No.4,2002,p.485.
[17] Giuseppe Manco,Riccardo Ortale,Andrea Tagarelli,"The Scent of a Newsgroup:Providing Personalized Access to Usenet Sites through Web Mining",**Web mining:applications and techniques**,Ed.by.Anthony Scime,Hershey,Idea Group Publishing,2005,p.396.

- **Web Content mining**: The main aim is to extract useful information from the content of Web resources. Content mining techniques can be applied to heterogeneous data sources as HTML/XML documents, digital libraries, or responses to database queries, and these techniques are related to traditional information retrieval techniques. However, the application of such techniques to Web resources allows the definition of new challenging application domains: Web query systems, which exploit information about the structure of Web documents to handle complex search queries; intelligent search agents, which work on behalf of users based both on a description of their profile and a specific domain knowledge for suitably mining the results that search engines provide in response to user queries.

- **Web Usage mining:** The focus here is the application of data mining techniques to discover usage patterns from Web data in order to understand and better serve the needs of Web-based applications and end-users. Web access logs are the main data source for any Web usage mining activity: data mining algorithms can be applied to such logs in order to infer information describing the usage of Web resources. Web usage mining is the basis of a variety of applications, such as statistics for the activity of a Website, business decisions, reorganization of link and/or content structure of a Website, usability studies, traffic analysis and security.

Web-based information systems depict a typical application domain for the above Web mining techniques, since they allow the user to choose contents of interest and browse through such contents. As the number of potential users progressively increases, a large heterogeneity in interests and in the knowledge of the domain under investigation is exhibited. Therefore, a Web-based information system must tailor itself to different user requirements, as well as to different technological constraints, with the ultimate aim of personalizing and improving users' experience in accessing the system.

2.2.3.3. Online Analytic Processing

Online analytical processing (OLAP) is an advanced data reporting tool. It is not strictly a data mining tool because it provides summary data rather than identifying patterns in data. OLAP tools are powerful and quite easy to use. They can make a significant contribution to extracting value from customer databases, adding to the value of data mining applications, rather than replacing them. OLAP tools have advanced graphical interfaces that make it possible for users with little statistical knowledge to explore large volumes of data. An interface is a new database or data cubes containing data from the data repository that has been stored using a special structure to make the 'slicing and dicing' of data quicker and easier. Whereas conventional reporting tools can take hours to gather data, OLAP tools can provide reports in only a few seconds. It should be noted, however, that achieving this fast response comes at the expense of losing some precision in the storage of certain types of data.[18]

2.2.3.4. Differences between Data Mining and Online Analytic Processing

The key differences between data mining and OLAP are best summarized by considering the kinds of management issues they each address. Data mining is more forward looking, providing insights into the best ways to manage different groups of customers. It is intended to support decision making. OLAP reports have a more historical focus, summarizing the data on, for example, recent sales performance and highlighting trends. An OLAP analysis of past sales, for instance, may show that some products sell best on a particular day. It does not, however, tell us why this is the case. A data mining technique may provide some insights to explain this trend. Another use of OLAP is for visualizing the results of data mining analysis. Perhaps one of the more important contributions of OLAP, however, is that its ease of use

[18] Michael J.A. Berry,Gordon Linoff,**Data mining techniques:for marketing, sales, and customer relationship management**,Second Edition,Indianapolis,Wiley Publishing,p.497.

makes data analysis accessible to a much wider range of people within the organization.[19]

2.2.4. Electronic Customer Relationship Management Strategies

As organizations implement e-CRM technologies and tools,in order to effectively benefit from these applications organizations must develop the necessary strategies for organizations' needs.In this study, e-CRM strategies are investigated in three parts,such as: e-CRM steps,direct marketing strategies and e-CRM marketing strategies.

2.2.4.1. Electronic Customer Relationship Management Steps

Electronic Customer Relationship Management Steps focus on how to attract new customers, and how to maintain and develop relationships with existing valuable customers. When e-CRM steps build trust and commitment it drives the growth in the organization's profitability. Creating an effective system for managing relationships means organizations need to radically change their own behaviour and define real e-CRM steps. To do this, a organization must accomplish the following steps:

2.2.2.4. Identifying Step

Managing relationships requires that the most profitable customers are identified. Who customers are must be defined and only those customers whose behaviour can be influenced should be considered. Identifying the desired, most profitable customer segments for the products is usually considered the first step for the development of a e-CRM strategy. Identifying all customer touch points in the organization is then necessary as a starting point for the integration of all customer-

[19] Payne,**a.g.e.,**p.254.

relevant business processes and the integration of information systems supporting the e-CRM strategy.Building successful e-CRM of an organization starts from identifying customers' true value and loyalty since customer value can provide basic information to deploy more targeted and personalized marketing.[20]

The Loyalty Matrix provides a framework for better understanding the problem of customer turnover and shows direction about where to look for opportunities for improvement. Figure 2 shows that turnover is greatest with customers who are dissatisfied with the relationship they have with the organization.[21]

Figure 2. E-Loyalty Matrix

Kelly D.Conway, Julie M. Fitzpatrick, "The customer relationship revolution-a methodology for creating golden customers", (Online), www.crm2day.com/library/EpFkZFFpuZxFJFxpzW.php,17 April 2006.

Customer A was satisfied with the product purchased, but dissatisfied with his relationship with the organization. This customer type is vulnerable to switching.

[20] Adam Lindgreen,et.al.,"A relationship-management assessment tool: Questioning, identifying,and prioritizing critical aspects of customer relationships",**Industrial Marketing Management**, Vol.35, No.1, 2006,p.61.

[21] Kelly D.Conway, Julie M. Fitzpatrick, "The customer relationship revolution—a methodology for creating golden customers",(Online), www.crm2day.com/library/EpFkZFFpuZxFJFxpzW.php,17 April 2006.

The customer/organization relationship profoundly affects how a product or organization is viewed and affects customer behavior. Properly managed and serviced, this category of customer can become a significant source of future transactions and move into the loyalty quadrant.

Customer B is very satisfied with the product and the relationship with the organization. The organization can count on his repeat purchase, and will most likely benefit from referral business via positive word-of-mouth.

Customer C is most undesirable, being seen as a saboteur to the organization. A bad experience with the product and the relationship with the organization guarantees that he/she will never buy from the organization again. This category of customer will bad-mouth the organization because they feel wronged, which compounds the problem, as they tell others about their bad experience and discourage potential customers from ever interacting with the organization.

Customer D was not satisfied with the product, but is hopeful that the next purchase will be satisfactory. A good relationship creates a reservoir of goodwill upon which the customer is willing to give the organization or product another chance.

The key is to focus on the customer's relationship with the organization. Even though Customers C and D both had poor product experiences, Customer D's willingness to continue a relationship with the organization dramatically differs from the behavior of the saboteur.

2.2.4.1.2. Customer Segmentation Step

The more an organization can break down its valuable customers into different groups with different needs and expectations the better it can serve them. The identification and definition of customers' profiles and segments is important not only for the existing market of the organization, but also for its future clients. Once

the main customer segments have been identified and their behavioral profiles defined,to meet the objectives set by the program, segment-specific treatments have to be developed and must be executed for each customer in a customized way. The new customer must be integrated into the most appropriate customer segment, and focused, effective marketing strategies must be applied from the very beginning of organization-customer interaction. The analysis includes the following tasks:[22]

- Structuring the customer types into different segments based on an easily obtainable variable, like income.
- Assigning costs to the different segments using a customer-based cost model that includes all the cost factors attributable to customer relationship management.
- Analyzing customer value, obtaining the income, profits and total profitability of customers, by segment and by individual customer.

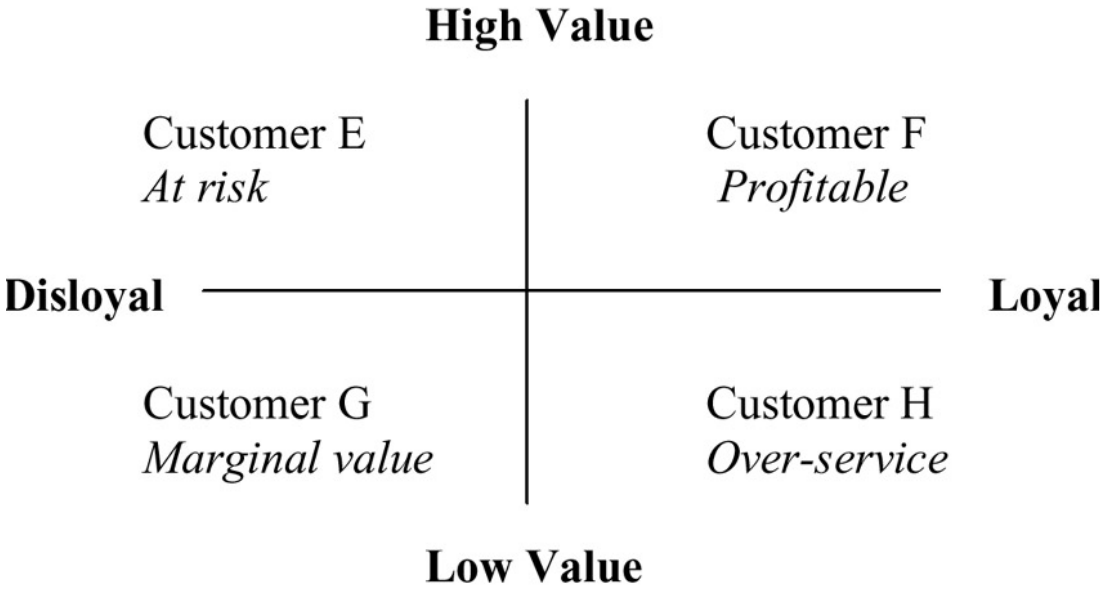

Figure 3. The Relationship Equity Matrix

Kelly D.Conway, Julie M. Fitzpatrick, "The customer relationship revolution-a methodology for creating golden customers", (Online), www.crm2day.com/library/EpFkZFFpuZxFJFxpzW.php,17 April 2006.

[22] Lindgreen,**a.g.e**.,p.61.

The strategic priority of each segment could be easily understood with value matrix in Figure 3:[23]

Customer E, high value but disloyal, represents a group that deserves the greatest amount of attention. The organization is at risk of losing profitable, influential customers.

Customer F is what makes the organization successful at present. organizations must pay great attention to this group as a way of expressing appreciation for their ongoing business and recognizing their importance.

Customer G, low value and disloyal, does not represent a group with long-term potential. If they choose to switch suppliers, the economic loss will be minimal for the organization. This customer is usually opportunistic and price oriented.

Customer H, low value but loyal, can be over-serviced, and therefore unprofitable for the organization in the long term.The analysis and the definition of each customer segment in terms of profitability will depend on the organization's profile and strategic objectives. Sometimes the low value and loyal customers can become in the future highly profitable customers for the organization, either through increased purchase or through positive referrals

2.2.4.1.3. Interacting

Once the organization has identified the customers with whom it wishes to have a durable relationship, there are a number of ways to interact with them. Customer interaction refers to how an organization interacts with its customers and how it delivers goods and services to them. This includes all the interaction processes, touch points, employees, and distribution channels. The purpose is to get

[23] Conway,**a.g.e**.,p.7.

to know when and how customers want to interact with the organization. All interactions must be well coordinated and customized through all touch points. This must be in relation to the customer’s individual profile that has been developed by using data gathered from past contacts. All touch points must be effectively and cost-efficiently used to distribute various goods and services and to communicate with customers. This implies that interaction with low value for customers should take place through low-cost channels. Also, customer interactions must be well coordinated and managed across all functions and levels in the organization. Indeed, delegating responsibility and empowering staff to handle customer contacts is essential for relationship management. The interaction strategy should be developed so all channels create synergy and a competitive advantage. The interaction stage consists of e-CRM initiatives like:,cross selling,up selling and winback:[24]

2.2.4.1.3.2. Cross-Selling and Up-Selling

The art of cross-selling and up-selling is understanding which products will increase, rather than decrease, a customer's overall profitability. Up-selling means motivating an existing customer to trade up to more profitable products and cross-selling is the act of selling aproduct to a customer as a result of another purchase. This has become very popular nowadays, because selling more services to an existing customer increases revenue from thatcustomer and costs less then acquiring a new one. Cross-selling done correctly means selling the right product to the right customer. It also means understanding that not every customer is a good candidate for cross-selling.

2.2.4.1.3.3. Winback

Winning back recently lost customers is one of the least exploited 'acquisition' methods. If a new competitor's welcoming activity is poor then customers lost to them are likely to be the most receptive to 'come back' messages.

[24] Lindgreen,**a.g.e.,**p.62.

However, it is important to be sure that it is only good customers that are targeted for winback activity and that when they are won back they are treated as returning customers and not as brand new customers.

2.2.4.2. Electronic Customer Relationship Management Marketing Strategies

In this study e-CRM marketing strategies are divided into three groups as e-mail marketing strategy,personalization and mass customization.

2.2.4.2.1. Direct Marketing

E-mail marketing or also called as database marketing is a form of direct marketing which uses electronic mail as a means of communicating commercial or fundraising messages to an audience. As there are other channels in which direct marketing can be applied, today E-mail is the dominant player in the direct marketing concept. In its broadest sense, every e-mail sent to a potential or current customer could be considered e-mail marketing.However, the term is usually used to refer to sending e-mails with the purpose of enhancing the relationship of a vendor with its current or old customers and to encourage customer loyalty and repeat business and acquiring new customers or convincing old customers to buy something immediately and adding advertisements in e-mails sent by other organizations to their customers.E-mail marketing strategy is popular with organizations because it offers advantages like:[25]

- Compared to other media investments such as direct mail or printed newsletters, it is less expensive.
- Return on investment has proven to be high when done properly and e-mail marketing is often reported as second only to search marketing as the most effective online marketing tactic.

[25] Dave Chaffey,**Total E-mail Marketing**,Oxford,Butterworth-Heinemann,2003,p.12.

- It is instant, as opposed to a mailed advertisement, an e-mail arrives in a few seconds or minutes.
- It lets the advertiser "push" the message to its audience, as opposed to a website that waits for customers to come in.
- It is easy to track. An advertiser can track users via web bugs, bounce messages, un-subscribes, read-receipts, click-throughs, etc. These can be used to measure open rates, positive or negative responses, corrolate sales with marketing.
- Advertisers can reach substantial numbers of e-mail subscribers who have opted in to receive e-mail communications on subjects of interest to them
- Over half of internet users check or send e-mail on a typical day.
- Specific types of interaction with messages can trigger other messages to be automatically delivered.

Many organizations use e-mail marketing to communicate with existing customers, but many other organizations send unwanted bulk e-mail, also known as spam.Illegal e-mail marketing came before legal e-mail marketing, since on the early Internet it was not permitted to use the medium for commercial purposes. As a result, marketers attempting to establish themselves as legitimate businesses in e-mail marketing have had a rough battle, slowed down by criminal spam operations billing themselves as legitimate.

It is frequently difficult for observers to distinguish between legitimate and spam e-mail marketing. First spammers attempt to represent themselves as legitimate operators. Second, direct-marketing political groups such as the U.S. Direct Marketing Association(DMA) have pressured legislatures to legalize activities which many Internet operators consider to be spamming, such as the sending of unwanted commercial e-mail. Third, the spam e-mails has led some users to mistake legal commercial e-mail for spam,especially when the two have a similar appearance, as when messages include HTML and flashy graphics. Due to the volume of spam e-mail on the Internet, spam filters are essential to most users. Some marketers report

that legitimate commercial e-mails frequently get caught by filters, and hidden; however, it is somewhat less common for e-mail users to complain that spam filters block legal mail.[26]

As e-mail dominates direct marketing in terms of efficiency,there are other channels and domains ,which an organization can use for the benefits of direct marketing, such as telephone , cell phones, mail, interactive TV and Wireless Access Protocol(WAP).

2.2.4.2.2. Personalization

As the web is growing exponentially, the user's capability to find, read, and understand content remains constant. Personalization ,which is also called personalized marketing, web personalization or sometimes called one-to-one marketing, is the most promising approach to help this problem and to provide users with tailored experiences. Personalization can be defined as any action that adapts the information or services provided by a web site to the knowledge gained from the users' navigational behavior and individual interests, in combination with the content and the structure of the web site.[27]

Web-based applications, which could be information portals, e-commerce sites, e-learning systems, and etc., improve their performance by addressing the individual needs and preferences of each user, increasing satisfaction, promoting loyalty, and establishing one-to-one relationships. A web site can track a customer's interests and make suggestions for the future. Many web sites help customers to make choices by organizing information and prioritizing it based on the individual's liking. There are many research approaches, initiatives and techniques, as well as commercial tools that provide web personalization based on business rules, website

[26] **Ibid**,p.14.
[27]Magdalini Eirinaki,Michalis Vazirgiannis,"Web Mining for Web Personalization", **ACM Transactions on Internet Technology (TOIT)**, February 2003,Vol.3, No.1,p.5.

contents and structuring, user behavior and navigational history as recorded in web server logs.[28]

The personalization technology is fast evolving and its use spreads quickly. As personalization is most practical in interactive media such as the world wide web, it covers a broad area on the web, ranging from check-box customization to recommender systems and personalized websites. Initial attempts of implementing personalization were limited to check-box personalization, in which portals allowed users to select the links they would like on their personalized pages, but this has proved of limited use since it depends on users knowing in advance the content of their interest. Today personalization perspective moved from customizable websites, in which users are allowed, usually manually, to configure the site in order to better suit their preferences, to adaptive web sites as the adaptive web site automatically produce adaptations according to the user profile, recorded history, etc.

As personalization technologies move to more intelligent approaches, collaborative filtering approach was deployed for implementing personalization based on knowledge about likes and dislikes of past users that are considered similar to the current one. These techniques required users to input personal information about their interests, needs and/or preferences, but this posed in many cases a big obstacle, since Web users are not usually cooperative in revealing these types of data. Due to such problems, researchers turned to observational personalization, which is based on the assumption to find clues about how to personalize information, services or products in records of users' previous navigational behavior. In this point web mining technologies come into play. In this study web mining was defined as the use of data mining techniques for discovering and extracting information from web documents and services and is distinguished as web content, structure or usage mining depending on which part of the web is mined. Today in most cases ,web applications base personalization on web usage mining, which undertakes the task of

[28] Juergen,Anke,David Sundaram,"Personalization techniques and their application",**Encyclopedia of E-Commerce, E-Government, and Mobile Commerce**, Ed.By.Mehdi Khosrow-Pour, Hershey, Idea Group,2006,p.920.

gathering and extracting all data required for constructing and maintaining user profiles based on the behavior of each user as recorded in server logs.[29]

Personalization is of great strategic significance to online vendors. Therefore, personalization is critically dependent on vendors' ability to acquire and process customer information, and customers' willingness to share information and use personalization services. While improvements in web based tracking and profiling technologies have provided vendors with the ability to create advanced customer profiles, many recent studies have shown that customers may not be willing to share information about themselves due to concern for privacy online. Personalized web sites require collecting and storing far more personal data than ordinary non-personalized websites. There is little legal protection of customer information acquired online while systems try to collect as much data as possible from users, usually without users' initiative and sometimes without their awareness. Numerous surveys illustrate user preferences concerning online privacy , with the requirement for maintaining the anonymity when interacting with an online system prevailing.[30]

Customers are concerned not just about their personally identifiable information, but even their anonymous and personally unidentifiable information. As customer profiles are created by collecting all of the different types of customer information and there is always a likelihood that a piece of anonymous information could be associated with personal information which may be perceived by customer as an intrusive attempt.For example, a recent research shows that only 62% of people accept cookies although it is well known that cookies do not carry any personal information but can only aid in creating the profile of an anonymous individual. So vendors need to be sensitive to the fact that customers may be concerned about providing even information that does not identify them directly. But also there is also

[29] Honghua Dai,Bamshad Mobasher,"Integrating Semantic Knowledge with Web Usage Mining for Personalization",**Web mining:applications and techniques**,Ed.by.Anthony Scime,Hershey,Idea Group Publishing,2005,p.285.
[30] Penelope Markellou,Maria Rigou,Spiros Sirmakessis,"Mining for Web Personalization",**Web mining:applications and techniques**,Ed.by. Anthony Scime,Hershey,Idea Group Publishing, 2005,p.32.

an argument that customers may give up some privacy if corresponding benefits are provided and therefore customer privacy is not an absolute concept. Customers engage in a cost-benefit analysis in dealing with privacy where customers assess the outcomes they receive when sharing information with organizations. Recent research findings show that non-monetary benefits such as convenience from online personalization can also serve as incentives for customers to part with their personal and preference information.[31]

2.2.4.2.3. Mass Customization

Mass customization can be defined as a business strategy that aims at satisfying individual customer needs at costs that do not considerably differ from the costs of similar standard products. Mass customization is a concept which is closely related to personalization. Mass customization strategy involves efficiently providing individually customized goods and services, therefore personalization strategy involves generating information from each customer about the specific needs and preferences. The twin logic of mass customization and personalization joins producer and customer together in an ongoing connection that becomes improved as the two interact with each other, collaborating to meet the customer's needs over time. As well as ensuring that the organization develops in line with the needs of its most valuable customers, mass customization helps retain customers.[32]

In an online environment, mass customization is made possible because it enables information about an individual's particular interests stored and processed to guide the specific offers made to them in the future. As these infromation need to be captured each time when people interact with the organization,with the each successive interaction, the organization can learn more about that specific customer and adapt their offer to be even more suited to their particular needs and

[31] Ramnath K.Chellappa,Raymond G.Sin,"Personalization versus Privacy: An Empirical Examination of the Online Consumer's Dilemma",**Information Technology and Management**, Vol.6, No.2, 2005, p.192.
[32] Ahmet Bardakci,Jeryl Whitelock,"Mass-customisation in marketing: The consumer perspective", **The Journal of Consumer Marketing**,Vol.20,No.4,2003,p.464.

circumstances. In a sense, the customer is progressively teaching the organization about themselves in order to receive a service that is ever more tailored to their needs and that is thus of greater value. The understanding the organization gains of its customers can then be used not only to drive the offers made to them in the immediate term but also to drive the longer term strategic development of the organization, the alliances it forms with other organizations and the products and services it offers in the future.[33]

2.2.6. Electronic Customer Relationship Management Performance

The change towards a customer-focused strategy is leading to a strong demand by organizations for CRM and e-CRM methodologies and solutions capable of allowing them to expand their resources by using a model that is closer to their business requirements and demands and the gradual move away from the traditional information technology infrastructure and the corresponding implementation methodologies. impacts and economic factors that contribute to their success.

For organizations to achieve return on investment (ROI) from CRM or e-CRM, investments in the application domains and technologies should contribute tangible business benefits to the organization, as well as intangible benefits. However with the findings of well-respected research organizations, the currently popular CRM or e-CRM practices often produce disappointing outcomes. It is suggested that between 35% and 75% of CRM programs fail. Another estimate is that 30-40% of CRM tactical projects have failed, while 60% of CRM projects that attempt a strategic focus have also failed. Also, programs not only fail to deliver in economic terms, but also damage the organization's relationships with its customers. Managers therefore have come to give a low priority to CRM programs[34]

---

[33] Michela Addis,Morris B Holbrook,"On the conceptual link between mass customisation and experiential consumption:An explosion of subjectivity,"**Journal of Consumer Behaviour**, Vol.1,No.1,2001,p.52.

[34] Zongyao Song,Yonggui Wang,Bin Yu,Zhengtang Zhmg,"How Customer Relationship Creates Value: The Role of Its Consistency with Firm Strategies",**Proceedings of ICSSSM '05,**2005 **International Conference on Services Systems and Services Management**,Vol.1,2005,p.144.

2.2.6.1. The Reasons of Electronic Customer Relationship Management Failures

The e-CRM concept is as popular as its failure rates. As mentioned before, many studies show the high failure rates or unsatisfied expectations of organizations' e-CRM implementation. The main reasons for the failure of e-CRM can be given as:[35]

- Mismatch between an organization and the vendor's software. Every effort must be made to find a vendor whose product is flexible enough to match the organization's best practices and does not force the organization to adopt the vendor's best practices. Realistically, no single software solution will handle all e-CRM needs equally well. Therefore, each organization should select the solution that best handles the critical customer-facing functions and maintains robust links to the existing technological system.

- A poor understanding of the organization's business processes. Each of the business processes should be reviewed, analyzed and documented before shopping for a vendor.

- Vendor stability should be a criteria used in selection. Organizations must check the financial stability of the vendor to assess whether or not it is likely to be able to survive a softening economy.

- Rejection by end users is always is a possibility when business functions are modified. If the new processes required for a successful e-CRM implementation are not developed with the knowledge, help and acceptance of the employees who will be relied upon to use them, there is a high possibility for failure.

[35] Shannon Scullin,et.al.,"Electronic Customer Relationship Management: Benefits,Considerations, Pitfalls and Trends",(Online) http://whitepapers.techrepublic.com.com/whitepaper. aspx?docid= 238440,25 May 2006.

- Some e-CRM implementations have failed because their initial scope was too broad. It would be wise to start small with a pilot e-CRM implementation as the risk associated with a failed pilot is much lower then for the full implementation, and it gives the organization the opportunity to evaluate the positives and negatives of the pilot when planning for a larger scale implementation.

2.2.6.2. Electronic Customer Relationship Management Measurement Methods

Performance measurement and benchmarking are recognized as important mechanisms for communicating whether tactical execution is aligned with corporate strategic goals and vision. First, measurement removes the ambiguity and disagreement that surround high-level strategic concepts. Second, measurement provides the precise language for clearly communicating at all levels what the organization wants to accomplish and how it intends to accomplish it. Third, measurement allows the continual evaluation of organizational alignment on strategic objectives. Last, measurement not only improves the probability but also speeds the pace at which change occurs. Measurement metrics can be used to determine changes in performance, costs and effectiveness of e-CRM business processes. The performance measurements of e-CRM initiatives allows understanding of strengths, weaknesses and detection of emerging trends that contribute to effective management.[36]

The effectiveness of e-CRM can be measured as a satisfaction level achieved by activities. Today increased emphasis is being placed on developing measures that are customer-centric and give managers a better idea of how their e-CRM policies and programs are working. Since it is difficult to evaluate tangible returns on the

[36] Kim,**a.g.e.,**p.7.

resources expanded to plan, develop, implement, and operate e-CRM, the intangible nature of benefits such as customer loyalty, service quality, value enhancement, effectiveness of processes, innovation of operation, service improvement, competitiveness, trust, and efficiency have to be measured[37]

2.2.6.2.1. Customer Measurements

It is necessary for an organization to develop customer centric metrics to evaluate the ongoing customer interaction processes. Therefore as organizations have their own customer metrics, some widely accepted metrics can be given as below:[38]

Customer retention: Existing customer loss rate, customer retention rate,degree of customer satisfaction

Customer satisfaction: Lead times, on time delivery, continuous stream of innovative products and services, anticipation of emerging needs, product customization, personalization, convenience, team spirit, reduced costs to customers as compared to competitors, product/service availability

Customer acquisition: Change in look-to-buy ratio

Customer profitability: Ratio of customer costs per market segment,percentage of preferred customer profiles, market and wallet share in targeted segments

2.2.6.2.2. Web-Site Measurements

Web analytics are an approach that may meet organizational demand for effective evaluation of online strategies. Web analytics aim to measure and understand the relationship between the customer and the web site. Web analytics

[37] Russell S. Winer,"Customer Relationship Management:A Framework, Research Directions, and the Future",(Online) http://crm.ittoolbox.com/documents/academic-articles/customer-relationship-management-a-framework-research-directions-and-the-future-3900,05 January 2006.
[38] Vrechopoulos,**a.g.e.,**p.3.

can be defined as monitoring and reporting of web site usage so that organizations can better understand the complex interactions between web site visitor actions and web site offers, as well as leverage insight to optimize the site for increased customer loyalty and sales.The field draws from the more general analytic field, which applies complex analysis to large data sets in order to determine value from the information that cannot be achieved through simple means. [39]

The optimum web analytics strategy couples this information with other data, such as demographics and subscription information, to enable a organization to unlock its biggest potential asset as its customers. Optimizing a web site not only means attracting more customers, it is also about managing existing customers, ensuring the web site meets their needs and expectations, increasing the customer loyalty. In addition, it is necessary to ensure that a web site also operates in a commercially effective way.

Because of the heavy use of marketing on the Internet, web site measures include many marketing measures. Most of the measures within a web site are designed to review the health of the Web site. However, with the wealth of customer information embedded within the click stream data, many e-CRM products include the ability to tie these measures to other off-line customer measures, for example, survey responses.As organizations choose their own unique web site measurement metrics for web site measurement,hereby some general metrics could be given as:[40]

- **Visitor count**: How many people have visited a Web site.
- **Unique visitor count**: How many unique people have visited a web site. This measure does not double-count users who visit a site multiple times in a period. web sites can have difficult in accurately determining unique visit counts, especially for those visitors who have chosen not to identify

[39] A. Phippen,L. Sheppard,S. Furnell**,"**A practical evaluation of Web analytics**", Internet Research**, Vol.14,No.4,2004,p. 286.
[40] Vince Kellen,"CRM Measurement Frameworks", (Online) http://www.crm2day.com/crm_academic_papers/academic_papers-4.php,5 May 2006.

themselves by not registering with a site, visitors who use multiple machines to visit a web site, and visitors who disable cookies in their browser preventing the system from anonymously identifying them

- **Page hits:** How many pages have been downloaded from web site, or how many times a single page has been visited in the site
- **Duration**: Total time a visitor spent on a page or a web site.
- **Click-through-rate:** The percentage of visitors clicked on banners or other form of e-marketing to visit the advertised web site.
- **Impressions:** How many visitors viewed a web page that contained an advertisement of some kind.
- **Registered users:** How many visitors registered with the web site.
- **Breakage:** What percentage of visitors started interacting with a web site but chose not to complete the interaction.
- **Click stream:** Not a measurement, but a source of many measurements. The click stream is the sequential history of all interactions with a visitor on a web site usually stored within log files in the web server. This behavioral data is used for example, to obtain page hits, visitor counts of images and advertisements viewed

In this chapter e-CRM strategies, technologies, implementation factors and measurement methods are explained. These concepts provide the theoretical background for the case study research, which is conducted in Mybilet and Estore organizations and given in chapter 3.

3. A CASE STUDY ON ELECTRONIC CUSTOMER RELATIONSHIP MANAGEMENT ENABLED ELECTRONIC RETAILERS

3.1. Electronic Retailing Sector

Many opportunities exist for enhancing the electronic business environment and two major forces will guide this revolution: customers and organizations that understand the retail business. Also it should be noted that the information efficiency constitutes a critical success factor for internet retailing. However, online markets are significantly different in a number of aspects from the structure of traditional markets,as more traditional retailers move to having an online presence, the conventional retailing theory should not be applied with its present form in the context of electronic retailing and should be transformed in order to avoid business failures.

As the competitive landscape has evolved from a predominantly physical marketplace to one encompassing both the physical and electronic marketplace the evolution of the electronic marketplace is associated with greater information richness of the traditional environment and the diminished information asymmetry between sellers and buyers. The evolving internet retailing landscape enables direct contact with suppliers and customers, provision of advanced customer services, application of one-to-one marketing techniques and etc. Despite the fact that the web can enhance the shopping experience, the employed applications must be tailored to the unique requirements of customer segments and product categories in order to be effective. A key task for electronic commerce is finding out who the actual and potential customers are in order to effectively apply business strategies.

Recording and understanding the behaviour of customers is the most important and a key factor influencing the success of any retail business. But it is

important to understand what the key data are, how and when they should be collected, how they should be converted to information and most importantly how these data can support customers, web site visitors, web site owners, and business processes.

3.2. Electronic Customer Relationship Management In Electronic Retailing

Eletronic Customer Relationship Management (e-CRM) requires that an e-retailer to manage the customer interaction whatever channel the customer chooses to use; anytime, anywhere and anyhow. Agreement on a definition of e-CRM is not needed to address more operational issues. Despite the differences in nuance and definition there is a general agreement that e-CRM positively affects the organization performance.

Given the nature of the retail customer interface, e-retailers should be at the forefront of e-CRM applications. It is because of this that it would be logical to examine the manner in which e-retailers are developing the e-CRM interface. And therefore, figure 4 shows 4 different types of e-retailer business models implementing e-CRM. The models are; direct-electronically applied retailing model, electronically applied retailing model, forward integrated electronic retailing channel enabled model,intermediated-forward integrated electronic retailing channel enabled model[1]

[1] Adam P.Vrechopoulos,"Mass customisation challenges in Internet retailing through information management",**International Journal of Information Management**,Vol.24,No.1,2004,p.63.

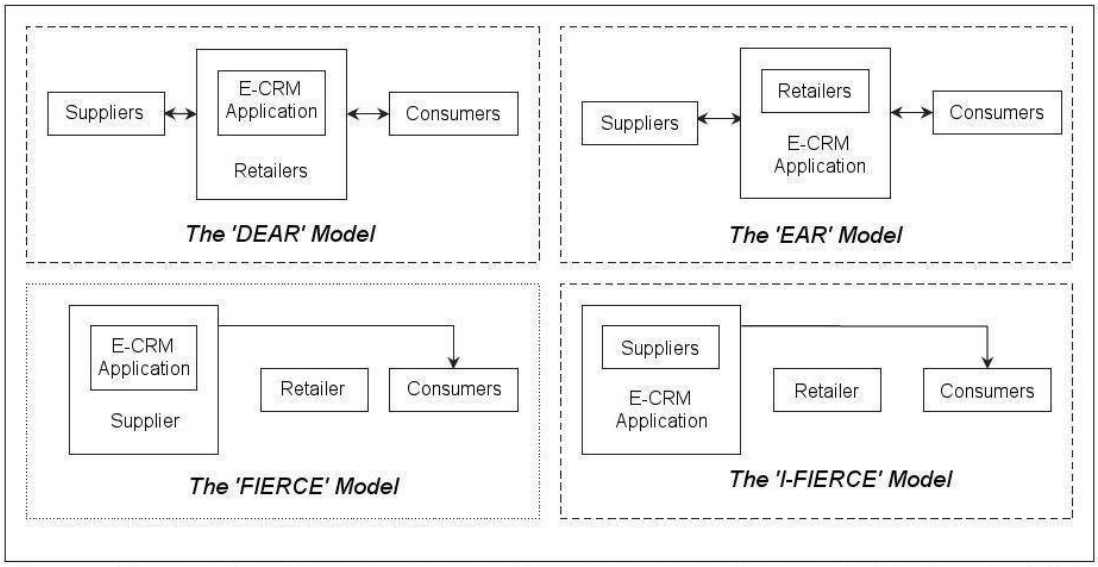

Figure 4. Alternative Business Models for the E-CRM Application Deployment

Adam P.Vrechopoulos,"Mass customisation challenges in Internet retailing through information management", International Journal of Information Management,Vol.24,No.1,2004,p.63.

3.2.1. Direct Electronically Applied Retailing Model

Direct-electronically applied retailing (DEAR) model refers to the case where the retailer buys and uses the e-CRM service to run his electronic store. This is the most frequently used model in B2C electronic commerce. The supplier, therefore, can reach customers through the electronic store of the retailer, which implies that there should be a close collaboration between them in order to satisfy customers. In this model the retailer should provide the point of sales data to the supplier in order for the supplier to design effective advertising campaigns.

3.2.2. Electronically Applied Retailing Model

Electronically Applied Retailing (EAR) model refers to the case where a third party hosts one or more retailers to its shopping mall. In this case, the intermediary can run the whole buying or selling process . In this case, there should be a close collaboration between the retailer, the suppliers and the third party hosting the

system. This collaboration implies the continuous information flow and the establishment of an effective pricing system for all organizations involved.

3.2.3. Forward Integrated Electronic Retailing Channel Enabled Model

Forward Integrated Electronic Retailing Channel Enabled (FIERCE) model refers to the case where the supplier buys and uses the e-CRM application in order to sell electronically his products/services to the customer. This implies that the supplier bypasses the retailer and further integrates along the value chain without the need to build physical stores. In this case, there is no any type of retailer involved since the supplier plays this role.This is the simplest model in terms of information flow complexity.

3.2.4. Intermediated-Forward Integrated Electronic Retailing Channel Enabled Model

Intermediated-Forward Integrated Electronic Retailing Channel Enabled (I-FIERCE) model refers to the case where a third party hosts one or more suppliers and sells their products or services electronically to the customers bypassing the retailer and enabling suppliers to further integrate along the value chain. In this case, an emerging type of retailer appears. This retailer is actually assisting the buying and selling process between suppliers and customers and holds the enormous technological capabilities offered in online marketplace.

As intermediaries, these organizations have successfully gained the interest of customers because they are able to offer significant benefits to the customers such as a number of choices, convenience, and value for money. For the suppliers these organizations help to increase the effectiveness and efficiency of distribution which is a major factor of the business success of a service organization as the nature of

service products increases the complexity of capacity management and makes timely distribution a vitally important aspect of the activity of service organizations.[2]

3.3. The Respondent Organizations

3.3.1. Estore.com.tr

Estore is established in 1999 by Enter Bilgisayar Sistemleri,which is one of the leading organizations in computer sector and operates since 1986 to present products and services of brands such as Compaq, IBM, Microsoft, Hewlett Packard, Novell to both end users and corporate levels. Estore operates on Microsoft platform and calls out to end users via www.estore.com.tr .Estore is one of the first online shopping stores in Turkey and has become one of the dominant players of online shopping by its secure and advantageous shopping conditions provided to customers with its dynamism. Estore also reaches its customers through alternative channels like televison after achieving T-commerce application as a result of the collaboration with Digiturk.Everyone who has a credit card can shop in Estore, with the opportunity to buy with installments if they have Galay Card and YKB Taksitcard. Estore provides maximum security during shopping by using coding technologies named 128 bit SSL and SET, which are valid all over the world, and VPOS systems of Garanti , Finansbank and Yapı Kredi Bank as the substructure of payment. It is not in question to capture credit card information in Estore, as it uses the most secure technologies. By having Verisign certificate, it's demonstrated that the shopping has done via www.estore.com.tr and personal infortmation is kept secure in Estore.[3]

[2] Khanh V La,Jay Kandampully,"Electronic retailing and distribution of services:Cyber intermediaries that serve customers and service providers",**Managing Service Quality**,Vol.12,No.2,2002,p.101.
[3] "estore hakkında",(Online) http://b2b.estore.com.tr/b2b_hakkinda.asp,11 January 2007.

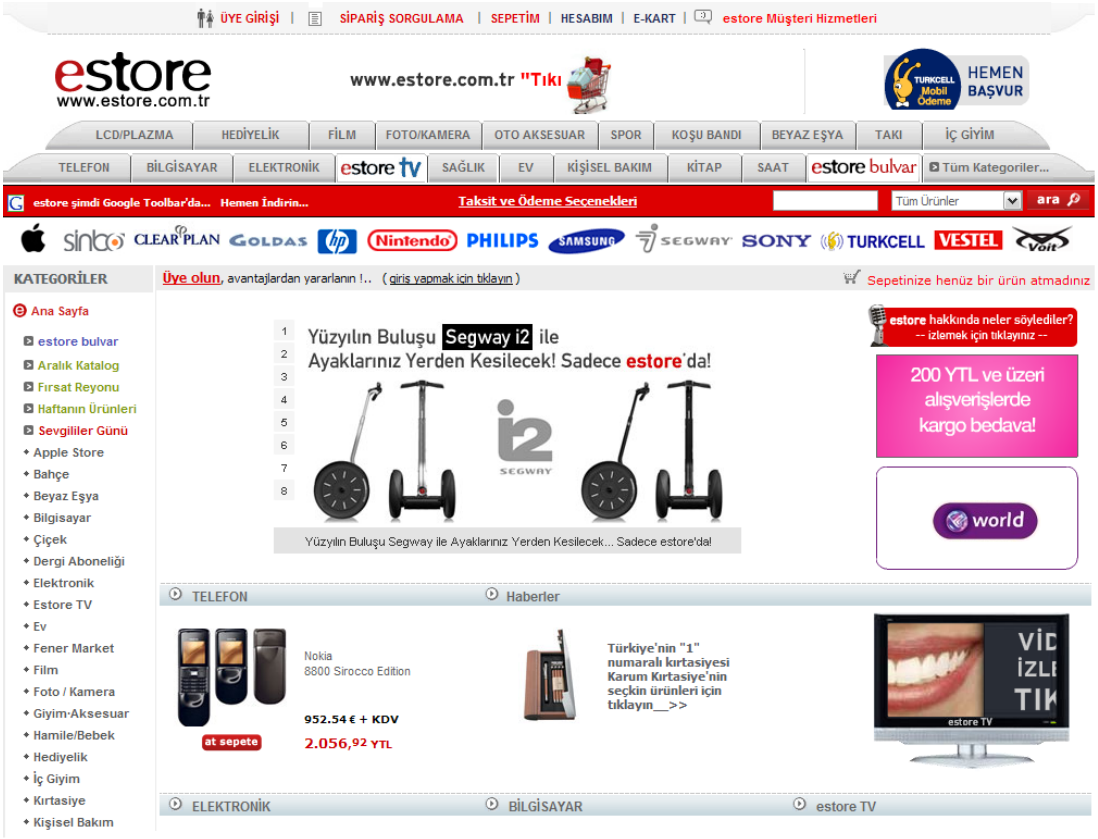

Figure.5 Screenshot of estore.com.tr web site

(Online) http://www.estore.com.tr, 04 February 2007.

Estore provides choice of delivery for every product for both domestic and outlying destinations, as it plays along with trusted organizations such as Global Express and Cargotech for domestic destinations and Fedex for abroad. Estore can deliver ordered products in two days within Istanbul, up to four days in other towns, 48 hours to Europe and USA, 72 hours to Asia and other continents. Thousands of products, specified in 17 main categories according to interests and needs and classified in more than 300 subcategories, are presented to appreciation of visitors with significant price advantages. Visitors can easily find the products they are looking for, with the help of the structure of category and advanced search machine. The newest products of the most well-known brands both in Turkey and the world are presented in main categories such as computer, book, DVD-VCD, music, home

appliances, electronics, telephones, personal care, stationery, automobile accessories, sport, health, hobby, gourmet, watch, toy, flower.[4]

Besides the consulting services for electronic commerce via internet, estore provides outsourcing services to organizations. About that, the strongest referance of Estore is Superonline which is one of the major internet access providers in Turkey. Shopping services of Superonline provided via shop.superonline.com is managed by Estore since July 2001.By the estore-boulevard project implemented in July 2001, Estore creates good chance for organizations to make sales with their brands in the virtual world. With its attractive conditions offered to organizations who want to present their products to a wider audience with lower costs, Estore provides them all substructure needed to start e-commerce. Virtual shops can manage their shops by an useful interface prepared for them as all their customer and logistic services are covered by Estore. Estore offers profitable suggestions to site owners by using affiliation system. It gives commissions from sales to site owners on internet in condition of using Estore banner or products on their sites. For the aim of fun, advantageous and secure shopping, Estore implements enduring innovations in its substructure and operational field and continues to operate to change shopping habits.[5]

3.3.2. Mybilet.com

Mybilet is established in the year 2000 as a member of Reysas Holding to support medium and large scaled software projects. Up to that date, it had operated as Software Department in the structure of Reysas Holding. By Online Ticket Reservation Sale System, which is the first and only management from center in Turkey, Mybilet offers solutions about ticket sale organizations to other organizations who operate in entertainment industries such as art, sport, activities, show, travel, cinema, theatre. With its online ticket sale service to many

[4] Ibid.

[5] Ibid.

organizations in Turkey, Mybilet achieved ticket sales of more than 1000 activities such as concert, festival and cinema on its system.Mybilet aims to provide the highest quality and the most secure service and has build up a “Membership System” as it follows the aim of providing the best service to the customers by its web site www.mybilet.com . This is a free service which also carries multiple advantages. These are offered to make a clear understanding of the system of Mybilet and improve its service potantial in Turkey.Mybilet can sell tickets on behalf of organizations of show, theatres, cinemas etc. via internet and simultaneously in box offices. By this service, Mybilet is the one-centered ticket sale platform. Mybilet defends that Enterprise Information and Decision Support Systems are crucial enstruments and that it is impossible to mention planned, efficient and effective operations in the absence of them.[6]

Mybilet Software Teams consist of computer engineers and specialists who are widely experienced in a range from micro to mainframe. Mybilet becomes an independent and a widely scaled software house when this potential in human resources is combined with the organization philosophy. The organization points out that they can perform successful projects in all kinds of hardware and software. The concept preparation and installation services of management and information sytems and answers to all kind of needs about these areas are presented by Mybilet by effectively using the leading edge technologies.Services operated by Mybilet can be stated as below:[7]

- Large scaled software and system entegration services
- Consulting servies about Information Systems
- Design and application of database
- Sale of high-technology software in order to present complete solutions
- Technical support

[6] "Hakkimizda",(Online) http://www.mybilet.com/about.aspx,11 January 2007.
[7] Ibid.

Figure.6 Screenshot of mybilet.com web site

(Online) http://www.mybilet.com, 04 February 2007.

3.4. Research Questions

This research investigates the electronic customer relationship management activities in Mybilet and Estore which are two different electronic retailers. This research aims to address the following three questions:

1 What are the underlying factors of electronic customer relationship management implementation success or failure in Mybilet and Estore organizations?

2 What are the critical electronic customer relationship management strategies used by Mybilet and Estore organizations?

3 What are electronic customer relationship management measurement methods used by Mybilet and Estore organizations?

3.5. Purpose Of The Research

As the research question of this research is to investigate the electronic customer relationship management activities in electronic retailers, therefore this research explored; (i) the electronic customer relationship management implementation methods of Estore and Mybilet ; (ii) the electronic customer relationship management strategies which are preferred by Estore and Mybilet and (iii) electronic customer relationship management performance mesurements of Mybilet and Estore.

3.6. Data Collection Methods

The primary and secondary data were collected to evaluate the research question. Primary data was collected by semi-structured interview method. Open-ended statements were included in the research questionnaire,which is given in the first appendix of this theses. The questions are related to three categories: electronic customer relationship management implementation,electronic customer relationship management strategies and performance measurements of electronic customer relationship management. All questions in three sections of the interview are answered by the general manager of Mybilet and the customer services group manager and CRM manager of Estore answered the questions related to their expertise. Secondary data was collected mainly from scholarly journals,academic literatures,books and electronic sources.

3.7. Data Analysis and Report Methods

The primary and secondary data are combined with the earlier electronic customer relationship studies to interpret the findings.

3.8. Electronic Customer Relationship Management Activities

In this research, the e-CRM activities within Estore and Mybilet organizations are investigated in three different aspects: e-CRM Implementation, e-CRM strategies and e-CRM performance measurement.

The e-CRM literature cites many factors affecting e-CRM implementation such as having a clear e-CRM definition,setting appropriate organization goals,having appropriate e-CRM implementation reasons, selecting the suitable e-CRM technology,integrating all customer touch points ,involving end-users to e-CRM implementation,involving top management support and so on. In this research the factors which affect e-CRM implementation are summarized into four dimensions :e-CRM definition,e-CRM goals,e-CRM implementation reasons,e-CRM technology selection and implementation. Also to investigate the organization specific success factors and barriers two more dimensions are added: Success factors of e-CRM implementation and barriers of e-CRM implementation.All these six dimensions are explained with the previous e-CRM literature in the first and second chapter of this thesis and this aspect will contribute this research by exploring the e-CRM implementation in Estore and Mybilet organizations.

In this research the e-CRM strategies aspect is summarized into four dimensions: e-CRM web site strategies,e-CRM steps, analytic e-CRM strategies and e-CRM marketing strategies.As these four dimensions are explained with the previous e-CRM literature in the second chapter of this theses,the e-CRM strategies aspect will contribute this research by explaining the importance of the strategic use of e-CRM technologies and tools, marketing strategies,web site features and alternative channels for the Estore and Mybilet organizations.

The e-CRM performance measurement aspect is summarized into three dimensions: e-CRM measurements , Customer measurements, Web-site

measurements. As the two previous aspects are related to succesful and strategic use of e-CRM, this aspect is related to the methods of performance measurement in e-CRM. This aspect will contribute to this research by investigating the importance of performance measurement in Estore and Mybilet organizations,as all three dimensions of this aspect are explained with the previous literature in the second chapter of this thesis.

3.8.1. Electronic Customer Relationship Management Implementation

In this dimension e-CRM implementation factors of Mybilet and Estore organizations are explored. At the end of this part a comparison of the implementation factors of Estore and Mybilet organizations is given in Table 1.

3.8.1.1. Electronic Customer Relationship Management Implementation Reasons

As the growth of electronic commerce has attracted considerable attention, today almost every organization presents itself to the global online marketplace through a web site with different business models in sectors like business-to-business,business-to-customer and etc. Mybilet is a new type of retailer which acts as a cyber intermediary between customers and organizations in entertainment industry by offering online ticket reservation service and Estore is an online retailer which offers thousands of products including electronics, telephones, accessories and etc. The customer services group manager of Estore stated that the organization is established as a customer centric organization and uses e-CRM tools and technologies. The general manager of Mybilet also stated that the organization is established with the e-CRM concept with its tools and technologies and by the business model of Mybilet, it is required for organization to invest in technological

capabilities to integrate the e-CRM technologies between organization and service suppliers.[8]

Both Mybilet and Estore stated that one of the main reasons of their e-CRM implementation is having a direct customer contact which is one of the major challenges of achieving success in business-to-customer sector. It is also mentioned by both that today customers are preferring alternative shopping channels like internet rather than using the old-fashion shopping channels and they focus on e-CRM technologies order to give better customer service by the cost-effective internet channel. The respondent from Mybilet mentioned that e-CRM takes a crucial part of the organization's business model as achieving such cost-effectivity would be impossible in traditional ways and also it is added that e-CRM helps organization to differentiate from competitors and achieve longevity in this industry. As e-commerce gained popularity,the competition in the online marketplace increased since more and more organizations today offer similar services and products, the respondent from Estore stated that the organization is differentiated from its competitors for several years by focusing on customer service with e-CRM tools.[9]

3.8.1.2. Electronic Customer Relationship Management Definition

As in today's online marketplace many organizations are implementing and embracing e-CRM concept to achieve the benefits offered by different technology vendors,many researches show that most of the e-CRM implementations fail or doesn't give the expected results. Having a clear and understandable defition of e-CRM concept is considered as one of the essential prerequisites of succesful e-CRM implementation as it is researched by previous studies that organization definitions are open for making unquestioned assumptions and building implicit beliefs.The general manager of Mybilet stated that the organization pursued the electronic customer relationship management concept with its tools and technologies since the

[8] La,**a.g.e.,**p.101,Vrechopoulos,**a.g.e.,**p.63.
[9] Bhattacherjee, **a.g.e.,** p.210, Massad,**a.g.e**,p.73.

foundation of the organization and therefore Mybilet defines the e-CRM as an organization wide technology which assists the organization to better serve the customers by simplifying the online shopping and to support technological capacity to service suppliers.It is further added by the respondent that all employees are supporting and pursuing the e-CRM concept.The customer services group manager of Estore stated that e-CRM technologies are pursued by the organization as a capability to improve customer service.The respondent further mentioned that as a customer centric organization,e-CRM can be defined as an organization wide concept which aims to improve the customer shopping experince by touching the customer.[10]

3.8.1.3. Electronic Customer Relationship Management Goals

Setting organization goals before beginning any e-CRM project is fundamental as the fact that organization specific objectives determine the structure and use of e-CRM. Both the respondents of Mybilet and Estore stated that one of the crucial objectives of the organizations is to give customer a superior shopping experience in order to improve the customer loyalty and repeated purchases, as it is mentioned in the literature that e-CRM has the potential for organizations to strengthen customer loyalty and build profitability by improving increases in customer retention rates. The respondent from Mybilet stated that with the e-CRM tools and technologies, the organization is capable of acquiring and analyzing customer information and trying to achieve full technological integration in all service supplier and customer touch points is another important goal of the organization. Trust is cited as an enabler of e-CRM in both organizations because customers need to trust the business before they purchase services or products, besides, the more trust an organizations gains, the easier it is for the organization to improve retention rates. The respondent from Estore stated that giving the best

[10] Rigby,**a.g.e.,**p.102, Fjermestad,**a.g.e**.,p.574,Bhattacherjee, **a.g.e**.,p.201.

customer services is a priority of the organization and therefore establishing a trustful relationship between the customer is seen essential by the organization.[11]

3.8.1.4. Electronic Customer Relationship Management Technology Selection

The e-CRM technologies available in the software vendors include everything from personalization,web analytics and call centre technologies to fully integrated enterprise-wide solutions and one of the major challenges is selection of the appropriate technology in terms of organization requirements. Organizations may suffer unwanted failures at the end of the implementation stage because that e-CRM projects can be complex and investing in these technologies can be expensive.The respondent stated that Mybilet has fully integrated e-CRM tools and technologies with the necessary software and hardware for online activities. The modular e-CRM applications are being preferred as choosing the right technology and used within the current system of Mybilet to integrate further evolving and changing technological interfaces. Both respondents of Estore and Mybilet stated that when selecting e-CRM technologies organizations give the upmost priority to the fit of the new technology into the organizations' requirements as the CRM manager of Estore stated that the organization is currently implementing a new e-CRM project with the technological solution partner of Estore. Both respondents mentioned that the implementation timeframe,security and cost effectiveness are the other factors when selecting of the e-CRM project. It is mentioned by Mybilet respondent that the current e-CRM technology infrastructure costed $150.000 and implemented in two years period. Since the financial expenditures are not mentioned by the Estore respondent, it is stated that the previous e-CRM project implemented within the previous year. As Mybilet preferred on-premise solutions like; analytic capabilities such as data mining,Online Analytic Processing, data warehousing and web analytics,web site features, online kiosk application and call center application,Estore preferred on-

[11] Chalmeta,**a.g.e.,**p.1018, Jutla,**a.g.e**.,p.7025, Cuthbertson,**a.g.e**.,p.303, Reichheld,**a.g.e**.,p.135.

premise solutions in technologies like web site features ,online shopping application and database softwares and on-demand solutions in technologies like call-center applications and web analytics. Estore does not have analytic solutions and capabilities like web analytics,data mining,data warehousing and OLAP. It is stated by the respondent that Estore will be implementing e-CRM analytic technologies in the near future.[12]

3.8.1.5. Success Factors Of Electronic Customer Relationship Management Implementation

The e-CRM implementations in organizations are divided into three dimensions: Technical,cultural and functional and as importance placed on the different dimensions of integration will vary with the needs of the organization involved it is suggested that all dimensions need to be managed to a lesser or greater degree.[13]

The general manager of Mybilet stated that ,an e-CRM software package ,which could also be best of breed or bespoke applications, wouldn't be sufficient for organization because for Mybilet the technological e-CRM implementation means integrating new e-CRM supplier systems into the organization structure and Mybilet has two sides:Organization side and supplier side. It is added by Mybilet that in order to achieve successful technological implementation, the new technological interface must be compatible with the existing technology of the organization and the service supplier,also it is mentioned that the existing technological infrastructure comprises an open architecture which would ease the integration with other e-CRM technologies that may be introduced in future. The CRM manager of Estore mentioned that the new e-CRM project of the organization is being implemented with the compatibility of the existing technological infrastructure.[14]

[12] Adebanjo,**a.g.e**.,p.570, Payne,**a.g.e.,**p.271,Fjermestad,**a.g.e.,**p.574.
[13] Adebanjo,**a.g.e**.,p.574.
[14] Adebanjo,**a.g.e**.,p.570, Fjermestad,**a.g.e.,**p.574.

The CRM manager of Estore stated that as the organization's customer database reached 450.000 members and therefore the analytic e-CRM capabilities are needed for identification and segmentation of customers. With the new e-CRM technologies it is aimed by Estore to establish new organization processes for analytical activities and to improve the efficiency of current business processes like customer services department. Both Estore and Mybilet respondents stated that the integration of information flow within the organization is critical and the technologies ,which are to be implemented, must be fully configurable for all organization processes as the more configurable an e-CRM application is, the closer it can be tailored to the requirements of the organization. And therefore it is also added by both respondents that when implementing an e-CRM project,end-users must be involved in order to consider their preferences in terms of usability and support.[15]

The organization culture is maybe the most important element in successfully managing the implementation of an e-CRM project as the deployment of new applications will be impacted by the organization acceptance of new working practices. As Estore has a very clear definition of objectives and responsibilities, customer centric culture is accepted by the organization-wide employees, the customer services group manager of Estore stated that not the top management support but all of the organization support is taken for the new e-CRM technological implementation. The general manager of Mybilet also stated that the top management of mybilet essentially supports the e-CRM implementation. Both respondents of Estore and Mybilet mentioned that before the e-CRM implementation necessary training for the new technologies is given to the employees and also it is added that with the introduction of new technology into the organization educations and cross team study methods will be used to increase the awareness and support of the technology.[16]

[15] Adebanjo,**a.g.e**.,p.570, Payne,a.g.e.,p.271,Tzokas,**a.g.e**.,p.124.
[16] Rigby,**a.g.e.,p.**105, Adebanjo,**a.g.e**.,p.570.

3.8.1.6. Barriers of Electronic Customer Relationship Management Implementation

The respondent stated that in the past as Mybilet had some difficulties in the design and integration stage of organizational e-CRM implementation,the most challenging barrier is the integration of organizational e-CRM system into the external e-CRM systems.It is told that the major conflicts usually occur between the project managers of organization and the suppliers by having different opinions of the e-CRM implementation defition and technological and functional integration of e-CRM. The customer services group manager of Estore stated that a part of the pre-implementation efforts of new e-CRM implementation has failed. The organization was careful about involving the end-user preferences and needs but the technological solution partner failed to tailor and integrate the technologies to the organizational structure as the implemented technologies failed to improve functionality and usability within organization. As an example, the web enable feature -similar to the web chat feature- of the new e-CRM project, which would fully integrate the customer service department to the internet in order to improve customer support, could not be implemented. The problem was solved by technological solution partner after taking all charges and responsibilities for failure and as the financial resources were compensated by technological solution partner, the introduction of e-CRM implementation is therefore delayed and time costs could not be compensated.

3.8.2. Electronic Customer Relationship Management Strategies

In this dimension e-CRM strategies of Mybilet and Estore organizations are explored. At the end of this part a comparison of the e-CRM strategies of Estore and Mybilet organizations is given in Table 2.

Table 1. E-CRM Implementation Factors of Mybilet and Estore

	Mybilet	Estore
1.Reasons	*Sectoral Requirement. *Direct Customer and Supplier Interaction. *Changing Shopping Concept. *Differentiation Strategy. *Cost Effectivity.	*Sectoral Requirement. *Direct Customer Interaction. *Changing Shopping Concept. *Differentiation Strategy.
2.Definition	*Established with E-CRM Tools and Technologies. *Organization Wide Concept to Better Serve Customers by Simplifying Shopping.	*Established with Customer Centricity. *Organization Wide Concept to Give Customers Better Shopping Experience by Touching Customer.
3.Goals	*Support Customer and Supplier Expectations. *To Better Satisfy Customers. *Improve Customer Loyalty. *Increase Customer Retention rates. *Build Trust. *Integration of Customer and Supplier Touch Points.	*To Better Serve Customers. *To Better Satisfy Customers. *Improve Customer Loyalty. *Increase Customer Retention rates. *Build Trust. *Integration of Customer Touch Points. *To Differentiate in Sector.
4.Technology Selection	*Owns Analytical Technologies. *On Premise Option is Preferred. *Modular Technologies are Preferred. *Implementation Timeframe. *Security of the Technology. *Cost of the Project.	*Does not have Analytic Technologies. *On Demand Option is Preferred for only Call Center and Web Analytics tecnologies. *Modular Technologies are Preferred. *Implementation Timeframe. *Security of the Technology. *Cost of the Project.
5.Success Factors	*Organizational and Supplier fit of the Technology *Involving End Users *Top Management Support *Team Studies with Suppliers *Educations	*Organizational Fit of The Technology *Involving End Users *Top Management Support *Organizational Support *Team Studies with Suppliers *Educations
6.Barriers	*Mismatch of e-CRM understanding and technologies with suppliers	*Mismatch between organization's infrastructure and the vendor's tailored software

3.8.2.1. Electronic Customer Relationship Management Web Site Features

It is mentioned by the e-CRM literature that web site features are effective in improving customer satisfaction,loyalty and therefore retention by supporting the whole buying process of the customer.These features can be described in three categories:

3.8.2.1.1. General Features

It is stated by the Estore and Mybilet respondents that organization web site designs must be user friendly to assist the customer in finding the appropriate products or services.It is mentioned by the respondent that Mybilet has the easy navigability option which offers customers to find the desired service in short time period but doesn't have the site tour , site map and search engine features.It is further stated that Mybilet updates organization's web site on a daily basis to inform users and members for the newest services available.The respondent from Estore stated that they offer different products with many categories in a large portfolio and therefore the web site is designed to improve the shopping experince of customer and orgaization's web site include site tour , site map and search engine features. Introduction for the first-time users feature is used by both Mybilet and Estore web sites which is stated as an optional feature for the users to learn how to efficiently use the web site. Also as both organization web sites offer alternative communication channels to the customers like e-mail,call center,traditional mail and fax,neither of the two organizations offer toll free numbers feature but Estore also supports the web chat feature. Both respondents stated as most customers are closing the web site when membership form requesting customer information is either too complex or too long, membership forms of two organizations are simplified in order to increase membership database. As it mentioned before that customer trust is essential in an environment where there is always a possibility of fraud or cyber identity theft, in the membership process Estore web site supports secure shell coding algorithm,which is

not supported by Mybilet, that enables secure information transfer. Web site personalization is one of the newest and most advanced feature of organization web sites but this feature is supported by neither of the organizations.[17]

3.8.2.1.2. E-commerce Features

The e-commerce features of e-CRM web sites are critical because of the fact that a positive shopping experience in this stage will affect the future behaviour of customer as also organizations in this stage may use effective cross selling or up selling strategies to generate better customer profitability.Both of the organizations' web sites are supporting the online purchasing,online information, highlights, purchase conditions and final preview of services or products.Both respondents of Estore and Mybilet stated that both organizations are aware of the importance of quick order ability and they are trying to simplify the buying process as much as possible. The customer services group manager of Estore added that in the organization's web site customization possibilities are available in limited products and also the external links are available in the vast majority of products.[18]

3.8.2.1.3. Post-Sales Support Features

The post sales support features protects customer by preserving customer rights, helps customer to solve any problem occurred and helps organization to build trust among customers.Both Mybilet and Estore web sites support the frequently asked questions and problem solving feature.With the online reservation system of Mybilet a customer can view the latest reservation status,Estore respondent stated that as there are many products in organization's portfolio,the shipping time of different products vary from each other.It is added that Estore supports order tracking feature with estimated responses and with the new e-CRM project the exact order tracking system will be implemented.Mybilet and Estore respondents stated that

[17] Feinberg,a.g.e.,p.470,Noor Raihan Ab Hamid,"E-CRM: Are we there yet?",**Journal of American Academy of Business**,Vol.6,No.1,2005,pp.53.
[18] Feinberg,**a.g.e**.,p.434,Collier,**a.g.e**.,p.1235.

customers can complain through web sites with the availability of this feature.The spare part feature is only supported with the necessary products by Estore.[19]

3.8.2.1. Electronic Customer Relationship Management Steps

As recording and understanding the behaviour of customers is the most important and a key factor influencing the success of any retail business,both of the respondents of Estore and Mybilet stated that the organizations integrated all customer touch points where the customer data is gathered.Estore respondent stated that customer segmentation is not implemented in the organization where mybilet respondent mentioned that all gathered customer information is supported through the service suppliers and therefore Mybilet supports the technological capacity to service suppliers for customer segmentation,customer profitability analysis and customer interaction. Estore respondent stated that with the new e-CRM project segmentation and valuation capabilities will be available and therefore will lead organization to better interact with its customers. It is both mentioned by the Estore respondent that upselling and cross selling initiatives are implemented in buying or reviewing process of products and services. Winback initiative is applied by neither of the organizations as Estore stated that in their current condition the determination of a customer loss would be impossible as online customers are not all frequent buyers.[20]

3.8.2.3. Analytic E-CRM Strategies

The general manager of Mybilet stated that the organization is supporting its service suppliers with the analytic e-CRM technologies like data mining,data warehousing and online analytical processing.It is also added Mybilet also has web mining feature to analyze,store and share the web site traffic with its service

[19] Hamid,**a.g.e**.,p.53,Feinberg,**a.g.e**.,p.470.
[20] Lindgreen,**a.g.e**.,p.61,Conway,**a.g.e.,**p.5,Vrechopoulos,**a.g.e**.,p.60.

suppliers.The respondent of Estore mentioned that all customer data is pooled from different information channels through the organization database to store the historical data.Also it is mentioned that the web site analytic informations are collected with the help of the third party organization Google Analytics.It is further added by the Estore respondent that historical customer and web site data will be used in the data mining process which will be implemented in a short period of time

3.8.2.4. Electronic Customer Relationship Management Marketing Strategies

3.8.2.4.1. Direct Marketing

As both Estore and Mybilet organizations use e-mail as the major marketing strategy,Estore takes the advantage of interactive digital television channel as a marketing and sales channel and Mybilet has the physical kiosk delivery advantage of its services. Both respondents stated that using alternative channels in todays business world is essential both by communication, marketing or sales purposes. Estore and Mybilet use wireless channels like The Global System for Mobile Communications (GSM) and Wireless Application Protocol (WAP) and classic services like telephone and fax channels. Short message service (SMS) system is preferred as a communication tool through GSM channel to acknowledge customer about specific promotions like gift offerings on special occasions like valentine's day ,mother's day , new year's eve and etc. WAP,which is an open international standard for applications that use wireless communication, is presented as an alternative presence in mobile marketplace. It is stated by the Estore respondent that the organization pursue tele-commerce as a different process than e-commerce and therefore Estore will differentiate the t-commerce and e-commerce support features by fully web enabling the customer services.

3.8.2.4.2. Personalization

As personalization and one-to-one marketing concepts gained popularity through the world, both respondents of Estore and Mybilet stated that the organizations' web sites do not support personalization feature. Both Mybilet and Estore agreed that they are not planning to implement such a feature as an uncertainity surrounds through this concept

3.8.2.4.3. Mass Customization

As mass customization is another differentiation strategy for organizations in business-to-customer sector, the CRM manager of Estore told that the organization does not use such concept and does not have the concept's requirements of analytical capabilities. The general manager of Mybilet responded that the segment specific analysis of the customers supports service suppliers to develop customized service offers to the customers but this strategy can not be accurately defined as mass customization.

3.8.3. Electronic Customer Relationship Management Performance Measurement

In this dimension e-CRM measurement methods of Mybilet and Estore organizations are explored. At the end of this part a comparison of the e-CRM measurement methods of Estore and Mybilet organizations is given in Table 3.

3.8.3.1. The Measurement of Electronic Customer Relationship Management Benefits

The general manager of Mybilet stated that the major benefits the organization gained with e-CRM are the cost effectivity of e-CRM, increased

Table 2. E-CRM Strategies of Mybilet and Estore

	Mybilet	Estore
2.1.Web Site Features		
2.1.1.General Features	*Introduction For First-Time Users *Easy Navigation *Alternative Channels: E-mail, Fax, Telephone, Traditional Mail and Call Center. *Membership *Posted privacy policy	*Introduction For First-Time users *Local search engine *Alternative Channels: E-mail, Fax, Telephone, Traditional Mail and Call Center *Membership *SSL Encrypted Membership Information Flow *Mailing list *Site tour *Site map *Electronic bulletin board *Posted privacy policy
2.1.2.E-commerce Features	*Online purchasing *Product information online *Product highlights *Quick order ability *Purchase conditions *Preview product *External Links *SSL Encrypted Payment Information Flow	*Online purchasing *Product information online *Product highlights *Quick order ability *Purchase conditions *Preview product *External Links *Customization possibilities for some products *SSL Encrypted Payment Information Flow
2.1.3.Post-Sales Support Features	*Ability to Track Order Status *Frequent Asked questions *Problem solving *Complaining ability	*Ability to Track Order Status *Frequent Asked Questions *Problem Solving *Complaining Ability *Spare Parts Possibility For Some Products
2.2.E-CRM Steps	*Identifying,Segmentation, Interacting Steps are Applied.	*Identifying and Interacting Steps are Applied. *Cross Selling and Up Selling Features are Used.
2.3.Analytic Strategies	*Data Warehousing, Data Mining and OLAP technologies are used *Customer Information is Shared to Related Suppliers	*Web Analytics Technologies are Supplied by Third Party Organization. *Customer Information is not Shared.

2.4.Marketing Strategies	* E-mail is Used as The Main Direct Marketing Tool *Cell Phones,WAP and SMS Technologies are Other Types of Channels Used.	* E-mail is Used as The Main Direct Marketing Tool *Cell Phones,WAP,SMS and Interactive Digital Television Technologies are Other Types of Channels Used.

customer retention rates and the improved market share in the e-CRM market by directing new service suppliers for e-CRM implementation and added that they have complex metrics for evaluation of e-CRM benefits. Estore respondent stated that with e-CRM solutions organization gained increased operational efficiency and profitability and it is added by the respondent that with the future e-CRM project an increase in the customer services efficiences are expected. Estore measures the benefits by checking the revenue increase rates,the decrease rates of product returns,the increase in customer profitability rates and with various metrics.

3.8.3.2. Customer Measurements

Mybilet respondent mentioned that the customer relations of the organization is improved and stable,and also it is added that the organizations are achieving positive returns from customers. Mybilet measures customer relations with the increase in sales,the differentiation rate of sales in physical-kiosks and online-kiosks and also from the customer satisfaction surveys that are sent to the customers. Estore respondent stated that by building trust in customer relations Estore achieved positive returns from customer in many aspects and the benefits are measured with many metrics such as changes in the annual shopping rate of the customer,the changes in the annual customer complaints,total shopping rate and metrics based on VIP customers.

Table 3. E-CRM Performance Measurements of Mybilet and Estore

	Mybilet	Estore
1-Benefits Measurement	*Low Costs. *Increased Customer Satisfaction. *Increase in Market Share as a Cyber Intermediary. *Organization Has Complex Benefit Measurement Metrics.	*Low Costs. *Increased Efficiency in Customer Services *Increased Profitability *Organization Has Benefit Measurement Metrics Such as: Increase Rates in Profitability, Increase Rates of Profitability Per Customer.
2-Customer Measurements	*Customer Relations are Improved Positively *Organization Has Customer Measurement Metrics Such as: Increase of Sales,Online VS Physical Kiosk Sale Differences and Customer Satisfaction Surveys.	*Customer Relations are Improved Positively *Organization Has Customer Measurement Metrics Such as: Changes in The Annual Shopping Rate and Customer complaints, Total Shopping Rate and Metrics for VIP customers
3-Web-Site Measurements	*Web Site Information is Stored *Organization Has Web Site Measurement Metrics Such as: Click Through Rates, Click Streams, External Link Rates, Number of Unique Vistors, Page Hits and Registered Users.	*Web Site Information is Stored *There are No Measurement Metrics.

3.8.3.3. Web-Site Measurements

Mybilet respondent stated that with the help of web analytic technologies,the organization stores the web site specific information in its database.It is mentioned that several metrics are important for Mybilet in terms of web site measurements such as click through rates,click streams,external link rates,number of unique vistors,page hits and registered users. Estore respondent stated that as organization collects the traffic of its web site,there are no measurement criteria and metrics set to measure the organization's web site.It is added that one such measurement could be stated as the duration and the monetary cost of the invesments made to the web site.

3.9. Conclusion Of The Research

In this research two different electronic retailers are investigated in three different aspects of e-CRM such as: e-CRM Implementation, e-CRM strategies and e-CRM performance measurement. At the end of this part, a comparison of research findings from Mybilet and Estore organizations and theoretical findings will be given in table 4.

E-CRM Implementation

Within this aspect it is aimed by this research to investigate the e-CRM implementation methods with the success or failure of Mybilet and Estore. Mybilet acts as a cyber intermediary in the online marketplace that assists the buying and selling process between customer and supplier contacts and Estore, which also acts in the B2B platform by hosting the web sites of different organizations, mainly acts as a general online retailer with direct customer contacts. Therefore, the business model of Mybilet is the Intermediated-Forward Integrated Electronic Retailing Channel Enabled (I-FIERCE) model and the business model of Estore is Direct Electronically Applied Retailing (DEAR) Model. From the point of operational e-CRM where the integration of customer touch points is a critical feature, both of the organizations had fully integrated customer touch points to the organization. As it is critical for Mybilet to integrate its system with the service suppliers to share the information collected from customer, Estore does not share the collected customer information with any third party organization. From the point of analytical e-CRM Mybilet has data warehousing,data mining and web analytics capabilities,as Estore does not have any analytical capabilities excluding the computer databases containing customer information.[21]

Both Mybilet and Estore agreed on some e-CRM implementation reasons,which are mentioned in this study, such as a differentiation strategy from

[21] La,**a.g.e**.,p.101,Vrechopoulos,**a.g.e**.,p.63.

competitors and an organization strategy to improve online customer experience,customer satisfaction and customer retention. For Mybilet, e-CRM is the foundation of the organization with its cost effective structure and for Estore, e-CRM is perceived as capabilities for better customer service,therefore Estore is planning to implement a new e-CRM project which will add analytical capabilities to the organization due to better serve the increased number of membership database. Since both of the organizations agreed that e-CRM is an organization wide strategy, for Mybilet e-CRM is perceived as a technological initiative and for Estore e-CRM is perceived as customer centricity. Despite having different e-CRM definitions,both organizations also agreed on the organization wide commitment of the e-CRM definition. The use of e-CRM differs as it takes many forms depending on the objectives of the organizations.As both organizations agreed on the goals of e-CRM,which are given in this study, such as improving customer satisfaction, trust, loyalty and retention,neither of the organizations use customer lifetime value(CLV) as an organization goal. It is therefore stated that for Mybilet calculation of CLV is not such a strategic goal with the current business model and for Estore, calculation of CLV is impossible with the different purchasing frequencies of customers.And the integration of customer touch points is also perceived as a common goal for both organizations.[22]

As given in this study,an open architecture of e-CRM technology is important for Mybilet,as organization has evolving interfaces with the changing and adding suppliers to its current infrastructure.Other important factors for both organizations are implementation timeframe,security and cost effectiveness of e-CRM solutions.Also as both organizations selected on-premise solutions for improving technological capabilities,Mybilet needed modular e-CRM solutions for the compatibility issues to its current infrastructure and Estore selected a bespoke e-CRM solution which is tailored for the organization's specific needs.Also both organizations agreed that configurability is a key option for e-CRM implementation success. Organizational fit and information flow with integration are considered as

[22] Massad,**a.g.e**,p.73,Bhattacherjee,**a.g.e.,**p.210, Fjermestad,**a.g.e**.,p.574, Reichheld,**a.g.e**.,p.135, Jutla,**a.g.e**.,p.7025.

important factors when selecting an e-CRM solution by both Mybilet and Estore,as an e-CRM project is currently being implemented by Estore to improve current processes with the help of analytical capabilities of e-CRM. For cultural integration, training method is taking into consideration for both organizations,Estore also involved end users in the organization,by creating cross-functional teams, in order to increase the awareness ,acceptance and usability.Both organizations involved top management support to the e-CRM implementation to reduce the resistance.[23]

Estore has had a failure with its e-CRM pre-implementation project with the usability and functionality issues.As pre-implementation is necessary strategy to prevent the failure of the whole e-CRM project,time loss is a failure which can not be undone. Mybilet has several conflicts with the integration issues of current information channels to the supplier channels.[24]

Electronic Customer Relationship Management Strategies

As it is given in this study,both Estore and Mybilet have general web site features as introduction for first-time users, mailing list, site tour, posted privacy policy, membership options and some alternative channels like e-mail, fax,calling and traditional mail. Estore further supports more general web site features like electronic bulletin board, local search engine, site map, electronic bulletin board and web chat features. But neither Mybilet nor Estore supports toll-free numbers,call-back button,voice over IP and site personalization features. It is also seen that as Estore use secure shell algorithms in membership process,Mybilet does not use encryption options for gathering membership information of customer. Both Mybilet and Estore have common e-commerce features like online purchasing,product information online,product highlights,quick order ability, purchase conditions, preview of product and services and external links.Estore also supports the customization feature in limited products. The quick order option feature in Mybilet and Estore is not the same feature that is described in this study,but organizations are trying to simplify this feature as much as they can.For the post-sales web site features

[23] Fjermestad,**a.g.e.,**p.574,Adebanjo,**a.g.e.,**573,Payne,**a.g.e**.,p.271,Tzokas,**a.g.e**.,p.124.
[24] Scullin,**a.g.e**.,p.9.

both Mybilet and Estore have ability to track order status and frequently asked questions features.As problem solving, complaining ability is supported by Estore,spare parts feature is limited with the support of product.[25]

Both organizations have fully integrated their customer touch points and the information flow from various channels are being stored in the databases of organizations.As it is all mentioned by this study that e-CRM is about focusing on the valuable customers and identifying, segmenting and interacting steps are important for organizations in order to increase profitability and operational efficiency.Mybilet supports its suppliers with the organization's technological capabilities to identify,segment and interact with customers but Estore achieves the identifying step and as the organization doesn't have adequate analytic capabilities to segment and valuate customers,skips the segmentation step and finally interacts with customers with unefficiently as valuable target audiences are not discovered with the segmentation step.Estore uses the cross selling and up selling feature but not the winback feature with the difficulty of determining the loss of a customer.[26]

Mybilet and Estore collect and store the customer information from different communication channels in their databases.Mybilet has its own resources and capabilities for collecting customer and web site information such as data mining,data warehousing,web analytics and call center applications since Estore does not have analytic capabilities to analyze customer data but takes third party organization's help for call center applications and collecting the web site analyzes. As Mybilet shares the stored information with its suppliers,Estore only stores the collected information in historical databases.[27]

Both Estore and Mybilet use e-mail as the major marketing strategy.As direct marketing strategy requires that the target valuable customers are determined, it is difficult to say for Estore that e-mail marketing is done efficiently.Estore also uses

[25] Feinberg,**a.g.e**.,p.470,Collier,**a.g.e**.,p.1235,Feinberg,**a.g.e.,**p.434,Hamid,a**.g.e**.,p.53.
[26] Lindgreen,**a.g.e.,**p.61,conway,**a.g.e**.,p.5,Vrechopoulos,**a.g.e**.,p.60.
[27] Rygielski,**a.g.e.,**p.485,Manco,**a.g.e.,**p.396.

interactive digital television channel as a marketing and sales channel and Mybilet has physical kiosk delivery advantage of its services. Estore and Mybilet preferred to use mobile channels like GSM, WAP and classic services like telephone,fax channels.[28]

Personalization and mass customization strategies are presented by the literature as latest the advanced e-CRM technologies to improve organization revenues by supporting unique online experience to customers. Mybilet and Estore use personalized e-mails directed to customers,but today these actions are not the match of the personalization and mass customization, as personalization today is defined as fully personalized dynamic web sites and mass customization is defined as organizational ability to find marketing niches through large number of customers with the advanced analytical capabilities.[29]

Electronic Customer Relationship Management Performance Measurement

The measurement of e-CRM is essentially suggested by the literature that e-CRM implementaion has high failure rates through the world. Mybilet gained benefits like cost effectivity,increased customer retention rates and the improved market share in e-CRM market..Estore gained operational efficiency and profitability with the future e-CRM project increases in the customer services efficiences are expected.Estore measures the benefits by checking the revenue increase rates,the decrease rates of product returns,the increase in customer profitability rates and with various metrics.Mybilet has complex metrics for benefit measurement.Mybilet has its customer relations is improved and also having positive returns from customers. Mybilet measures customer relations with the increase in sales,the differentiation rate of sales in physical-kiosks and online-kiosks and also from the customer satisfaction surveys that are sent to the customers. With building trust in customer relations, Estore achieved positive returns from customers in many aspects and the benefits are

[28] Chaffey,**a.g.e.,**p.12.
[29]Eirinaki,**a.g.**e,p.5,Anke,**a.g.e**,p.920,Dai,**a.g.e**.,p.285,Markellou,**a.g.e**.,p.32,Chellappa,**a.g.e**.,p.192,Bardakci**,a.g.e**.,p.464,Addis,**a.g.e**.,p.52.

Table 4. Comparison of Theoretical and Research Findings

Theoretical Findings	Research Findings	
	Mybilet	**Estore**
1.IMPLEMENTATION FACTORS		
1.1.Reasons		
Differentiation Strategy	*Supported	*Supported
Sectoral Requirements	*Supported	*Supported
Inrease Profitability	*Supported	*Supported
Customer Satisfaction	*Supported	*Supported
Additional Reasons	*Changing Shopping Concept *Cost Effectivity	*Changing Shopping Concept
1.2.Definition	"Organization Wide Concept to Better Serve Customers by Simplifying Shopping."	"Organization Wide Concept to Give Customers Better Shopping Experience by Touching Customer."
1.3.Goals		
Better Satisfy Customers	*Supported	*Supported
Improve Customer Loyalty	*Supported	*Supported
Increase Customer Retention	*Supported	*Supported
Build Trust	*Supported	*Supported
Customer Lifetime Value	*Not Supported	*Not Supported
Additional Goals	*Support Customer and Supplier Expectations. *Integration of Customer and Supplier Touch Points.	*Integration of Customer Touch Points. * To Differentiate in Sector.
1.4.Technology Selection		
On-Premise Model	*Preferred For All Applications.	*Preferred for ongoing implementation.
On-Demand Model	*Not Preferred.	*Preferred for Call Center and Web Analytics.
Complexity of Technology	*Modular Technologies are preferred.	*Modular Technologies are preferred.

Time Frame	*Short Implementation Timeframe is Demanded by Suppliers.	*Short Implementation Timeframe is Demanded by Organization.
Configurability	*Preferred by Suppliers.	*Preferred by Organization.
Additional Criterias	*Security of the Technology. *Cost of the Project.	*Security of the Technology. *Cost of the Project.
1.5.Success Factors		
Compatibility with existing technology.	Supported	Supported
Consisting open architecture.	Supported	Supported
Organizational Fit of Technologies.	Supported	Supported
Employee Training.	Supported	Supported
Top Management Support.	Supported	Supported
Team Studies.	Supported	Supported
Additional Factors		Organizational Support
1.6.Barriers		
Mismatch Between an Organization and the Vendor's Software.	Not Supported	Supported
Poor Understanding of Business Processes.	Not Supported	Not Supported
Poor Vendor Stability.	Not Supported	Not Supported
Rejection by End Users.	Not Supported	Not Supported
Broad Project Scope.	Not Supported	Not Supported
Additional Criterias	*Mismatch of e-CRM understanding and technologies with suppliers	
2.STRATEGIES		
2.1.Web Site Features		
2.1.1.General Features		
Introduction for first-time users.	Supported	Supported
Site personalization.	Not Supported	Not Supported
Alternative Channels.	Supported	Supported
-E-mail	Supported	Supported
-Fax	Supported	Supported
-Toll-Free Numbers	Not Supported	Not Supported
-Traditional Mail	Supported	Supported
-Call-Back Button	Not Supported	Not Supported
-VOIP	Not Supported	Not Supported

-E-Bulletin Board	Not Supported	Supported
-Call Center	Supported	Supported
Local search engine.	Not Supported	Supported
Membership.	Not Supported	Supported
Mailing list.	Not Supported	Supported
Site tour.	Not Supported	Supported
Site map.	Not Supported	Supported
Web Chat.	Not Supported	Supported
Electronic bulletin board.	Not Supported	Supported
Posted privacy policy.	Supported	Supported
2.1.2.E-commerce features		
Online purchasing.	Supported	Supported
Product information online.	Supported	Supported
Product highlights.	Supported	Supported
Quick order ability .	Supported	Supported
Customization possibilities.	Not Supported	Limited Support
Purchase conditions.	Supported	Supported
Preview product.	Supported	Supported
External Links.	Supported	Supported
2.1.3.Post-Sales Support		
Ability to track order status.	Supported	Supported
Frequent asked questions.	Supported	Supported
Problem solving.	Supported	Supported
Complaining ability.	Supported	Supported
Spare parts.	Not Supported	Limited Support
2.2.E-CRM Steps		
2.2.1.Identifying	Supported	Supported
2.2.2.Segmentation	Supported	Not Supported
2.2.3.Interacting	Supported	Supported
Cross Selling.	Not Supported	Supported
Up Selling.	Not Supported	Supported
Winback.	Not Supported	Not Supported
2.3.Analytic Strategies		
1.Data Warehousing	Supported	Not Supported
2.Data Mining	Supported	Not Supported
3.OLAP	Supported	Not Supported
2.4. Marketing Strategies		
2.4.1.Direct Marketing		
E-Mail.	Supported	Supported
Cell Phone.	Supported	Supported
Interactive Digital TV.	Not Supported	Supported
Traditional Mail.	Not Supported	Not Supported
2.4.2.Personalization	Not Supported	Not Supported
2.4.3.Mass Customization	Not Supported	Not Supported
3. PERFORMANCE		

MEASUREMENTS		
3.1.Benefits Measurement Gained Benefits	*Metrics are set but not shared	*Increase Rates in Profitability *Increase Rates of Profitability Per Customer
3.2.Customer Measurements Customer metrics	*Increase of Sales *Online VS Physical Kiosk Sale Differences *Customer Satisfaction Surveys.	* Changes in The Annual Shopping Rate *Changes in Customer complaints *Total Shopping Rate *Metrics for VIP customers
3.3.Web-site measurements Visitor Count. Unique Visitor Count. Page Hits. Duration. Click Through Rate. Impressions. Registered Users. Breakage. Click Stream.	Not Supported Supported Supported Not Supported Supported Not Supported Supported Not Supported Supported	Not Supported Not Supported Not Supported Not Supported Not Supported Not Supported Not Supported Not Supported Not Supported

measured with many metrics such as changes in the annual shopping rate of the customer,the changes in the annual customer complaints,total shopping rate and metrics based on VIP customers. Mybilet stores the web site specific information in its database with the help of web analytic technologies.It is mentioned that several metrics are important for Mybilet in terms of web site measurements such as click through rates,click streams,external link rates,number of unique vistors,page hits and registered users. Estore collects the traffic of its web site but there are no measurement criterias and metrics set to measure the organization's web site.It is added that one such measurement could be stated as the duration and the monetary cost of the invesments made to the web site.[30]

[30] Phippen,a.g.e.,p. 286,Vrechopoulos,a.g.e.,p.3,Kim,a.g.e.,p.7.

CONCLUSION OF THE THESIS AND RECOMMENDATIONS

In today's competitive and global business world, electronic commerce has gained widespread use by both customers and organizations. Organizations are offered by the advantages of internet such as; reduced entry level and global reach barriers ,efficient and cost effective communications and marketing and the ability to personalize or customize the products or services with the collection and analysis of customer information. With the offered advantages,many organizations ,including both pure online based organizations and traditional organizations, established their virtual presence by building web sites. However with the advantages of internet customers today gained the ability to easily search ,collect and sort the information of products or services offered from different vendors. With the vast majority of organizations supplying the same product or service differentiation from competitors became difficult, profitability of organizations are decreased as customers become disloyal and more demanding and longevity issues has become critical. Also today the major concerna of online customers are the security of their private information and reliability of the organization. Electronic customer relationship management has emerged as a new concept by applying the basic principles of customer relationship management to the internet medium.

Electronic customer relationship management, can be defined as a broad term of strategies and methods, which assists organizations to better manage customer relationships. The notion of the electronic customer relationship management lies on understanding the customer by collecting and analyzing the customer information. In fact,organizations shape the electronic customer relationship management concept with their defined goals and vision. Electronic customer relationship management gained popularity in online organizations with its flexibility, as today, with the advent of technologies and tools, organizations can have the capability of offering personalized or one-to-one relationships and products or services which are customized for the customer.

Electronic customer relationship management is considered as the main strategic concept for building relationships in the online enviroment since many traditional organizations build their online presence as an obligation. However implementation of electronic customer relationship management poses some challenges such as the selection of broad scope of tools and technologies offered by different vendors,definition of clear goals and vision and integrating the technological solution into the organization. Electronic customer relationship management implementation would be complex and expensive with the organization wide technological solutions and there are many examples of electronic customer relationship management implementation failures in the world.

This study is aimed on exploring and explaining the electronic customer relationship management practices on Mybilet and Estore organizations acting in the electronic retailing sector. Mybilet acts as a cyber intermediary in cinema industry with both direct customer and supplier contacts and Estore is a general electronic retailer with direct customer contacts. Mybilet is established with with both operational and analytical electronic customer relationship management technologies and tools,therefore Estore is mainly focused at the operational electronic customer relationship management technologies and tools but implementing a new electronic customer relationship management project to gain analytical capabilities.The research conducted in three dimensions as: electronic customer relationship management implementation, electronic customer relationship management strategies and the measurement methods of electronic customer relationship management.With the analysis of secondary data, factors affecting the electronic customer relationship management implementation has been obtained,strategies that are widely used by the electronic customer relationship management enabled organizations are acquired and finally some methods of electronic customer relationship management measurement are collected.With these secondary data, research questionnaire which consisted of four parts is prepared with the questions of open ended statements.Primary data was collected by semi-structured interview method which is applied to the highly qualified members of the both organizations. It

is therefore a limitation of this study that the efforts of future electronic customer relationship management project of Estore could not be investigated.

The first part of the questionnaire is related to the general organization information.The second part of the questionnaire includes 10 questions regarding to the factors affecting electronic customer relationship management implementation such as the definiton,goals,reasons of electronic customer relationship management, technology selection and the organization related success factors and barriers of electronic customer relationship management implementation.The third part of the questionnaire includes 12 questions regarding the mainly used strategies,technologies and tools in an electronic customer relationship management implementation such as technologies like organization web site features,organization data mining, warehousing and web analytics,strategies like electronic customer relationship management steps, direct marketing approach,personalization strategies,mass customization strategies.The fourth part consists of 5 questions regarding the measurement methods of electronic customer relationship management benefits, customer measurements and web site measurements.

Within the analysis of the factors in the four different parts of the questionnaire, the answers of the questions of the every different part are used within the secondary data to interpret the findings. As a result this study,the electronic customer relationship management activities of the two different electronic retailers in three dimensions are evaluated and some conclusions are obtained.

- As the conducted research displays, the different business models of the Estore and Mybilet affected the electronic customer relationship management implementation of the organizations. E-CRM implementation concept is different for Mybilet and Estore. For Mybilet, e-CRM implementation means adding new supplier interactions to the organization’s e-CRM infrastructure since Mybilet hosts the e-CRM applications for supplier and gains the ability to charge individual customers by electronically distrubuting supplier

services. For Estore, e-CRM implementation means adding new technological capabilities to the organization's infrastructure since Estore hosts its own e-CRM applications and gains the ability to collect customer information for the organization.

- The main reasons for electronic customer relationship management implementation of both organizations are aligned with sectoral and organization requirements. Meeting the customer expectations and differentiation from competitiors are two common reasons for both organizations.Also for Mybilet supporting supplier requirements and for Estore to gain analytic capabilites are additional reasons for electronic customer relationship management implementation.

- The definition of the electronic customer relationship management completely differed in both organizations as Mybilet perceived electronic customer relationship management as technological tools and capabilities to meet both customer and supplier demands, store perceived electronic customer relationship management as customer centricity and technologies and tools as capabilities to improve customer service.

- For current technologies Mybilet uses on-premise option for all applications where Estore uses on-premise solutions for operational electronic customer relationship management applications and on-demand solutions for call-centers and web analytics. On-premise modular solutions are selected for both Mybilet and Estore with the integration issues with current technical infrastructure. For Estore implementation timeframe is important with the functional features of the application and for Mybilet implementation timeframe is optional dependent on the supplier end.Organization fit and configurability of technologies are two more important reasons for the selection of appropriate technology.

- Before implementation Mybilet constructs a cross-functional team of experts in both supplier-end and Mybilet in order to reduce conflicts and improve commitment and Estore constructs a cross-functional team of different expertises in organization to gain implementation support and awareness.Training and management commitment are also two important factors for implementing electronic customer relationship management.Also for Estore organization wide commitment is supported and perceived as essential for success.

- Estore has had a pre-implementation failure of the ongoing electronic customer relationship management project with functional integration problems of the solution caused by the technological partner and Mybilet has also conflicts and problems of integration with the supplier-end.

- For both organizations attracting customers to the organization web site is critical. The general web site features support customer to better navigate and find the products or services directed to the customer. It is found that organizations have general web site features as introduction for first-time users, mailing list, site tour, posted privacy policy, membership options and some alternative channels like e-mail, fax and traditional mail. Estore further supports more general web site features like electronic bulletin board, local search engine, site map, electronic bulletin board and web chat features. But neither Mybilet nor Estore supports toll-free numbers, call-back button,voice over IP and site personalization features. It is also seen that as Estore use secure shell algorithms in membership process where Mybilet does not use encryption options for gathering membership information of customer.

- E-commerce features allow organizations to increase profitability and give customer better shopping experience.It is found that both Mybilet and Estore have common e-commerce features like online purchasing, product information online,product highlights,quick order ability, purchase

conditions, preview of product and services and external links.Estore also supports the customomization feature in limited products. The quick order option feature in Mybilet and Estore is not the same feature that is described in this study, but organizations are trying to simplify this feature as much as they can. Post sales features builds trust among customer.For the post-sales web site features both Mybilet and Estore have ability to track order status and frequent asked questions features. As problem solving and complaining abilities are supported by Estore,spare parts feature is limited with the support of product.

- As mentioned before since Mybilet supports analytical capabilities to the suppliers like data warehousing,data mining and web analytics,Estore only stores the web statistics in its database with the help of the third party organization's on-demand web analytic features.Both organizations have fully integrated their customer touch points and the information flow from various channels as integration of customer touch point is perceived as an essential strategy. The information collected from customer touch points are stored in the organization databases and since Mybilet supports segmentation and valuation of customers to the suppliers, Estore does not have the segmentation and valuation capabilities. It is found that as both Estore and Mybilet use e-mail as the major marketing strategy, for Estore the efficiency of the interactions are low with the absence of segmentation capability and for Mybilet interactions are made with the close work with suppliers. Also for both organizations supporting multichannels is an important factor. As the marketing and sales capability of both Mybilet and Estore is dependent on the channels like internet , mobile channel options and classic channels like telephone,fax or direct mail.Estore also has interactive digital television channel directed to customers as the organization does not have a physical located store.Mybilet supports the print of the provided service from the physical kiosk. Both of the organizations does not support advanced personalization and mass customization strategies but support personalized e-mail offerings sent to the customer.

- Cost effectivity in operations and increased retentions rates are remarkable electronic customer relationship management benefits for Mybilet and for Estore with the future electronic customer relationship management project, improvements in efficiencies of customer service department and targeting valuable customers with the help of analytical capabilities are expected benefits as with the current operations profitability and operational effeciencies are mentioned as remarkable benefits. The evaluation of electronic customer relationship management investments is not made by both organizations but the measurement efforts in Mybilet based on both suppliers and customers where Estore basic operational measurement metrics for the current operations and creating new measurement criterias for future electronic customer relationship management implementation.

Recommendations

- With the current state Estore does not have the capability to focus or segment its profitable customers since the membership portfolio of the organization is too large to segment manually. It should be essential for Estore to implement analytical capabilities to segment valuable customers for increasing profitability and operational efficiency as the organization uses e-mail marketing method.

- Both Estore and Mybilet should consider calculation of customer lifetime value (CLV) in order to evaluate and provide organization the average value of each customer for better precision.

- With the current state both organizations are not aware of the customer churn situation. Both organizations should consider setting specific metrics for customer churn situation and applying winback strategies.

- Both organizations should consider improving web site features. Mybilet must improve the security gap in the encryption support of membership information and both organizations should consider giving support for voice over IP support for communicating customers online.

- Both organizations must consider the advanced personalization functions and mass customization for improving customer satisfaction and finding market niches.

BIBLIOGRAPHIA

Adebanjo,Dotun: "Classifying and selecting e-CRM applications: An analysis-based proposal",**Management Decision**, Vol.41,No.5-6, 2003,pp.570-578.

Addis,Michela,Morris Holbrook: "On the conceptual link between mass customisation and experiential consumption:An explosion of subjectivity," **Journal of Consumer Behaviour**,Vol.1,No.1,2001,pp.50-66.

Aigbedo,Henry: “Managing Operations in the E-Commerce Era:Requirements and Challenges,” **Intelligent Enterprises of the 21st Century**, Ed.By. Jatinder Gupta, Sushil Sharma, Hershey,Idea Group Publishing, 2004,pp. 281-301.

Anderson,Kristin,Carol Kerr: **Customer Relationship Management**,New-York, McGraw-Hill, 2002.

Anke,Juergen,David Sundaram: “Personalization techniques and their application", **Encyclopedia of E-Commerce, E-Government, and Mobile Commerce**, Ed.By.Mehdi Khosrow-Pour, Hershey, Idea Group,2006,pp.919-925

Bardakci, Ahmet,Jeryl Whitelock: "Mass-customisation in marketing: The consumer perspective",**The Journal of Consumer Marketing**, Vol.20, No.4,2 003,pp.463-479.

Berry,Michael,Gordon Linoff: **Data mining techniques:for marketing, sales, and customer relationship management**, Second Edition, Indianapolis, Wiley Publishing,2004.

Bhattacherjee,Anol: "An empirical analysis of the antecedents of electronic commerce service continuance", **Decision Support Systems**,Vol.32,No.2,2001, pp.201–214.

Blecker,T.,Nizar Abdelkafi: "Complexity and variety in mass customization systems: analysis and recommendations", **Management Decision**,Vol.44,No.7, 2006, pp. 908-929.

Bligh,Philip,Douglas Turk: **CRM Unplugged:Releasing CRM's Strategic Value**, New Jersey, John Wiley & Sons, 2004

Boon,Olaf,Brian Corbitt: "Identifying some of the Prerequisites for CRM Implementation from an Organisations Perspective:a Review of the Literature," School Working Papers Series, No.57,2002,(online) http://www.deakin.edu.au/buslaw/infosys/ docs/ workingpapers/ archive/Working_ Papers_ 2002/ 2002_ working_ papers.htm, 5 February 2006.

Bradshaw,David,Colin Brash: "Managing customer relationships in the e-business world: How to personalise computer relationships for increased profitability," **International Journal of Retail & Distribution Management**, Vol.29, No11, 2001, pp.520-530.

Bridges,E.,Goldsmith,R.,Hofacker,C.:"Attracting and Retaining Online Buyers: Comparing B2B and B2C Customers," **Advances in Electronic Marketing** ,Ed. By. Irvine Clarke,Theresa B. Flaherty,Hershey,Idea Group,2005,pp.1-27.

Chaffey, Dave: **Total E-mail Marketing**, Oxford, Butterworth-Heinemann, 2003, p.12.

Campbell,Alexandra J.: ”Creating customer knowledge competence: managing customer relationship management programs strategically,” **Industrial Marketing Management**, Vol.32, No.5,2003, pp.375– 383.

Chalmeta, Ricardo: "Methodology for customer relationship management",Journal **of Systems and Software**,Vol.79,No.7,2006,pp.1015-1024.

Chellappa,R.,Raymond S.: "Personalization versus Privacy: An Empirical Examination of the Online Consumer's Dilemma",**Information Technology and Management**,Vol.6,No.2-3,2005,pp.181 – 202.

Collier,D.A.,Susan Meyer: "A service positioning matrix",**International Journal of Operations & Production Management**,Vol.18,No.12,998,pp.1223-1244.

Conway,Kelly,Julie Fitzpatrick: “The customer relationship revolution—a methodology for creating golden customers”,(Online), www.crm2day.com/ library/ EpFkZFFpuZxFJFxpzW.php,17 April 2006

Croteau,A.,Li,P.: ”Critical success factors of CRM technological initiatives,” **Canadian Journal of Administrative Sciences**,Vol.20,No.1,2003, pp.21-35.

Cuthbertson,Richard,Arttu Laine: "The role of CRM within retail loyalty marketing",**Journal of Targeting, Measurement and Analysis for Marketing**, Vol.12, No.3, pp.290–304.

Dai,H.,Bamshad M.: "Integrating Semantic Knowledge with Web Usage Mining for Personalization",**Web mining: applications and techniques**,Ed.by.

Anthony Scime, Hershey, Idea Group Publishing,2005,pp.276-306.

Davenport,T.H.,Michael C. B.: "Managing information about processes," **Journal of Management Information Systems**,Vol.12,No.1,1995,pp.57-80.

Eirinaki,Magdalini,Michalis V.: "Web Mining for Web Personalization", **ACM Transactions on Internet Technology (TOIT)**, February 2003, Vol.3, No.1, pp.1-27.

Eke,Selda: "CRM-Müşteri İlişkileri Yönetimi", **Active**, No.37, 2004,pp.76-84.

Eriksson,K.,Mattson,J.: "Managers' perception of relationship management in heterogeneous markets," **Industrial Marketing Management**,Vol.31,No.6,2002,pp 535– 543.

Etzion,O.,Amit F.,Segev W.: "e-CLV: A Modeling Approach for Customer Lifetime Evaluation in e-Commerce Domains, with an Application and Case Study for Online Auction",**Information Systems Frontiers**, Vol.7, No.4,pp.421–434.

Feinberg,Richard,Rajesh Kadam: "E-CRM Web service attributes as determinants of customer satisfaction with retail Web sites," **International Journal of Service Industry Management**,Vol.3,No.5,2002,pp.432-452.

Feinberg, Richard,et.al.: "The state of electronic customer relationship management in retailing",**International Journal of Retail & Distribution Management**,Vol.30,No.10,2002,pp.470-482.

Fjermestad,Jerry,Nicholas Romano: "Electronic customer relationship management :Revisiting the general principles of usability and resistance--an integrative implementation

framework",**Business Process Management Journal**, 2003, Vol.9,No.5, pp.572-592.

Gallaugher,John,Suresh R.: "Online Exchanges and Beyond: Issues and Challenges in Crafting Successful B2B Marketplaces", **Business to Business Electronic Commerce:Challenges and Solutions**,Ed.By.Merrill Warkentin, Hershey, Idea Group Publishing, 2002,pp.51-70

Grant, Robert M.: "The resource-based theory of competitive advantage: Implications for strategy formulation,"**California Management Review**, Vol.33,No.3,1991,pp.114– 135.

Gurau,C.,Ranchhod,A.,Hackney,R.: "Customer-Centric Strategic Planning: Integrating CRM in Online Business Systems," **Information Technology and Management**,Vol.4,No.2-3,2003, pp.199-214.

Haa,S.H.,Sung M.B.Sang C. P.: "Customer's time-variant purchase behavior and corresponding marketing strategies: an online retailer's case", **Computers&Industrial Engineering**, Vol.43,No.4,2002,pp.801–820.

Hamid, Noor Raihan Ab: "E-CRM: Are we there yet?",**Journal of American Academy of Business**,Vol.6,No.1,2005, pp.51-58.

Hirschowitz, Anton: "Closing the CRM loop: The 21st century marketer's challenge: Transforming customer insight into customer value," **Journal of Targeting, Measurement and Analysis for Marketing**,Vol.10,No.2,2001,pp.168-179.

Jutla,D.,James C.,Peter B.: "Enabling and Measuring Electronic Customer Relationship Management Readiness",**Proceedings of the 34th Annual**

Hawaii International Conference on System Sciences(HICSS-34),Vol.7,2001,pp.7023-7033.

Kane,Rob: "The Top 10 Myths of Hosted CRM" (online) http://www.aplicor.com/pdf/10myths_hostedCRM_whitepaper.pdf,25 February 2006

Kellen,Vince: “CRM Measurement Frameworks",(Online) http://www.crm2day.com/ crm_ academic_ papers/academic_papers-4.php,5 May 2006.

Kim,S.,Jung,T.,Suh,E.,Hwang,H.: ”Customer segmentation and strategy development based on customer lifetime value: A case study,” **Expert Systems with Applications**,Vol.31,No.1,2006,pp.101–107.

Kim, J.,Suh,E.,Hwang, H.: ”A Model for Evaluating the Effectiveness of CRM using the Balanced Scorecard,” **Journal of Interactive Marketing**,Vol.17,No.2,2003, pp. 5-19.

La,KhanhV.,Jay Kandampully: "Electronic retailing and distribution of services:Cyber intermediaries that serve customers and service providers",**Managing Service Quality**,Vol.12,No.2,2002,pp.100-117.

Larivie`re,B.Dirk Van den P.: "Predicting customer retention and profitability by using random forests and regression forests techniques",**Expert Systems with Applications,**Vol.29,No.1,2005,pp.472–484.

Law,M.,Lau,T.,Wong,Y.H.: “From customer relationship management to customer-managed relationship: Unraveling the paradox with a co-creative perspective,“ **Marketing Intelligence & Planning**,Vol.21,No.1,2003.pp.51-61.

Leary,Brent: "On-Demand Services" ,**Network Journal**, Vol.13, No.6 ,2006, pp.28-29.

Lindgreen,Adam: "The design, implementation and monitoring of a CRM programme: a case study," **Marketing Intelligence & Planning**, Vol.22, No.2, 2004, pp.160-186.

Lindgreen,Adam,et.al.: "A relationship-management assessment tool: Questioning, identifying,and prioritizing critical aspects of customer relationships",**Industrial Marketing Management**, Vol.35, No.1, 2006, pp.57-71.

Loshin, Pete ,John Vacca: **Electronic Commerce**, 4th edition Charles River Media, 2004

Ma,C.,David C.,David Y.: "Data warehousing, technology assessment and management",**Industrial Management + Data Systems**,Vol.100,No.3,pp.125-135.

Madlberger,Maria: "Strategies and business models in electronic retailing: indications from the U.S. and the UK", **ACM International Conference Proceeding Series;Proceedings of the 6th international conference on Electronic commerce**,Vol.60,2004,pp.296-303.

Mahadevan,B.: “Business models for Internet-based e-commerce: An anatomy,” **California Management Review** ,Vol. 42,No.4,2000, pp.55–69.

Manco,G.,RiccardoO.,AndreaT.: "The Scent of a Newsgroup:Providing Personalized Access to Usenet Sites through Web Mining",**Web mining:applications and techniques**,Ed.by. Anthony Scime,Hershey,Idea Group Publishing,2005,pp.393-414.

Markellou,P.,MariaR.,Spiros S.: "Mining for Web Personalization",**Web mining:applications and techniques**,Ed.by. Anthony Scime,Hershey,Idea Group Publishing, 2005,pp.27-48.

Massad,N.,Robert H., Kevin C.: "Customer Satisfaction with Electronic Service Encounters",**International Journal of Electronic Commerce**,Vol.10,No.4, 2006,pp.73–104.

Massey,A.,Holcom,K.: ”Re-engineering the customer relationship: Leveraging knowledge assets at IBM,” **Decision Support Systems**, Vol.32, No.2, 2001,pp.155-170.

Payne,Adrian: **Handbook of CRM: Achieving Excellence in Customer Management**, Oxford, Butterworth-Heinemann,2005.

Payne,Adrian,Pennie Frow: "A Strategic Framework for Customer Relationship Management", **Journal of Marketing**,Vol.69,No.4,2005,pp.167-181.

Phippen,A.,L.Sheppard,S.Furnell: "A practical evaluation of Web analytics", **Internet Research**,Vol.14,No.4,2004,pp.284-293.

Plakoyiannaki,E.,Nikolaos T.: ”Customer relationship management: A capabilities portfolio perspective,” **Journal of Database Marketing**, Vol.9, No.3, 2002, pp.228-238.

Reichheld,F. F., Phil Schefter: "E-Loyalty: Your secret weapon on the Web", **Harvard Business Review**, Vol.78, No.4, 2000, pp.105–113.

Reichheld,F.,RobertM.,C.H.: "The loyalty effect - the relationship between loyalty and profits",**European Business Journal**,Vol.12,No.3,2000,pp.134-139.

Rigby,D.,Frederick F.,Phil S.: "Avoid the four perils of CRM",**Harvard Business Review,**Vol.80,No.2,2002,pp.101–109.

Romano,Nicholas C,Jerry F.: "Electronic Commerce Customer relationship management research: an assessment of research",**International Journal of Electronic Commerce**,Vol.6,No.3, pp.61-114.

Ross,David F.: “E-CRM from a supply chain management perspective,“ **Information Systems Management** ,Vol.22,No.1,2005,pp.37-45.

Rygielski,C.,Jyun W.,David C.: "Data mining techniques for customer relationship management",**Technology in Society**, Vol.24,No.4,2002,pp.483-502.

Saloner,G.,Michael S.,Eric M.: “Siebel Systems, Inc.",1999,(Online) https://gsbapps. stanford.edu/ cases/ detail1.asp? Document_ID=1202,23 May 2005

Sawabini,Stuart: ”EDI and the Internet”, **The Journal of Business Strategy**, Vol.22, No.1, 2001, pp.41-44.

Song,Zongyao,et.al.: "How Customer Relationship Creates Value: The Role of Its Consistency with Firm Strategies",**Proceedings of ICSSSM '05. 2005 International Conference on Services Systems and Services Management**, Vol.1, 2005,pp.144-150.

Scullin,S.,et.al.: "Electronic Customer Relationship Management: Benefits, Considerations, Pitfalls and Trends", (Online) http:// whitep apers. techrepublic.com.com/whitepaper.aspx?docid= 238440,25 May 2006

Scullin,S.,Jerry F.,Nicholas R.: "E-relationship marketing: changes in traditional marketing as an outcome of electronic customer relationship management",**Journal of Enterprise Information Management**,2004,Vol.17,No.6, pp. 410-415.

Sharp,Duane E.: **Call Center Operation- Design, Operation, and Maintenance**, Amsterdam, Digital Press,2003.

Strauss,J,Hill,D.J.: ”Consumer complaints by e-mail: An exploratory investigation of corporate responses and customer reactions,” **Journal of Interactive Marketing**,Vol.15,No.1,2001,pp.63-73.

Sugumaran,V.,Andrea J.,Stefan K.: "Supporting mass customization with agent-based coordination",**Information Systems and E-Business Management**, Vol.4, No.1,2006,pp.83-106.

Tan,X.,Yen,D.C.,Fang,X.: “Internet integrated customer relationship management: A key success factor for companies in the e-commerce arena,” **The Journal of Computer Information Systems**, Vol.42, No.3, 2002,pp.77-87.

Tellefsen,T.,Thomas,G. P.: “The antecedents and consequences of organizational and personal commitment in business service relationships,” **Industrial Marketing Management**, Vol.34, No.1,2005,pp.23– 37.

Tian,Y.,Stewart,C.: “History of E-Commerce,” **Encyclopedia of E-Commerce, E-Government, and Mobile Commerce**, Ed.By.Mehdi Khosrow-Pour, Hershey, Idea Group,2006,pp.559-564.

Tzokas,N.,Michael S.: "Competitive advantage, knowledge and relationship marketing: where, what and how?," **The Journal of Business & Industrial Marketing**, Vol.19, No.2,2004, pp.124-135.

Vrechopoulos,Adam P.: "Mass customisation challenges in Internet retailing through information management",**International Journal of Information Management**, Vol.24, No.1, 2004,pp.59-71.

Warkentin,M.,Bajaj,A.: "The On-Demand Delivery Services Model for E-Commerce," **Managing business with electronic commerce:issues and trends**, Ed.by.Aryya Gangopadhyay, Hershey, Idea Group Publishing,2002,pp.131-149.

Winer, Russell S.: "Customer Relationship Management:A Framework, Research Directions, and the Future",(Online) http://crm.ittoolbox.com/documents/academic-articles/customer-relationship-management-a-framework-research-directions-and-the-future-3900,05 January 2006

Xu,Y.,Yen D.,Lin,B.,Chou, D.: "Adopting customer relationship management technology," **Industrial Management and Data Systems**, Vol.102, No.8, 2002, pp.442-452.

Yao,J.E.,Liu,C.,Chen,Q.,Lu,J.: "Administering and Managing a Data Warehouse," **Encyclopedia of data warehousing and mining**,Ed.By.John Wang,Hershey,Idea Group Publishing, 2006, pp.17-22.

Yi,H.,Corbitt B.,Thanasankit T.: "Trust and Consumers in B2C eCommerce", **School Working Papers Series**, 2002, (online)

http://www.deakin.edu.au/ buslaw/ infosys/docs/workingpapers/archive/Working_Papers_2002/2002_working_papers.htm,5 February 2006.

Yen,H. J. R.,Kevin P. G.: "Internet retail customer loyalty: the mediating role of relational benefits",**International Journal of Service Industry Management**, 2003, Vol.14,No.5, pp.483-501.

Zablah,A.,Bellenger,D.,Johnston,W.:"An evaluation of divergent perspectives on customer relationship management:Towards a common understanding of an emerging phenomenon," **Industrial Marketing Management,**Vol.33,No.6,2004, pp.475–489.

Zhou,Zhi-Hua: "Comprehensibility of Data Mining Algorithms," **Encyclopedia of data warehousing and mining**,Ed.By.John Wang, Hershey,Idea Group Publishing, 2006, pp.190-195.

"estorehakkında",(Online) http://b2b. estore. com.tr/b2b_hakkinda.asp, 11 January 2007

"Hakkimizda",(Online)http://www. mybilet.com/ about.aspx,11 January 2007

"Hello,dolly!",CIO Magazine,15 May 2001,(online),http://www.cio.com/archive/ 051501/ hello.html, 06 Jun 2006

"Paperless tigers",CIO Magazine,15 February 2004,CIOMagazine,http://www. cio.com/archive/ 021501/crm.html, 06 jun 2006

"Window seat", CIO Magazine,15 July 2000,(online),http://www.cio.com/ archive/071500/ window.html,06 Jun 2006

APPENDIX 1: THE INTERVIEW QUESTIONS OF ELECTRONIC CUSTOMER RELATIONSHIP MANAGEMENT: AN APPLICATION IN E-RETAILING SECTOR

Electronic customer relationship management is the latest paradigm of customer relationship management approaches,which is usually embraced by organizations as a crucial competitive strategy among the changing and improving business world.

The purpose of this research is to investigate the electronic customer relationship management activities in electronic retailers in three dimensions: electronic customer relationship management implementation, electronic customer relationship management strategies and performance measurements of electronic customer relationship management.

Thank you for your contributions to the research

İbrahim Sünney

A) Questions For General Organization Information

1. Name of the Organization

2.Name of the respondent

3.The respondent's position

4.Number of Employees

B) Questions for Electronic Customer Relationship Management Definitons, Goals and implementation

1-Does your organization pursue the electronic customer relationship management concept with the tools and technologies? If your answer is yes please explain with the extent of usage in your organization.

2- Please explain why electronic customer relationship management tools and technologies are used by your organization.

3- What is the definition of electronic customer relationship management for your organization? Please explain.

4- Please explain the electronic customer relationship management goals for your organization.

5- What are the electronic customer relationship management tools and technologies used in your organization? Please explain if your organization is planning to use further tools and technologies in the future.

6- What conditions apply to your electronic customer relationship management tools and technologies selection? Please explain.

7- Please explain the time and financial costs of your electronic customer relationship management project.If your organization is implementing the project please explain your expectations.

8- Please tell and explain the necessary factors for succesful electronic customer relationship management implementation in your organization.

9- How did your organization integrated electronic customer relationship management to your organization. Please explain your methods.

10- Did you have troubles during your electronic customer relationship management implementation in your organization.If your answer is yes please explain.

C) Questions for Electronic Customer Relationship Management Tools and Strategies

1- Does your organization face challenges and problems in acquiring customer data? If your answer is yes please explain.

2- What are the main channels that your organization use to acquire customer data? Please explain the role of these channels in your organization's electronic customer relationship management strategies.

3- What are the general attributes of your organization's Web site? Please explain the role of these attributes in your organization's electronic customer relationship management strategies.

5- What are the electronic commerce attributes of your organization's web site? Please explain the role of these attributes in your organization's electronic customer relationship management strategies. If your answer includes "Cross-selling","Up-selling" and "Winback" please explain the role of these initiatives in your electronic customer relationship management strategies.

6- What are the post-sales attributes of your web site? Please explain the role of these attributes in your electronic customer relationship management strategies.

7- Please explain the electronic customer relationship management steps in your organization. If your answer includes "Customer identification","Customer Segmentation","Customer Valuation" and "Customer interaction" please explain the role of these steps in your electronic customer relationship management strategies.

9- What are the dominant marketing strategies in your organization? If your answer includes "E-mail Marketing", "Personalization" and "Mass Customization" please explain the role of these strategies in your electronic customer relationship management understanding.

10- What kind of analytic electronic customer relationship management capabilities does your organization hold? If your answer includes "Web Analytics","Data Warehousing" and "Data Mining" please explain the role of these capabilities in your organization’s electronic customer relationship management strategies

11- If your organization implemented electronic customer relationship management analytic technologies, please tell the problems you faced during practice.

12- If your organization is acquiring or storing customer data and metadata,please explain the data sharing policies and strategies for your organization.

D) Questions for Electronic Customer Relationship Management Performance and Measurement

1- Please explain the benefits gained with the electronic customer relationship managementation for your organization. If your organization is planning to

implement electronic customer relationship management please tell the expected benefits.

3- How did the electronic customer relationship management affected your organization's relationships with customers? If your organization is planning to implement electronic customer relationship management please tell the expected affects.

4- Does your organization measure the changes of customer relationships? If your answer is yes please tell your measurement metrics and criteria.

5- Does your organization measure your web site performance? If your answer is yes please tell your measurement metrics and criteria.

APPENDIX 2 : GENERAL INFORMATION OF RESPONDENTS

Name Of The Organization: OPUS Information Systems Co.
Online address : http://www.mybilet.com
Respondent : Ufuk Acar
Title in the Organization : General Manager
Telephone : 0.312.210.00.50
Fax : 0.312.210.00.54
E-mail : ufukacar@mybilet.com

Name Of The Organization: E-store Elektronik ve Sanal Mağazacılık A.Ş.
Online address : http://www.estore.com.tr/
Respondent : Şenay Çağlayan
Title in the Organization : Müşteri Hizmetleri Grup Müdürü
Telephone : 0.212.385.05.39
Fax : -
E-mail : senay.caglayan@estore.com.tr

Name Of The Organization: E-store Elektronik ve Sanal Mağazacılık A.Ş.
Online address : http://www.estore.com.tr/
Respondent : Halil İbrahim Çubukçu
Title in the Organization : Müşteri Hizmetleri Bölüm Yöneticisi
Telephone : 0.212.284.40.55
Fax : 0.212.325.67.92
E-mail : halil.cubuk@estore.com.tr