Investigating CRM Activities in E-Banking of Iranian Banks

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Investigating CRM activities in e-banking of Iranian banks

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Abstract

One of the most important thing for the banks is how can they develop an effective process for establishing and maintaining a relationship with key consumers and industrial customers? The aim of this research is to investigate CRM activities in e-banking among Iranian banks. These banks are already adopting CRM and approaching it differently, and achieving different rates of success in terms of customer satisfaction and customer relationship management. A comparative approach of their attitudes toward CRM, therefore, will reveal important insights.

Following similar approaches researchers have employed in Pakistan, Malaysia, the United Kingdom, and Ireland, this research investigated the touch points and services that connect banks to their customers. According to these researches in other countries, it has developed a theoretical framework to investigate CRM activities in Iranian banks. The main components of our research framework are: Communicational/collaborative CRM, Operational CRM, and Analytical CRM. This also considers the relationship among the components. In summary, analytics drives decision making in operational CRM for the deployment of marketing sales and customer-service processes. But without the data collected via the operational CRM processes, analytical CRM wouldn’t have any data to work with. And the data processed by analytical CRM tools couldn’t be effectively disbursed, and strategic decision making wouldn’t occur, without collaborative CRM. Collectively, operational CRM, analytical CRM, and business intelligence work simultaneously to drive the customer life cycle.

This research will reveal Iranian banks’ positioning with regard to CRM activities, a comparison between Iranian banks’ CRM activities, and also some conclusions for practitioners.

Keywords: Customer relationship management (CRM), e-banking, qualitative research
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Chapter 1: Introduction

This chapter starts with research background to give an idea about the area of the thesis. This will be followed by the problem discussion, which will end with an overall purpose of the study from which then specific research questions will be formulated. The chapter ends with demarcations and disposition of the thesis and a summary of the chapter.

Imagine walking into your local bank to be greeted by a friendly assistant who, after asking only for your name (no account code or reference number), then has access to all of your details enabling him or her to serve you immediately. While you are being served, the assistant observes that you have recently called the customer service department on two occasions and asks whether you are completely satisfied at present.

When you say that actually you are thinking of switching companies, the assistant is able immediately to recommend a range of products more suited to your banking needs, thanks to the information in front of them. All the advice given is relevant to you as an individual. You are no longer just a number.

In the mid-twentieth century, mass production techniques and mass marketing changed the competitive landscape by increasing product availability for consumers. However, the purchasing process that allowed the shopkeeper and customer to spend quality time getting to know each other was also fundamentally changed. Customers lost their uniqueness, as they became an “account number” and shopkeepers lost track of their customers’ individual needs as the market became full of product and service options.

Many companies today are racing to re-establish their connections to new as well as existing customers to boost long-term customer loyalty. Some companies are competing effectively and winning this race through the implementation of relationship marketing principles using strategic and technology-based customer relationship management (CRM) applications.
Globalization and technology improvements have forced companies into tough competition. In this new era organizations are focusing on managing customer relationships, particularly customer satisfaction, in order to efficiently maximize revenues (Constantinos 2003). Today marketing is not just developing, delivering and selling, it is moving towards developing and maintaining mutually long term relationships with customers (Buttle 1996).

Relationship marketing is becoming important in financial service (Zineldin 1996). If a bank develops and sustains a solid relationship with its customers, its competitors can not easily replace them and therefore this relationship provides for a sustained competitive advantage (Gilbert 2003). Moriarty et al. (1983) has suggested relationship concept in the banking sector which states that banks can increase their profits by maximizing the profitability of the total customer relationship over time, instead of seeking to get more profit from any single transaction.

Perrien et al. (1992) observed server competitive pressures that forces financial intuition to restructure their marketing strategies by developing into long-term relationship with customers. The above discussion about CRM indicates the need for banks to think about establishing long-term relationships with their customers.

1.1. Motivation and importance

*In this section explicit benefits that will accrue from this study will be describe. The importance of “doing the study now” should be emphasized (cooper)*

CRM is an attractive area for research because of its relative novelty and exploding growth. Competition is escalating, both from traditional players and new entrants, owing to deregulation. Changing consumer behavior and needs, globalization, deregulation, disintermediation and the emergence of new financial service models are all dynamics in the financial services industry. Information technology is also having its impact (Park, 1999).
The more a marketing paradigm evolves, the more long-term relationship with customers gains its importance. CRM, a recent marketing paradigm, pursues long-term relationship with profitable customers. It can be a starting point of relationship management to understand and measure the true value of customers since marketing management as a whole is to be deployed toward the targeted customers and profitable customers, to foster customers’ full profit potential. Corporate success depends on an organization’s ability to build and maintain loyal and valued customer relationships. Therefore, it is essential to build refined strategies for customers based on their value.

The motivating factors for companies moving towards CRM technology are presented in Table 1-1.

<table>
<thead>
<tr>
<th>Main Reasons for implementing CRM</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving customer satisfaction level</td>
<td>4.32</td>
<td>4.00</td>
<td>4.44</td>
<td>4.19</td>
</tr>
<tr>
<td>Retaining existing customers</td>
<td>4.46</td>
<td>4.16</td>
<td>3.90</td>
<td>3.95</td>
</tr>
<tr>
<td>Improving customer lifetime value</td>
<td>4.38</td>
<td>4.22</td>
<td>4.36</td>
<td>3.48</td>
</tr>
<tr>
<td>Providing better strategic information to sales, marketing, finance, etc.</td>
<td>4.12</td>
<td>3.88</td>
<td>3.82</td>
<td>4.08</td>
</tr>
<tr>
<td>Attracting new customers</td>
<td>3.98</td>
<td>3.60</td>
<td>3.48</td>
<td>3.50</td>
</tr>
<tr>
<td>Cost savings</td>
<td>3.18</td>
<td>3.33</td>
<td>2.98</td>
<td>2.98</td>
</tr>
</tbody>
</table>

Notes: 1 – not important; 5 – very important

The data shows that a major consideration for companies in using CRM is to
improve customer satisfaction level, to retain existing customers and to improve customer lifetime value. Providing strategic information from the CRM systems appears less important than improving satisfaction level and customer lifetime value.

This shows that most managers accept the view that gaining a new customer is more costly than retaining an existing customer. Several authors highlight the strategic advantage of maintaining the customer base as opposed to merely attracting new customers (Luck and Lancaster, 2003; Rowley, 2002). For example, Kandampully and Duddy (1999) quote that “it costs five times more to attract a new customer than it does to keep an existing one”. Zineldin (1996) argues that getting customers is important, but keeping and satisfying them is more important. Customer retention is less costly and, therefore, more profitable than customer attraction.

Retention also contributes to the creation of reputation, which in turn further lowers customer acquisition costs. Managers no longer see CRM as a quick way to bring new customers on board.

Using CRM for cost reduction is ranked the last in the four-year survey. This suggests that most managers do not perceive CRM systems as simply a means of reducing the costs of customer service. Sweet (2003) reports that specialist software supporting CRM operation such as contact management systems are perceived as important by 66 per cent of the respondents, 52 per cent of the respondents regard the call centre as important (Xu & Walton, 2005).

The percentages are significantly higher than that of the analytical CRM systems. Revisiting the data suggests that many CRM systems implemented are aimed at improving operational aspects of CRM. The operational efficiency in dealing with customer enquiries could result in improved customer satisfaction level and customer loyalty. However, gaining customer knowledge from CRM systems and providing strategically important customer information to other departments are not perceived as important as improving operational efficiency.

Rowley (2002) defines customer knowledge as:
• Knowledge about customers, which includes knowledge about potential customers, customer segments and individual customers; and

• Knowledge possessed by customers.

Minna and Aino (2005) differentiate customer knowledge from customer data and customer information, and suggest that customer knowledge can be explicit, the structured customer information in databases, or in tacit customer knowledge – knowledge in mind of employees and customers.

CRM initiatives have resulted in increased competitiveness for many companies as witnessed by higher revenues and lower operational costs. Managing customer relationships effectively and efficiently boosts customer satisfaction and retention rates (Reichheld, 1996a,b; Jackson, 1994; Levine, 1993). CRM applications help organizations assess customer loyalty and profitability on measures such as repeat purchases, dollars spent, and longevity.

CRM applications help answer questions such as “What products or services are important to our customers? How should we communicate with our customers? What are my customer’s favorite colors or what is my customer’s size?” In particular, customers benefit from the belief that they are saving time and money as well as receiving better information and special treatment (Kassanoff, 2000). Furthermore, regardless of the channel or method used to contact the company, whether it is the Internet, call centers, sales representatives, or resellers, customers receive the same consistent and efficient service (Creighton, 2000).

The focus of CRM helped companies to understand the customers’ current needs, what they have done in the past, and what they plan to do in the future to meet their own goals (Xu 2005). The intelligent use of information about customer needs will create long-term, two-way relationship with customers.

Companies have come to realize that in order to develop long-term, successful relationships with their customers, they need to focus on “economically valuable” customers while eliminating “economically invaluable” ones (Verhoef & Donkers 2001).
Instead of treating all the customers equally, it is better to develop customer-oriented strategies.

CRM enables organizations to set up such strategies by managing individual customer relationships. From the service oriented industry perspective, customer satisfaction and retention is ensured by solving customer problems quickly. Customer satisfaction is made certain by allocating, scheduling and dispatching the right people, with right parts, at the right time (Xu 2005).

1.2. Research problem and purpose

A useful way to approach the research process is to start the basic dilemma that prompts the research and then try to develop other questions by progressively breaking down the original question into more specific ones (Cooper)

A primary purpose of management and marketing strategy is to develop a competitive advantage (Devlin & Ennew, 1997). A competitive advantage provides customers with superior value compared to competitive offerings. According to Porter (1980), there are two generic ways of establishing a competitive advantage, the low-cost supplier or by differentiating the offer in a unique and valuable way.

Every company has to consider how to enter a market and then build and protect its competitive position. Banks begin to realize that no bank can offer all products and be the best/leading bank for all customers. They are forced to find a new basis for competition and they have to improve the quality of their own products/services (Prodserv) (Zineldin, 1996).

Not long ago, companies with efficient facilities and greater resources were able to satisfy customer needs with standardized products, reaping advantages through productivity gains and lower costs. Mass marketing and mass production were successful as long as customers were satisfied with standardized products.

As more firms entered the market, mass marketing techniques, where the goal was
to sell what manufacturing produced, started to lose effectiveness. Target marketing, or segmentation, shifted a company’s focus to adjusting products and marketing efforts to fit customer requirements. Changing customer needs and preferences require firms to define smaller and smaller segments.

In this internet age, when the customer is having access to a variety of products and services it is becoming very difficult for banks to survive. In this situation, when customer inquiries are not met easily or transactions are complicated, the customer will asks for new levels services, and only chose those institutions who are making a real effort to provide a high level of quality, fast and efficient service through all the banks touch points, call centers, ATMs, voice response systems, internet and branches (Puccinelli 1999). Managers really need to look at areas where opportunities lie because industry consolidation, virtual delivery channels and the ability to move money around at the click of a mouse are making it easier for customers to pack their bags and say by to the bank (Puccinelli 1999). Of course, only depending on technological capabilities can’t insure customer service (Dyche 2001). Company need to analyses the business situation and understands the real requirement for automation (Xu 2005).

In this difficult situation CRM is an opportunity that banks can avail to rise above minor advantages by developing actual relationship with their customers (Bose 2002). Company committed to CRM must continuously invest in its relationship with its customers, because it is the only competitive advantage remaining to an organization (Xu 2005). Often companies have to change their internal business processes, and exploit human and organizational recourses (Xu 2005), in order to manage good relationship with their customers. Institutional success lies in the secret of successfully delivering customer oriented product or service to every customer (Bose 2002).

Banking has traditionally operated in a relatively stable environment for decades. However, today the industry is facing a dramatically aggressive competition in a new deregulated environment. The net result of the recent competition and legislation is that traditional banks have lost a substantial proportion of their domestic business to essentially non-bank competition. Competition will undoubtedly continue to be a more
significant factor. Finding a place in this heating sun becomes vital to the long-range profitability and ultimate survival of the bank. Those banks that are not considering the new atmosphere to build and protect their competitive position will likely become victims of that heating sun.

Evaluation of the relationship among quality, productivity and positioning requires an understanding and examination of the elements of quality relative to the operations strategy (Zineldin1996). Improving the intangible attributes of service quality is not necessarily achieved by higher resource spending. It is likely that the service quality may still be perceived as poor because intangible aspects of the service package are not being addressed.

Many banks have found themselves in this position with many of their customers. Unlike manufacturing and some service industries, bankers are not only selling products and services. First and foremost, they are selling their organization reputation with every “customer relationship”. A bank has to create customer relationships that deliver value beyond the provided by the core product. This involves added tangible and intangible elements to the core products thus creating and enhancing the “product surrounding”. That is the nature of competition. If there are many others who can do what you do, then you do not have many added values. This dynamic erodes your added value. To protect its added value, a bank needs to manage, create and enhance long-term customer relationships.

The aim of this research is to investigate the customer relationship management activities that are already exist in e-banking activities in Iranian banks. By motivations that are already discussed Iranian banks are already adopt themselves through this mindset more or less. Iranian banks proceed to this important issue differently with different rates of success in customer satisfaction and customer relationship management. So, with a comparative approach their attitudes toward CRM will reveal and embrace their success and failure factors. In the similar approaches that researchers have done in the case of Pakistan, UK and Ireland the touch points and services that connect the banks to their customers were investigated. Based upon this
discussion the problem area has formed as: “How can CRM activities in Iranian banks be described?”

1.3. Disposition of the Thesis

The study consists of seven chapters as presented in figure 1-1. Chapter one, introduction, contains the research background followed by problem discussion. Chapter two, literature review, will present a review of previous research relevant to the purpose of this thesis. Chapter three, frame of reference, will present the theories that formulate the theoretical frame of reference; research purpose and questions, demarcations and disposition of the thesis. Chapter four, methodology, will cover the adopted methodological choices for this study. It also addresses the issues concerning the validity and reliability of the study. Chapter five, empirical data presentation, will present the collected data from documentation and interview. Chapter six, data analysis, will deal with analyzing the data presented in chapter five. The thesis ends with chapter seven, findings and conclusions, where general conclusions are drawn based on the findings of the research conducted. Finally, the implications for management and further research will be discussed.

![Figure 1-1: Disposition of the Thesis](image-url)
1.4. Summary of the Chapter

The primary goal of this chapter was to introduce the area in which the study is conducted, drilling down from a general viewpoint towards the specific study problem. The chapter started with a brief introductory background covering the scope of this thesis. In order to do that, the core issues of this study are CRM, characteristics of CRM, and customer relationship management activities in e-banking were defined and discussed. Thereafter, the research problem, research purpose and questions of this thesis were formulated followed by the limitations of the research study in terms of the topic and choosing the sample. The next chapter comprises the relevant literature review. It will cover related issues and theories of different CRM activities in e-banking which mentioned in previous researches.
Chapter 2: Literature review

Based on the research problem presented in chapter one, content of CRM, characteristics of it which are operational, collaborative and analytical CRM will be presented. After that there are some definitions about banking, e-banking and some CRM activities which are already exist in banking processes.

Customer relationship management (CRM) is one of the fastest growing management approaches being adopted across many organizations. Ovum (Bradshaw and Brash, 2001), an independent research and consulting company, define CRM as: A management approach that enables organizations to identify, attract and increase retention of profitable customers, by managing relationships with them.

According to Light (2001), CRM evolved from business processes such as relationship marketing and the increased emphasis on improved customer retention through the effective management of customer relationships. Relationship marketing emphasizes that customer retention affects company profitability in that it is more efficient to maintain an existing relationship with a customer than create a new one (Payne et al., 1999; Reichheld, 1996).

Customer Relationship Management (CRM) has become a leading business strategy in highly competitive business environment. CRM can be viewed as ‘Managerial efforts to manage business interactions with customers by combining business processes and technologies that seek to understand a company’s customers’ (Kim, Suh, & Hwang, 2003). Companies are becoming increasingly aware of the many potential benefits provided by CRM. Some potential benefits of CRM are as follows: (1) Increased customer retention and loyalty, (2) Higher customer profitability, (3) Creation value for the customer, (4) Customization of products and services, (5) Lower process, higher quality products and services (Jutla, Craig, & Bodorik, 2001).

When evaluating customer profitability, marketers are often reminded of the 80/20 rule (80% of the profits are produced by top 20% of profitable customers and 80%
of the costs are produced by top 20% of unprofitable customers) (Gloy, Akridge, & Preckel, 1997).

The core parts of CRM activities are understanding customers’ profitability and retain profitable customers (Hawkes, 2000). To cultivate the full profit potentials of customers, many companies already try to measure and use customer value in their management activities (Rosset, Neumann, Eick, Vatnik, & Idan, 2002). Therefore, many firms are needed to assess their customers’ value and build strategies to retain profitable customers.

In some organizations, CRM is simply a technology solution that extends separate databases and sales force automation tools to bridge sales and marketing functions in order to improve targeting efforts. Other organizations consider CRM as a tool specifically designed for one-to-one (Peppers and Rogers, 1999) customer communications, a sole responsibility of sales/service, call centers, or marketing departments. But CRM is not merely technology applications for marketing, sales and service, but rather, when fully and successfully implemented, a cross-functional, customer-driven, technology-integrated business process management strategy that maximizes relationships and encompasses the entire organization (Goldenberg, 2000).

CRM technology applications link front office (e.g. sales, marketing and customer service) and back office (e.g. financial, operations, logistics and human resources) functions with the company’s customer “touch points” (Fickel, 1999). A company’s touch points can include the Internet, e-mail, sales, direct mail, telemarketing operations, call centers, advertising, fax, pagers, stores, and kiosks. Often, these touch points are controlled by separate information systems. CRM integrates touch points around a common view of the customer (Eckerson and Watson, 2001).

Figure 2-1 demonstrates the relationship between customer touch points with front and back office operations.
Figure 2-1: CRM applications, supported by ERP/data warehouse, link front and back office functions (Eckerson and Watson, 2001)
A lot of researchers and practitioners relate CRM with people, processes and technology, according to Injazz (2004):

“Customer relationship management (CRM) is a combination of people, processes and technology that seeks to understand a company’s customers. It is an integrated approach to managing relationships by focusing on customer retention and relationship development”.

The implementation of CRM systems has been widely reported by both CRM software vendors and academic researchers. The popular CRM systems appear to be: call centre, contact management, data warehousing, portals, and workflow and business process management for the purposes of retaining existing customers and developing new customers. Xu et al (2005) suggest that contact centers have been playing a major role within the CRM picture. Taylor and Hunter (2002) report that the European customer support and service market is still largely focused on call centers, particularly in the UK.

Very few practitioners are making optimum use of their client database, because they are failing to update, quantify and qualify the information collated about the clients (Dyer, 1998). A few reports even suggest that CRM systems fail to have the transformational impact widely promised by the software industry and expected by the business community. For example, Harvey (2001) cited Gartner’s report by saying that 65 per cent of CRM implementations result in failure.

Most CRM systems are used to improve customer-facing operations. Rowley (2002) argues in line with Harvey that 80 per cent of CRM implementations fail, and academics express skepticism about the viability of interpreting customer data in such a way that it generates useful insights into customer and user behavior. Bolton (2004) consents with these arguments by stating that, many of the early CRM implementations seem to have failed.

According to Xu and Walton (2005), Sweet (2003) reported four survey results related to CRM applications in UK companies. The surveys were conducted by PMP Research from 2001 to 2004. A range of CRM-related issues are investigated including
the success level of CRM, reasons for implementing CRM applications, degree of customizing CRM solutions, current spending and future investment in CRM, degree of using analytical tools, and the perception of gaining competitive advantage from CRM.

Another view of CRM is that it is technologically orientated. Sandoe et al. (2001) argue that advances in database technologies such as data warehousing and data mining, are crucial to the functionality and effectiveness of CRM systems.

2.1. Customer relationship management (CRM)

Customer relationship management (CRM) has been widely regarded as a company activity related to developing and retaining customers through increased satisfaction and loyalty. Customer relationship management (CRM) is a customer-focused business strategy that dynamically integrates sales, marketing and customer care service in order to create and add value for the company and its customers.

There are various definitions of CRM in the literature. Among the most representative, we could quote (Scott, 2001), who defines CRM as “a set of business processes and overall policies designed to capture, retain and provide service to customers”, or (Injazz and Karen, 2004), for whom CRM is “a coherent and complete set of processes and technologies for managing relationships with current and potential customers and associates of the company, using the marketing, sales and service departments, regardless of the channel of communication”. By analyzing this definition, it can be deduced that CRM systems basically make three things possible (Greenberg, 2001).

1- Having an integrated, single view of customers, by using analytical tools.

2- Managing customer relationships in a single way, regardless of the communication channel: telephone, website, personal visit, and so forth.

3- Improving the effectiveness and efficiency of the processes involved in customer relationships.
CRM: a new paradigm in marketing? The concept of “paradigm” has been defined as “a set of assumptions about the social world, and about what constitute proper techniques and topics for inquiry” (Punch, 1998, p. 28). Much of the marketing literature has regarded CRM as representing a paradigm shift in marketing thought.

CRM is a process designed to collect data related to customers, to grasp features of customers, and to apply those qualities in specific marketing activities (Swift, 2001). Choy et al. (2003) suggests that CRM is an information industry term for methodologies, software, and usually internet capabilities that help an enterprise manage customer relationships in an organized way.

It focuses on leveraging and exploiting interactions with the customer to maximize customer satisfaction, ensure return business, and ultimately enhance customer profitability. In practice, however, managers often perceive CRM from different perspectives, for example, CRM is a part of marketing efforts, customer service, particular software and technology, or even process and strategy. Luck and Lancaster (2003) suggests that the term CRM has become a buzzword, with the concept being used to reflect a number of different perspectives.

CRM is a relatively new management concept – a new approach to managing customers – currently sweeping through businesses world-wide and is especially finding a receptive audience in the professional service sector. CRM, though not a formal program, generally combines various elements of technology, people, information resources and processes in order to create a business that takes a “360-degree” view of its customers. As a point of reference, the definition CRM is:

Activities a business performs to identify, qualify, acquire, develop and retain increasingly loyal and profitable customers by delivering the right product or service, to the right customer, through the right channel, at the right time and the right cost. CRM integrates sales, marketing, service, enterprise resource planning and supply-chain management functions through business process automation, technology solutions, and information resources to maximize each customer contact. CRM facilitates relationships...
among enterprises, their customers, business partners, suppliers, and employees (Galbreath, 1999).

CRM is more than the automation of traditional sales, marketing, supply-chain, “back-office” or service functions through the use of technology and process reengineering. However, CRM is also more than a newfangled “customer service” or “service quality” issue. CRM is about the transformation of the entire enterprise and how it views and conducts business with its customers.

CRM is a strategy for competitive advantage. It is a transformation philosophy and ideal of how businesses must compete in the twenty-first century. It is becoming the foundational cornerstone of profitable financial success.

At a tactical level, CRM may mean database marketing or electronic marketing. At a strategic level, CRM may mean customer retention or customer partnering. At a theoretical level, CRM may mean an emerging research paradigm in marketing (Sin & Tse 2005).

To deal with the challenges of customer relationships in the fast-evolving internet world, even the most customer-focused companies have to understand the three essential insights to getting customer relationships right: (Bradshaw & Brash 2001)

1- that building CRM in the front office is just the start, and that it must involve the back-office functions as well as the analytical functions like data warehousing and “pushing” customer insights back up to the front office.

2- That conducting relationships across multiple media requires the correct technical infrastructure, allowing companies to deal with their customers in a consistent way across multiple media, and even add new media as required without the need to develop every interface separately and from scratch.

3- Building the correct strategy for directing customers to different media. For a few companies the strategy “we will deal with customers on whatever medium they
prefer” is right; but for the vast majority of companies it is a recipe for disaster. “Consistency” does not mean “uniformity”.

Getting it right in CRM across multiple channels means that can deal with customers in and across multiple media and still have a unified up-to-date view of the customer, with no gaps. Ideals such as “one-to-one marketing” and “the market of one” have been widely written about but rarely realized, except in the occasional corner florist’s. Getting CRM right is the closest approach to achieving these ideals that a large organization can make. Doing this across multiple media is a major achievement that will make the organization ready to face the future.

In CRM, there is a “virtuous triangle” (see Figure 2-2). The purpose of this is to ensure that you can know your customer fully, and then act according to their needs and your interest. Important information is generated and used in other areas. Any company that is doing CRM properly must integrate the front office, back office and analytic systems:

- The back office executes the customer requirements. Generally the only customer contact functions in the back office are billing and logistics, and in even these functions, the customer contact is moving into the front office environment.
- Analytical software allows you to look for patterns in the customer data you have collected. The outputs from this are strategic and tactical information can be used to determine future strategy, while the tactical information will help to modify existing practice. Increasingly the tactical information is generated and used on the fly in customer interactions. (Bradshaw & Brash 2001)

The current focus of CRM tends to be almost entirely on the front office. This is not harmful-almost all organizations could improve their performance in this domain but it is not optimal in the longer run.
Extending CRM into multiple media means integrating the front (and aspects of the back office where appropriate) with different communications channels (see Figure 2-3). (Bradshaw & Brash 2001)
Sin and Tse(2005) hypothesize that CRM is a multi-dimensional construct consisting of four broad behavioral components: key customer focus, CRM organization, knowledge management, and technology-based CRM (see Figure 2-4).

This is in accord with the notion that successful CRM is predicated on addressing four key areas: strategy; people; technology; and processes, and that only when all these four work in concert can a superior customer-relating capability emerge.

For a business to maximize its long-term performance in such aspects as customer satisfaction, trust, return on sales, and return on investment, it must build, maintain, and enhance long-term and mutually beneficial relationships with its target buyers. We will discuss each component and then describe our research methodology along with the findings from our analysis.

1- **Key customer focus**: Key customer focus involves an overwhelming customer-centric focus, and continuously delivering superior and added value to selected key customers through personalized/customized offerings. Key facets of this dimension include customer-centric marketing, key customer lifetime value identification, personalization, and interactive co creation marketing.

2- **CRM organization**: CRM essentially means fundamental changes in the way that firms are organized and business processes are conducted. Firms should pay heightened attention to the organizational challenges inherent in any CRM initiative. The key considerations to successfully organize the whole firm around CRM include organizational structure, organization-wide commitment of resources, and human resources management.

3- **Knowledge management**: According to the knowledge-based view of the firm, the primary rationale for a firm’s existence is the creation, transfer, and application of knowledge. From a CRM perspective, knowledge can be understood as what has been learned from experience or empirical study of consumer data. Key facets of “knowledge management” include knowledge learning and generation, knowledge dissemination and sharing, and knowledge responsiveness.
4- **Technology-based CRM**: Accurate customer data is essential to successful CRM performance and, consequently, technology plays an important role in CRM in adding to firm intelligence. In fact, the startling advances in IT equip enterprises with the capability to collect, store, analyze, and share customer information in ways that greatly enhance their ability to respond to the needs of individual customers and thus to attract and retain customers. The promise of one-to-one relationships, customer-value analysis, and mass customization are now brought to reality by unprecedented advances in IT, transforming the traditional approach to CRM to an integrated, web-enabled approach, featured by tools like customer information systems, automation of customer support processes, and call centers. CRM calls for “information-intensive strategies” which utilize computer technologies in building relationships, leveraging existing technology and rigorously linking technology deployment to targeted business initiatives.

Computer technologies such as computer-aided design/manufacturing, flexible manufacturing systems, just-in-time production databases, data warehouses, data mining, and CRM software systems enable firms to provide greater customization with better quality at lower cost. It also helps staff at all contact points serve customers better. Many customer-centric activities would be impossible without appropriate technology.
Starkey & Williams (2002) claimed that technology is certainly one of the key enabling or supporting factors in CRM, but by itself it does not constitute CRM. In their view this is a very narrow perspective and misrepresents what CRM really is or what it can achieve.

2.2. Characteristics of CRM

Sweeney Group defines customer relationship management (CRM) as “all the tools, technologies and procedures to manage, improve, or facilitate, support and related interactions with customers, prospects, and business partners throughout the enterprise”. This broad definition involves CRM in every process of a business transaction. A well designed CRM shares the characteristics as:

1- **Communicational/collaborative CRM** for building online communities, developing business-to-business customer exchanges, personalizing services, etc. It makes interactions between a business, its channels and its customers possible. It provides the means for the customer to contact the company and enables collaboration between suppliers, partners, and customers.

2- **Operational CRM** for improving customer service, online marketing, automating sales force, etc. It is the automation of customer-facing processes. It handles the customer contact and processing. It manages and synchronizes customer interactions in marketing, sales, and service.

3- **Analytical CRM** for building data warehouses, improving relationships, analyzing data, etc. It uses customer data to create a mutually beneficial relationship between a business and its customers. This analysis, modeling and evaluation help to optimize information sources for a better understanding of customer behavior, so that make the contact to be more personalized.

2.2.1. Communicational CRM

The CRM systems are integrated with enterprise-wide systems to allow greater
responsiveness to customers throughout the supply chain (Kracklauer and Mills, 2004). For instance, a CRM can be extended to include employees, suppliers, or partners. A collaborative selling CRM can offer knowledge and tools to everyone in the extended enterprise, and to help drive sales through every channel from call centre to the web.

The features include instant service response based on customer input, one-to-one solutions to customers requirements, direct online, communications with customer anytime and anywhere, and customer service centers that help customers solve their questions. The impacts are increase customer’s satisfaction, customize the service, attract more customers, maintain the customers.

Harker (1999) proposes the following definition: “An organization engaged in proactively creating, developing and maintaining committed, interactive and profitable exchanges with selected customers (partners) over time is engaged in relationship marketing.”

2.2.2. Operational CRM

Customer data is collected through a whole range of touch points such as contact centre, contact management system, mail, fax, sales force, web, etc. The data then are stored and organized in a customer centric database, which is made available to all users who interact with the customer. A typical operational CRM is the contact centre and contact management.

A contact management system can provide complete and comprehensive tracking of information relating to any contact with customers. This is known as 100 per cent focus on the customer (Kotorov, 2002). The benefit of this type of CRM is to personalize the relationship with the customer, and to broaden the organizational response to the customer’s needs.

The functions include Sales Force Automation (SFA), automatically tracking a client’s account history for repeated transactions. The goal of SFA is to allow the sales force to concentrate more on selling and less on administrative tasks. Enterprise
Marketing Automation (EMA) for evaluating valuable customers and segmentations for some strategic marketing and Customer Service and Support (CSS) for delivering personalized and efficient services to the customers.

Customer service and support (CSS) solutions are responsible for retaining customers in an environment where the Internet provides customers with global choice. By developing relationships with customers through interaction, CSS solutions theoretically improve customer satisfaction, loyalty, and ultimately extend the customer’s value to the enterprise.

It is far easier to grow a business by retaining customers than by finding new ones. Customer service, however, should be viewed as one part of a customer relationship management (CRM) strategy and while individual technologies may be used to ease “pain points,” the full benefits will not be realized until the concept of customer centricity is accepted enterprise wide.

The four main components of a CSS solution are call management, Internet-based service (e-service), field service and dispatch (FS/D), and a multi channel contact center capability. Call centers provide a traditional voice-based (assisted) customer service capability, which is rapidly evolving to include new communication channels (e.g., e-mail).

The Internet boom has driven the demand for Web-based customer service solutions. Call centers, for example, can deploy browser-based agent interfaces and corporate Web sites can provide a powerful customer self-service capability. These self-service sites allow customers to interact with the enterprise without human interaction. Customers can resolve inquiries, check the status of an order, view product information, check and edit account details, and perform a broad range of other tasks.

2.2.3. Analytical CRM

Customer satisfaction is essential for increasing the competitiveness of companies and achieving customer objectives. To improve it, it is necessary to identify customer needs
and expectations and ensure they are met. This requires the construction of a measurement system fed by information, part of which will come directly from the customer and part will be extracted from the company’s computer system.

Data stored in the contact centric database is analyzed through a range of analytical tools in order to generate customer profiles, identify behavior patterns, determine satisfaction level, and support customer segmentation. The information and knowledge acquired from the analytical CRM will help develop appropriate marketing and promotion strategies.

This type of CRM is referred by Kotorov (2002) as a 360 degree view of the customer. Technologies underpinning the analytical CRM system include CRM portals, data warehouses, predictive and analytical engines (Eckerson and Watson, 2001); pattern discovery association rules, sequential patterns; clustering, classification and evaluation of customer value (Ahn et al, 2003). As a result of the analysis, customers are more effectively segmented and offered products and services that better fit their buying profiles.

It includes enabling new technology and skills to deliver value, using technology to make “up-to-the-second” customer data available, and applying data-warehousing technology to aggregate transaction information, to merge the information with CRM solutions such as finding the answer these questions, what will happen, why did it happen, what might be happen if….. , and provide key performance indicators. Also the features include the flexibility to manage unpredictable events and a good forecasting model to integrate transactions history with some projections. Totally in analytical CRM the most important goal is to understanding the customers.

Enhancing the analytical power of CRM systems has been recognized by researchers. For example, Rowley (2002) suggests that CRM systems include online order, e-mail and knowledge bases that can be used to generate customer profiles, and to personalize service. Xu et al (2005) state that CRM technologies allow the organization to gain an insight into the behavior of individual customers. And, it turns to target and
customize marketing communication and messages. In addition, these tools generate data that support the calculation of customer lifetime value for individual customers. Of course, the best CRM implementations offer advantages to both the organization and its customers.

A bank for example might use CRM to help identify that a customer has a large current account balance, a saving account, a mortgage and a personal loan, and therefore probably deserves customer service which recognizes this- so that, for example, a slight temporary overdraft on the current account does not result in a letter of admonishment.

Of course, e-business with its rapid turn-round times and strong data-gathering abilities offers additional opportunities for companies to really get to know their customers behavior patterns (Imhoff et al., 2001). However, it would be stretching reality a little too far in many of these CRM/e-services implementations to claim that they do in fact manage “relationships”.

It is very important to have appropriate information about customers, so, if the bank’s systems relating to various types of accounts and services did not recognize that the same customer interacted with bank in a number of ways, relating to different services of the bank, it would not be possible to take a complete view of the customer – and his/her value to the bank. In term 360 degree customer view has been coined to refer to this need for a view of the complete set of interactions between an organization and its customers. Brief outlines of organizational benefits with a data warehouse are:

- Accurate and faster access to information to facilitate responses to customer questions;
- Data quality and filtering to eliminate bad and duplicate data;
- Extract, manipulate and drill-down data quickly for profitability analysis,
- Customer profiling, and retention modeling;
- Advanced data consolidation and data analysis tools for higher level
- Summary as well as detailed reports; and
- Calculate total present value and estimate future value of each and every
customer.

A key question is **how can the bank develop an effective process for establishing and maintaining the relationship with key consumers and industrial customers?** The answer is that they have to renew or improve their strategic management and marketing of their core products and supporting services in a more systematic manner.

Those companies with the deepest and strongest customer relationships will stand the best chance of retaining the customer’s transactions. Many companies are selecting a few key market targets and concentrate on trying to serve them better than competitors. Companies, therefore, should emphasis deeper penetration of the existing customer database.

An effective customer database allows a company to understand better customer’s needs – particularly their relationship needs – better than the competitors. The customer database will also include data about the current and past state/trend of customer’s business, industry and market shares profitability, etc. The data about customer’s needs and behavior enables companies to identify today’s key customers, develop relations with tomorrow’s customers and calculate the revenue the customer generates and estimate own future investment opportunities.

### 2.2.4. e-CRM (Electronic Customer Relationship Management)

Jill Dyche (2001) considers e-CRM as a mean of selling, serving, or communicating with customer through the web. Further he takes e-CRM as a subset of CRM strategies. Beyond that, e-CRM is a fast and cost-effective means of personalizing customer communications for the companies, on a large scale. The goal of e-CRM systems is to improve customer service, retain valuable customers, and provide analytical data. Further, it helps to increase customer value by motivating valuable customers to remain loyal.
2.2.5. Relationship between the characteristics of CRM

According to Reynolds (2002), each component is dependent on the others. For instance, analytics drives the decision making in operational CRM for the deployment of marketing sales and customer service processes. But without the data collected via the operational CRM processes, analytical CRM wouldn’t have any data to work with. And the data processed by the analytical CRM tools couldn’t be effectively disbursed and strategic decision-making wouldn’t occur, without collaborative CRM. Collectively, operational CRM, analytical CRM and business intelligence work at the same time to drive the customer life cycle.

In the past the business community concentrated on operational and collaborative tools, but this is rapidly changing. Businesses realize that analytical tools are necessary to drive the strategy and tactical decisions, related to customer opposition, acquisition, retention and enhancement. Analytics also allow a company to listen to its customers and to learn from an existing customer base (Reynolds 2002).

2.3. The benefits of CRM

According to Newell (2000) the real value to a company lies in the value they create for their customers and in the value the customers deliver back to the company. Accordingly, it is important to mark that the value does not lie in more information and in more advanced technology. The value lies in the customer knowledge and in how the company uses that knowledge to manage their customer relationships. Knowledge is the sole of CRM.

If companies are transforming the customer data into knowledge and then uses that knowledge to build relationships it will create loyalty, followed by profits.

1- Lower cost of recruiting customers: Customer recruitment cost will decrease and there will be savings in marketing, mailing, contact, follow-up, fulfillment, services, and so on.
2- No need to recruit so many customers to preserve a steady volume of business: Increase in long-term customers’ relationship will ultimately minimize the need for new customer recruitment.

3- Reduced costs of sales: Long-term customers are more responsive than the newer ones that decrease the selling cost. As well as marketing campaign cost will also decrease due to familiarity with the distribution channels.

4- Higher customer profitability: Customer profitability will increase by higher customer wallet-share, up-selling, cross-selling and follow-up sales and satisfied customer refers more customers.

5- Increased customer retention and loyalty: The retained or long-staying customer buys big quantities frequently. The customers initiatives increases bounding relationships and as a result- loyalty.

6- Evaluation of customer profitability: The Company evaluates which customers are profitable, going to be profitable in future and never profitable in future. The key to success in business is to discover economically beneficial customers, acquire them and never let them go.

According to Budhwani (2002) all the customers are not beneficial; if the customers are taking company’s time energy and recourses without generating enough business, they are dangerous customers. Newell (2000) describes that the company must use CRM were they can get good profitable customers.

2.4. The emergence of financial services networks

Three major trends have led to the emergence of financial services alliances. First, customers increasingly demand that their financial requirements are comprehensively covered. This forces financial services companies to offer customer support for all their financial requirements, ranging from account management to life insurance and the granting of a home loan, thus realizing the “one-stop finance” idea. The integration of
different financial services is often realized by specialized companies (relationship managers) which have direct contact with customers as distribution intermediaries (Figure 2-5) (Lehmann, 2000).

Second, threats from new and aggressive market entrants as well as constantly growing customer requirements force financial services companies to focus on their core competencies to remain competitive (Alt and Reitbauer, 2005). This development has given rise to a deconstruction of the industry, resulting in specialized companies or business divisions (product providers) that focus on the delivery of specific products and services.

Third, financial services companies increasingly outsource transaction processing to external transaction processors in order to focus on their core competencies (Homann et al., 2004). All of these trends have resulted in the emergence of networks consisting of relationship managers, product providers and transaction processors (Heinrich and Leist, 2002; Hagel and Singer, 1999).

Figure 2-5: Trends in the development of value chains in the financial services industry (Lehmann, 2000)

### 2.4.1. CRM in the financial services industry

CRM emerged as a response to decreasing customer loyalty in different industries. The reasons for decreasing customer loyalty in the financial services industry are manifold and closely interconnected. Three fundamental factors can be identified (Walter, 2000; Ko¨rner and Zimmermann, 2000; Krishnan et al., 1999):
1- **New technological opportunities**: The conceptual nature of financial services makes them ideal for distribution through electronic channels, e.g. the internet, which then makes it easier for competitors to enter a market.

2- **Increasing competition from new market entrants**: Supported by new technological opportunities and deregulation, the market for financial services is being transformed into a globally-connected emporium. Especially non-and near-banks, e.g. telecommunication providers and financial consultancies, constitute a growing threat to established banks.

3- **Customers’ changing behavior**: Financial services customers are increasingly self-confident, better informed about products and services, and increasingly demand services, also as a result of technological possibilities.

These factors have led to the emergence of concepts that focus on the nurturing of customer relationships (Payne and Ryals, 2001; Peppard, 2000). CRM emerged as an amalgamation of different management and information system approaches, particularly relationship marketing (Sheth and Parvatiyar, 2000; Scullin et al., 2004), and technology-oriented approaches such as computer-aided selling (CAS) and sales force automation (SFA) (Gebert et al., 2003). Following Shaw and Reed (1999), we define CRM as an interactive approach that achieves an optimum balance between corporate investments and the satisfaction of customer needs in order to generate maximum profits. It entails:

- Acquiring and continuously updating knowledge on customer motivations, and behavior over the lifetime of the relationship;
- Applying customer knowledge to continuously improve performance through a process of learning from successes and failures;
- Integrating marketing, sales, and service activities to achieve a common goal; and
- The implementation of appropriate CRM systems to support customer knowledge acquisition, sharing, and the measurement of CRM effectiveness.
To integrate marketing, sales, and service activities, CRM requires the business processes that involve customers to be fully integrated. These customer-oriented CRM processes are mostly semi-structured, and their performance is predominantly influenced by the underlying supply of knowledge on products, markets, and customers (Day, 2000; Schulze et al., 2001; Garcia-Murillo and Annabi, 2002). In many financial services networks, however, customer-oriented processes and systems lack integration.

2.5. e-Banking Services

Puccinelli (1999) looks the financial service industry as entering a new era where personal attention is decreasing because the institutions are using technology to replace human contact in many application areas.

The banking sector can hardly be regarded as a model of innovation. Indeed, its tradition, probity and established ways of doing business have been a source of pride to the sector. Banking, which has been characterized by its “tried and tested” processes of service delivery, is greatly affected by environmental change.

Technology continues to make a dramatic and profound impact in service industries and radically shapes how services are delivered. The primary motivation for the increasing role of technology in service organizations has been to reduce costs and eliminate uncertainties as well as being used to standardize services by reducing the heterogeneity prevalent in the typical employee/customer encounter (Durkin, M. 2004).

A different organization got affects from this revolution; banking industry is one of it. In this technology revolution, technology based remote access delivery channels and payments system surfaced which included Automated Teller Machines (ATM) displaced cashier tellers, telephone represented by call centers replaced the bank branch, internet replaced the mail, credit cards and electronic cash replaced traditional cash transactions, and interactive television will replace face-to-face transaction.

This is a gain in time and spares callers from dealing with the wrong department before they can get the information they require. However, it is vital for the bank to
convert its call centers from cost centers to profit centers. Therefore, they have to encourage callers to purchase new products, direct them to the less expensive distribution channels, and help the bank to cross-sell.

In recent years banks have moved towards a marketing orientation and the adoption of relationship banking principles. The key motivators for embracing marketing principles were the competitive pressures that arose from deregulation of the financial services market. This essentially exposed clearing banks and the retail banking market to increased competition and led to a blurring of boundaries in many traditional product markets (Durkin, M., 2004).

Regarding e-mail communication, messages have to be dealt with through a powerful artificial intelligence system, to enable the bank to send out standardized replies. It is important to send the right reply to a request, and therefore an individual answer should be provided to the client if there is any doubt. Indeed, if the artificial intelligence system does not have the capacity to reply to an e-mail message, it must be directed towards an employee who will be able to individualize the response the client requires.

The past four decades have witnessed acceleration in technological innovation within the banking industry. The increase in innovation adoption is a largely defensive measure against increasingly sophisticated and highly demanding consumers, escalating competition, and the necessity to control and reduce rising costs (Barra, 1990).

Over the last few decades, technical evolution has highly affected the banking industry (Sherif 2002). For more than 200 years, banks where using branch-based operations, since 1980s things really getting changed with the advent to multiple technologies and applications.

Global changes brought new trends, directions and new ways of doing business, which also brought new challenges and opportunities to the financial institutions. In order to compete with newly increasing competitive pressures, financial institutions must recognize the need of balancing their performance by achieving their strategic goals and
meeting continues volatile customer needs and requirements. Different ways must be analyzed to meet customer needs.

The banking sector occupies a pivotal position in the global economy. The slogan “the customer is king” has never been truer for the banking sector than it is today. Legislation has increased customers' rights; technology and competition have increased their choice of products and providers. The Internet will bring about changes in the working environment, living conditions and patterns of banking use (Hagel et al., 1997).

Continuing technological innovation and competition among existing banking organizations and new entrants have allowed for a much wider array of banking products and services to become accessible and delivered to retail and wholesale customers through an electronic distribution channel collectively referred to as e-banking. However, the rapid development of e-banking capabilities carries risks as well as benefits.

According to Foss (2002) most of the financial services industries are trying to use CRM techniques to achieve varieties of outcomes. These areas are:

- Creating consumer-centric culture and organization;
- Securing customer relationships;
- Maximizing customer profitability;
- Aligning effort and resource behind most valuable customer groups.

To implement strategies these aspects must be considered:

- Communications and supplier-customer interactions through channels;
- Identifying sales prospects and opportunities;
- Supporting cross-and up-selling initiatives;
- Managing customer value by developing propositions aimed at different customer segment;
- Supporting channel management, pricing and migration.

It is possible to identify four stages Foss (2002) as fallows:
1- Building the infrastructure and systems to deliver customer knowledge and understand customer profitability;

2- Aligning corporate recourse behind customer value-developing segment management strategies to maximize customer profitability and satisfaction;

3- Incorporating a market perspective into understanding of customer value, to avoid any possibly adverse effects and maintain customer relationships;

4- Integrating strategic planning and customer value management.

Foss (2002) points out that the four stages are usually sequential, but not always so!

The bank would need a complete view of its customers across the various systems that contain their data. If the bank could track customer behaviors, executives can have a better understanding a predictive future behaviors and customer preferences. The data and applications can help the bank manage its customer relationship continue to grew and evolve (Dyche 2001).

The expression “e-Banking services” refers to the set of processes and mechanisms that a virtual agent-based banking institution offers to agents intending to engage in commerce activities in an agent environment. The e-Banking service consists of two sub-services:

- Electronic payment service for enabling agents to make and receive payments;
- Account Management service for creating, maintaining and closing bank accounts.

In the past few years, insurers and retail banks have made most of the running in CRM. Increased competition and shrinking margins have forced them to deploy CRM strategies and technologies in order to respond to the needs of shareholders and clients. More recently, investment banks have begun to realize the intrinsic value of CRM.
The bank defines CRM as a marketing strategy that allows it to:

- Focus on profitable clients through discriminated segmentation.
- Understand different combinations of clients, products, and volumes. Indeed,
- Information about “who buys what and how much” enables the bank to have a commercial approach based on the client and no longer solely on the product.

Have a proactive approach, which consists in creating the demand – as a result of better information – instead of just experiencing it. Set-up a mix of distribution channels with standardized or specialized services according to the individual client’s importance for the bank.

The principles of CRM hold true for this sector. Just because investment banking is a business-to-business application does not take away the fact that recognition of the client is still the key for CRM success. However, most of CRM in investment banking is still work in progress. It is a missed opportunity since it offers banks a chance to rethink their fundamental approach to client management, to redesign their coverage strategies and to use technology to bring this about.

Technology that tracks and analyzes customer behavior allows companies to easily identify the best customers and focus marketing efforts and reward those who are likely to buy often. Acquiring a better understanding of existing customers allows companies to interact, respond, and communicate more effectively to significantly improve retention rates.

2.6. CRM activities in banking

The recent academic focus on customer self-service technologies (SSTs) highlights the importance of exploring research issues where technology acts as a service enabler for the customer. The benefits of such technologies are argued to be centered on the fact that “customers can access services when and where they want without some of the complications of inter-personal exchanges” (Durkin, M., 2004).
CRM techniques will help banks if they improve the bank’s ability to:

- Select and then manage the right client set (coverage);
- Determine which products and services should be sold to which client, profitably, and then help the bank implement this sales plan (profit planning and implementation);
- Reduce the cost of coverage, in particular by improving the productivity of sales professionals covering those with small wallets, while maintaining quality of coverage (one day the wallets may be big!);
- Coordinate the multi-product, multi-country relationship in real time.

For CRM to work, banks must have a very clear view of what their clients want from them. Four of the most important needs of clients are:

- Cost reductions and efficiencies in services delivered;
- Better control and transparency resulting in accountability for delivering results;
- Greater convenience in having to deal with fewer banks;
- Banks knowing the needs of clients intimately, so that the latter are offered the right products, at the right time and the right price, with appropriate associated service.

There are different CRM activities which are already used in Iranian banks. Some of them are the communicational CRM and the others are somehow operational CRM. Some of these activities are just for view such as check balances, view statement/account, historical records. The others are for account controls which are some CSS activities of operational CRM such as, accounts amendment, order cheque books, transfer funds, pay bills to third parties, standing order/print statements send messages and pay credit card bills.

There are seven distribution channels – contact points – with the organization.

- *Agencies:* The interactions with the client are conducted face to face. There are
privileged sources of valuable information.

- **Call centers:** There is easy and fast access to products or advice from the bank without having to go to the agency.

- **Self-banking:** These are contact points between the client and the bank that can be reached through their bank card enabling the client to make payments, draw cash, etc., and eventually interact with the bank.

- **Home banking:** The client can reach these contact points via a PC.

- **Technical support:** It is composed of employees who can give technical advice and support regarding an eventual problem as well as giving technical support concerning the bank’s products.

- **Communication and advertising:** This department is responsible for the campaigns and client communication.

- **Client service:** This service helps client understand complex products and provides them with after-sales service.

Even though all these channels have their particular attributes and importance in the general communication process, the call centre has received special attention. Using IT, it enables a specific and immediate recognition of the clients, provides the employee with the right data immediately, and allows clients to be forwarded to the right people, according to their need and importance (Lindgreen 2004).

For the purposes Jayawardhena’s paper, customer expectations from electronic banking can be conveniently categorized under four different categories, namely, view-only functions, account control functions, new services and reconciliation functions. Each of these categories has been further divided into subsets of functions, which are by no means exhaustive.

**1- View-only functions:** Increasingly customers feel the need to have bank balances in check. Without exception, all banks offer view-only functions. The primary advantage for the banks is that it reduces the workload for bank staff at both branch and call centers, and it relieves congestion at ATMs. The benefit for customers is that they can be assured of a private, quick and efficient service at any time.
2- **Action/account control functions:** Action/account functions are required to provide customers with the broadest range of access and control over their accounts. To provide maximum customer satisfaction it is beneficial if as many of these functions as possible are provided by an Internet bank. All banks reviewed offer the facility of transferring funds between accounts. Additionally, bills represent a significant proportion of household expenditure, and the timing of these payments can be vital, hence the need for an active management of the household cash flows. A standing order or a direct debit might not provide the best payment timing. The mechanics for setting up this facility would seem to be the least technically challenging of all account control functions.

3- **Applying for new banking services:** To exploit the convenience of Internet banking fully customers must be able to make applications for core banking services and open new accounts (savings accounts, loans, etc). It is important that both existing and potential customers be encouraged to make applications and acquire new services. If the entire process cannot be completed over the Internet due to regulatory barriers (e.g. money laundering regulations), at least the customer should be allowed to feed in personal details so that the process is expedited.

4- **Integration and reconciliation:** An increasing proportion of customers use software packages to manage their finances. Therefore it is important that they are given the opportunity to reconcile their accounts by freely downloading and sharing information from their bank accounts to their individual financial management software (Jayawardhena 2000).

According to Reynols (2002) Customer relationship management applications can commonly include:

- Call Center Automation
- Campaign Management
- Contact Management
- Data Warehousing
- Email Management
• Field Service Automation
• Knowledge Management
• Marketing Automation
• Personalization
• Sales Force Automation

Rapidly improving technology has allowed organizations to make the best of each customer contact.

More recent research specific to the growth of self-service technologies (SSTs) propose that a successful SST improves service firms resource management by lowering delivery costs and by releasing service personnel to provide better and more varied service. SSTs can “ensure a customized service offering, help companies recover from service failure and are often perceived by customers as a delightful experience”. However that technology may not always have a positive impact on the relationship between supplier and customer and highlight that “few authors have investigated whether the presence of IT-mediated channels have a detrimental effect on firms’ relationships with their customers’” Durkin, M. (2004).

These networks face a variety of challenges regarding a coordinated approach to customer relationship management (CRM). CRM is a management concept that has the potential to positively impact the cost-revenue ratio by aligning the company with its customers and focusing its resources on high-value customers. Romano and Fjermestad (2003) provide an overview of current research directions. In many financial services networks, an integrated approach to CRM remains to be developed. For example, “many CRM systems used by financial conglomerates cannot even tell whether a banking customer also has, say, a mortgage or a stock broking account with its various subsidiaries” (The Economist, 2003).

Stamoulis, Kanellis, and Martakos (2002) assessed the business value of e-banking distribution channels. These can be used to assess the business value along two points: the internal view, where the channel is considered as a resource whose utilization
must be maximized, and the external view, where the channel as an interface to the bank’s customer base should enable and support customer relationship management. These models only focused on customer interaction in the communication channel. They report a study that was undertaken in a bank faced with the challenge of assessing the value of its main e-banking channel in operation.

Arguing that the evaluation of an information system should be seen as a form of communication, we describe the approach and evaluation model that was created and applied. The model employs five different perspectives each having its own set of metrics. These can be used to assess the business value along two viewpoints:

a) The internal view, where the channel is considered as a source whose utilization must be maximized; and

b) The external view, where the channel as an interface to the bank’s customer base should enable and support customer relationship management.

Adopting consequently a working definition of IS business value as developed by Cronk and Fitzgerald (1999). Their approach “is to start with a more generic definition, as sign dimensions of value that in total reflect the true meaning of the construct and allow the IS context to direct the choice of measures from each of the dimensions that represent IS business value”. The three dimensions the authors proposed are system dependent dimension, user dependent dimension and business dependent dimension, envisaging IS business value as a prism whose three faces are the above dimensions. Supposing that the e-banking channel is a ‘light beam’ that hits on the prism, the light is scattered at different angles (evaluation perspectives) that correspond to the faces of the prism (the dimensions of the IS business value). (Stamoulis, Kanellis, & Martakos 2002)

Following on from this conceptualization of IS-derived business value they set as a target to measure the channel’s value by identifying initially which of the metrics, methods, and techniques that were already used by the bank could also apply to this particular case. To do this, the team initially looked at various business units that collect
business data for evaluation purposes. They found out that four major functions, namely marketing and sales, finance, information technology (IT) and strategy were using metrics that could be related to e-banking channels. Then, they decided to enrich those inherited metrics and consequently categorized those under evaluation perspectives according to their original source, i.e. (Cronk and Fitzgerald, 1999) (see Figure 2-6).

1- The ‘customer’ perspective: The fundamental question from the customer perspective is whether the channel offers added value to the banking activities of the customer base it serves. The answer relates both to the medium and the content. The content has to do with the products and services that are offered through this channel. The medium is the IT infrastructure that implements the channel. As far as the latter is concerned, each infrastructure element (Internet, telephone, cell phone, PDA) has its own inherent benefits such as software independence, mobility, etc. Context is also very important for the customer who wants a high-quality product.

Garvin (1987) noted that high quality means pleasing customers and not just protecting them from annoyances, and identified eight ‘critical dimensions’ or ‘categories of quality’ around which the competition for customer satisfaction takes place. These dimensions of quality were judged to be sufficient and were adopted by the team for
assessing customer attitudes towards the channel. For each of these dimensions, several metrics as indicators of success can be identified, depending on the particular e-banking channel being assessed.

1-2- The ‘marketing and sales’ perspective: In commerce, sales data forms the basis of revenue calculation that lies at the heart of any financial evaluation. The second perspective’s broader view focuses on the requirement that a distribution channel must attract new customers and retain its existing ones. The former requires a measurement of the sales volumes and an assessment of how easy or difficult it is to create for and use the same channel to deliver promotional campaigns to new customer segments.

The number of successful promotional campaigns reaching the end-consumer constitutes a metric under this perspective. As far as the customer retention is concerned, usability is the key metric compared with other non-electronic distribution channels. Usability can be measured in terms of at least three criteria: the hours of system usage or ‘logged-in’ statistics, the number of transactions executed, and the total amount of funds manipulated through this channel.

2- The ‘finance’ perspective: Several financial techniques and metrics are applicable for IS investment appraisal. We propose that the financial assessment of an e-banking channel should start with three prime financial indicators: cost reduction, profitability and risk. These must be quantitatively analyzed. The first refers to labor and premises costs that are saved because the customer using the channel replaces the Bank’s teller in executing the transactions.

The saved effort can be readily translated into labor costs, measured by the number of tellers who would be required over a period of time to perform an equal number and type of transactions to those executed through the electronic channel. Premises cost is derived from the leasing price attached to a branch or through the application of depreciation methods on the acquisition cost.

The profitability of the channel has to be calculated on the basis of revenues that are generated not only by directly charging the customers but also by exploring any
reductions in operating costs. Ideally, the calculation of a channel’s revenue should also take into account its contribution to the level of a customer’s overall profitability for the Bank—an open research issue. Some products may generate profit apart from cost savings and the charges to the customer, as it is the case with the electronic purse. When a customer loads a smart card with value, the money is debited directly to his account. However, the owner does not immediately spend them. In the interim the amount stays in a float account with the Bank making a profit out of that float until the money is spent.

Finally, risk must not be ignored, both for the customer and the Bank as the channel interfaces with central IT applications. A channel should always give the customer the capability to reverse and/or cancel a transaction as mistakes can easily be made. Appropriate safeguards must be embedded into the IT infrastructure so as to minimize the risk of fraud, misappropriation, security vulnerability, technical malfunction, etc. There are guidelines as to how much money should be spent to prevent unpleasant situations with channels and a minimum level of threat aversion provisions is often dictated by the market itself. For example, a typical security scheme for web banking consists of the combination of user-id and password, 128-bit encryption over the communication lines, and a certification of the Bank’s server to prevent another server masquerading. Overall, risks that are associated with an electronic channel must be identified and quantitatively translated to costs that must be borne by the Bank in order to eliminate them. In addition to those described above, other financial performance indicators that can be used are sales growth rate by segment, percentage revenue from new products/services offered through the channel and cash to cash cycle.

3- The ‘technology’ perspective: The quality characteristics of the underlying infrastructure have a definite impact on the business value of an e-banking channel. The most obvious metric is downtime; for example, not only customers who rely on an ATM for cash transactions cannot be served, but also queue lengths within branches increase unexpectedly. Therefore, the technical side should not be underestimated, since it is a dependent variable of the channel’s overall quality and success. There are numerous methods and techniques for assessing the technical quality of an IS and can be used under this perspective.
4- The ‘strategy’ perspective: E-banking channels are in essence interfaces between the Bank and its customers and hence of strategic importance. The more strategic a system becomes for an organization, the more appropriate a qualitative assessment is. To evaluate under the strategic perspective, such methods as SWOT analysis, Resource-Based View and PEST analysis are deemed appropriate. The strategic perspective looks at the channel as a competitive weapon with which the Bank expects to differentiate by means of enhanced customer propositions. Ideally, the informational, transactional, and advisory types of services offered by a channel must be scored relatively to those by the competitors. The evaluator need not have access to internal competitor data; he can simply use the channel as a customer in a role-play mode and can also interview other people who are using it. Under the strategic perspective, the position of a channel in relation to the others owned by a bank should also be considered. As is often the case, the ‘killing’ of a service that a specific channel supports is done intentionally in order to move its customer base to another. Evaluation data under this perspective aims at assisting the Bank to reassess and manage the distribution channel mix offered to the customer (Stamoulis, Kanellis, & Martakos 2002).

The financial services industry is in the middle of a structural change (Lehmann, 2000). Increasing competition and customer demands require that financial services companies focus on core competencies in order to deliver better value to their customers. Consequently, companies that were formerly highly integrated have split into divisions or independent companies focusing on different parts of the value chain (Heinrich and Leist, 2002). On the other hand, many customers demand a complete range of financial products in order to satisfy their financial needs “one-stop”. This forces financial services companies to collaborate with providers of complementary products and services. Ultimately, networks of financial services companies emerge (henceforth referred to as “financial services networks”) (Alt and Reitbauer, 2005).

2.6.1. Key CRM issues in financial services networks

1- Redundant competencies: Almost all the companies exhibited redundant competencies in respect of some of their partner companies in the network. Because some customers
may be clients of both companies, this may result in ambiguity regarding the responsibility for the provision of these services.

Generally, redundant competencies in a network are contrary to the idea of core competencies, since competitive advantage is achieved through the concentration of resources and economies of scale (Snyder and Ebeling, 1992). On the other hand, redundancy is – at least to some degree – desirable to reduce the risk of competency loss. This is especially important in loosely coupled financial services networks in which partnering companies can change rapidly.

2- Privacy constraints: The privacy protection laws make it more difficult for network partners to exchange customer data. Because customers own their personal data, customer data are thus essentially bound to the company that collects it, and can only be used for the stated purposes. Companies therefore either have to include a very broad declaration of data sharing in their “general terms and conditions” when signing their first contract with the customer, or have to obtain explicit permission to use these data for each new purpose (including providing it to another company in a network).

However, special privacy laws prevent banks from sharing any customer data without a court order – even with their customers’ permission. Consequently, partners may share data with banks, but banks cannot share data with partners. This makes it difficult for them to analyze customer preferences in order to improve, for example, product innovation.

3- CRM process integration: Because customer-oriented process activities are distributed across different enterprises, these processes have to be integrated among the partnering companies. Some networks also have different contact persons for a single customer. This is a typical characteristic when process integration is lacking, leading to inefficiencies and poor service quality (Peppard, 2000).

4- Customer information exchange: Customer information exchange is a big issue in all the companies and is closely connected to the privacy issue. Privacy constraints can lead to insufficient information exchange between partnering companies. However, even
when the necessary customer consent for data exchange purposes has been obtained, it is often difficult for these companies to exchange customer information. This issue becomes especially important when dealing with corporate clients, since much important knowledge is only stored in the heads of customer consultants and very little in information systems.

The initiation phase requires a significant time slice of the sales process as a whole, because knowledge has to be gathered and consolidated from various sources. Sometimes, because of missing information regarding “who knows what”, important business opportunities are missed or deals may not be closed.

5- CRM systems integration: Rudimentary CRM systems integration is a major issue that is often responsible for insufficient customer information exchange between partnering companies.

2.7. Customer value in CRM process

Committed customers are profitable to an organization for the long term. Customer commitment forms when a customer’s expectation is satisfied and the customer realizes fair value from his/her relationship with the organization. From an organization’s perspective, this value reflects customer equity, but from a customer’s perspective, it represents the customer’s perceived value of the relationship.

Effective customer relationship management (CRM) has become a strategic imperative for companies in virtually every business sector. Companies are moving closer to their customers, expending more effort in finding new ways to create value for their customers, and transforming the customer relationship into one of solution finding and partnering rather than one of selling and order taking (El Sawy and Bowles, 1997).

Organizations will be more successful if they concentrate on obtaining and maintaining a share of each customer rather than a share of the entire market (Peppers and Rogers, 1995). It has been illustrated in practice that retaining an existing customer is more profitable than acquiring a new one (Reichheld and Sasser, 1990).
Each relationship exchange incurs transactional and/or non-transactional data. Transactional data typically include sales amount, transaction time, place, and buyers while non-transactional data may include inquiries or feedback in the form of complaints or suggestions. Both transactional and non-transactional data must be organized into an integrated customer data profile because such information is what makes customer interaction powerful (Wells et al., 1999).

Such integration is a foundation of simplifying customer support activities and reducing transaction costs so that the organization may not only differentiate its products but also offer lower prices (Goodhue et al., 1992; Rangaswamy, 1993; El Sawy and Bowles, 1997).

Segmentation by demographic factors is widely used in bank marketing despite the fact that the correlation of such factors with the need of customers is often weak. Segmentation by expected benefits and attitudes could enhance a bank’s ability to address the conflict between individual service and cost-saving standardization. Using cluster analysis segments were formed based on combinations of customer ratings for different attitudinal dimensions and benefits of bank service. The clusters generated in this way were superior in their homogeneity and profit to customer segments gained by referring to demographic differences (Machauer, A. & Morgner, S., 2001).

Companies try to segment their customers by identifying groups of persons with need structures that are as homogeneous as possible within each group and significantly heterogeneous between groups. These groups can then be addressed with a specially designed but also standardized strategy. The goal is to solve the conflict between the intentions to satisfy customer needs as individually as possible but also to allocate marketing resources as economically as possible (Machauer, A. and Morgner, S., 2001).

A qualitative example of psychographic segmentation is presented by Harrison (1994) who uses variables such as the individuals’ own perceived knowledge and understanding of financial services, the perceived confidence and ability in dealing with financial matters and the expressed level of interest (involvement) in financial services.
With this study four distinct customer segments based on the level of knowledge and on the degree of the customers’ financial maturity could be identified. The segments are labeled “financially confused”, “apathetic minimalists”, “cautious investors” and “capital accumulators” and are hence characterized by particular attitudes towards financial services.

![Figure 2-7: Financial services customer segmentation (Machauer, A. and Morgner, S., 2001)](image)

2.8. Relationship positioning with the customer

According to equity theory, when a person perceives disparity in relationship, he/she will try to change the balance in an actual or psychological manner; otherwise, he/she would attempt to end the relationship (Hatfield et al., 1979). So equitable relationship building is important in the long-term relationship management. Through proper relationship positioning, it is possible to manage the customer life cycle so that firms may implement an equitable relationship strategy; by maximizing customer equity as well as enhancing the customer value.
The fair-value line is guidance to such an equitable relationship positioning. Figure 2-8 shows the analysis of the relationship value along the two dimensions. The area I in Figure 2-8 shows that, while the company provides significant value to its customers, the equity of the customers is relatively low for the company. So, in this case, the company may be given two alternatives. First, it can expel low-equity customers by reducing the level of benefits provided. Or it can increase the customer equity by intensifying customer relationship interactions and increasing customer loyalty. The customers in area II in Figure 2-8 have high customer equity but their perceived customer value from the relationship is relatively low. In this case, because the current value of the relationship to the customers is low, if a competitor offers a better value proposition, they may be tempted to defect.

Thus when your customers (especially core customers) are located either in area I or area II of Figure 2-8, it suggests a state of disparity and necessitates corrective actions. In summary, for maintaining a successful long-term relationship with their customers, firms should provide differentiated relationship value and communicate continuously with their customers. Customer information lays the foundation of such sustainable relationships. With the help of information technology, organizations can manage their customer information to enhance their customers’ transactional and non-transactional commitment, thereby boosting their competitiveness.

Figure 2-8: Relationship value analysis and positioning in two dimensions (Hatfield et al., 1979)
2.9. Types of customers by their behavior

Enabled by advanced information technologies, companies can now collect unprecedented amount and depth of data on their customers and turn them into information for their strategic business purposes. Here, the important issues are: to identify what kind of information they need; about whom they will collect this information; and how they will manage such information for future use.

From an information management perspective, customer identification is a critical beginning point for CRM. When customers do not reveal their identity to the firm (like the cash-paying customers in retail stores or airline passengers who are not enrolled in the mileage program), they are invisible to the firm, thus unmanageable. We define an identified customer as “a customer whose identification and contact information exists within the firm”.

Once able to identify its customers, a firm can make its customer-base more loyal by collecting, processing, and applying customer profile and transaction data to create in-depth understanding of customer needs and provide fair value to all customers.

As the firms nurture their relationships with their identified customers, some of them will evolve to become, what we call, core customers. Core customers are typically a small group of customers who are truly loyal to the firm and create enormous value for the firm. Despite their significant contribution to the firm, identifying these core customers is not always as easy as it sounds. In fact, defining core customers is regarded as one of the most critical strategic processes (Blattberg and Deighton, 1996).

We define the core customer of a firm as “an identified customer who accrues substantial value to the firm through high profit contribution, long term active relationship, or strong opinion leadership”.

It is not necessary to satisfy all three conditions to qualify as a core customer. Since the conditions are not mutually exclusive, some may satisfy two or all three conditions while others may satisfy only one of them. To identify core customers, firms
need to collect not only transaction data (purchasing) but also various non-transaction data such as membership activity, new customer referral, or feedback idea for the firm.

2.10. Types of customer information

According to the content and interaction types, customer information can be classified into three types:

1- Information of-the-customer;

2- Information for-the-customer; and

3- Information by-the-customer.

First, “of-the-customer” information includes personal and transaction data about a customer. It is the type of information most widely collected for CRM implementations. Firms obtain the personal data and are able to understand the customer’s sales volumes, profitability, purchasing patterns, frequency, preference, etc. For example, banks and credit card firms keep enormous amount of “of-the-customer” information in their database systems for opening, maintaining, and customer accounts billing and also to identify the most or least profitable customers. Database marketing, also called target marketing, is based on the strategic use of “of-the-customer” information.

Second, product, service and organizational information that are perceived useful by customers is referred to as “for-the-customer” information. This type of information is presented through diverse communication media so that customers acquire and process it to make more informed decisions. Firms can provide such information by direct mail, automatic response system (ARS), or Internet home pages.

The third type is “by-the-customer” information. This is the non-transactional customer feedback in formation that includes customer complaints, propositions, claims, A/S information, etc. Information of this type must be included in the expanded customer data profile because such information is what makes customer interactions powerful (Wellsetal, 1999). Since it contains customers’ direct complaints, needs and suggestions,
this type of information can be applied to develop new products and services or improve critical business processes.

2.10.1. An integrated framework for dynamic CRM

Figure 2-9 shows the integrated customer relationship management framework based on customer information types along with relationship evolution stages. At the relationship initiation stage, firms identify customers by collecting and recording “of-the-customer” information. Registering customers into the firm’s membership or bonus point programs is a typical method for customer identification.

For the identified customers, firms can provide various “for-the-customer” type information – for example, newsletters, special promotion notice, bonus point status, order status, etc. – as well as customized service. Some of the identified customers, after a certain period of satisfactory relationship experience, eventually evolve into core customers who satisfy one or more of the criteria for core customer.

As identified customers evolve into core customers, the firm enters the “expansion phase” in its CRM. In this phase, core customers actively participate in the two-way interactions with the firm and expand the firm’s customer base by word-of-mouth marketing. Feedback or suggestion from these core customers (“by-the-customer” information) may prove to be crucial for the firm to introduce new products, improve
Figure 2-9: A framework of dynamic customer relationship management (Park & Kim 2003)
business processes, and satisfy customer needs. The boundary between the firm and its customers becomes transparent in this phase.

For effective customer relationship management, each customer relationship needs to be analyzed from both the customer’s and organization’s perspectives.

Segmentation is a key method employed by banks to better understand and service their customers in this increasingly competitive environment. Characteristics of the financial services sector indicate it is a suitable area for market segmentation, most notably a diverse customer base with wide ranging needs and buyer behavior manifest through various channel interfaces.

The behavioral approach contrasts with the process of segmentation based on customer characteristics in that the focus is more driven by customer “needs”. It is argued that such a need identification approach is more robust than a classification of characteristics and that it is more probable that the segments that are consequently identified will be ultimately more predictive of purchase behavior.

Nunes and Cespedes (2003, p.99) argue that while “demographic segmentation can still tell you what people buy, demographics no longer tell you how people shop... it’s a poor basis for channel design. The only rational basis is to integrate buyer behavior”. In support of this approach, any approach to segmentation that is not focused on clustering customers according to their motivations “is simply an approximation based on the assumption that descriptors (i.e. characteristics) and motivations (i.e. needs/behavior) are closely aligned–usually they are not”.

2.11. Segmenting customers to personalize services

In addition to identifying strategically significant customers, the analytical CRM system will help profile and segment existing customers. Customer profiling combines multiple aspects of customers into a coherent evaluation, such as customer details, historical records and contact details, customer attractiveness, or customer satisfaction (Xu 2005).
Even though customer profiling is oriented more towards the operational function than the analytical function, it does provide a comprehensive view of each customer. This is the information required to understand the true value of the customer and gain insights to understand customer behavior. Existing customers can be segmented in many ways. This can lead to greater understanding about which customers and products have the most impact on the company’s operation and strategy. The segmentation enables the company to provide more personalized and, therefore, more attractive product and service offerings to individual customer groups (Xu 2005).

Figure 2-10: An analytical CRM for customer knowledge acquisition (Xu 2005)

A lot of large banks have been adopting information-driven customer acquisition and CRM, but at this stage few can show clear bottom-line rewards from this effort. However, a number of large banks in the USA, UK, Europe and Australia have invested in data warehouses and data-mining tools in the past few years. They have been building models of consumer-segment profitability and behavior, which help them target direct
marketing campaigns for the “right” groups of customers. They have been analyzing and classify consumer needs, assessing the risk of loss and trying to predict demand and delivery methods for various types of customers. They have been leveraging information for selling and for enhancing the effectiveness of new customer marketing campaigns (Foss 2002).

The essential of acquiring customer knowledge is to know not only who they are (customer profiling and segmentation) but also how they behave and what pattern they follow.

Customer knowledge acquisition should be treated as a dynamic and continuous process, to collect information about existing customers (internal), defecting customers (cross organizational boundary) and new customers. Knowledge about prospective customers and customers that are loyal to competitors (external) should also be obtained. (Figure 2-10) (Xu 2005)

2.12. Tracking and modeling customer behavior patterns

Customer behavior modeling is a process that includes segmenting target customer groups, establishing criteria for measuring behavior, monitoring and tracking behavior changes, generating behavior patterns, and predicting possible future behavior. Figure 2-11 shows the process of behavior modeling (Xu 2005).

1- Select target customer groups: Different customer segments may have different behavior patterns, thus modeling customer behavior needs to select a particular customer group. For example, it would be useful to know how strategically significant customers perceive the company, interact with the company and respond to the company’s offerings and promotions. The target customer group may also be identified by their particular behavior, for example, a group of defecting customers, a group of regular complainers. Based on such segmentation, their perceptions and shopping patterns can be monitored.
2- Developing measures to monitor customer behavior: It is important but often difficult to know what needs to be known. Effective behavior modeling needs to pre-define the types of behavior to be modeled and how the behavior is to be measured. Table 2-1 outlines some typical customer behavior patterns that should be modeled by an analytical CRM system.

3- Tracking and generating emerging patterns: Customer behavior needs to be continuously monitored and tracked in order to identify customer behavior patterns and trends, and to detect any abnormal behavior or emerging patterns for managers’ attention. Monitoring and tracking should be based on the pre-defined criteria to guide what to monitor and how. To fulfill this function, intelligent agent and expert systems can be included as a part of the analytical CRM system to enhance the detection, comparison, reasoning and alerting function.

4- Predicting possible actions: Finally, the analytical CRM will predict possible actions that are likely to be taken by customers based on the behavior and pattern generated. PeopleSoft refers to this as predictive analytics. Such analytics will enable managers to look ahead, and to provide guidance on how best to manage and treat customers.

For example, to predict whether a customer is likely to purchase or defect, and which group of customers are at risk of attrition. In addition to managerial support, the analytics can guide staff that has direct contact with customers as to which offers can improve their satisfaction, and make real-time recommendations on the best offers (Xu).
<table>
<thead>
<tr>
<th>Customer behavior</th>
<th>Purpose</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing behavior</td>
<td>To know the type of products and volume/value</td>
<td>Frequency, date, time, volume and value against product type</td>
</tr>
<tr>
<td>Contact behavior</td>
<td>To know how a particular customer contacts the company</td>
<td>Frequency of contact, length of each contact, channel of contact, and purpose of the contact</td>
</tr>
<tr>
<td>Retention behavior</td>
<td>Reduces the likelihood to churn among valuable customers and increase customer retention</td>
<td>Type of retention customers, frequency of retention, average volume of customer order, factors affecting customer retention</td>
</tr>
<tr>
<td>Respond behavior</td>
<td>Predict customer responses to marketing and sales campaigns</td>
<td>Per cent ignoring, noticing, taking action; changes in perception/actions, e.g. frequency of purchasing</td>
</tr>
<tr>
<td>Migration and defection behavior</td>
<td>Tracks the changing behavior of customers and monitors the changes in customer segments</td>
<td>Percentage of defection, trends of defection, type of defecting customers</td>
</tr>
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First European Bank considered it essential to develop a real-time database as a means to fully understand which types of clients it was dealing with. In fact, clients interact with sales services and client support services through the distribution network, which contains every possible channel to contact the bank: Agencies, call centers, self banking, home banking, client service, and so on. The bank’s interactions with its clients should provide transparent information, which can then be used by the “back office” for better marketing and peripheral services (e.g. the presence of a particular employee to serve a particular client and for cross-selling (Figure 2-12) (Lindgreen 2005).

![Figure 2-12: Client information and business flows (Lindgreen 2005)](image)

Segmentation, This key activity permits First European Bank to better understand the type of clients it is dealing with, and to adapt its marketing communication accordingly. The important elements to be taken into account are: clients’ attitude and needs; socio-demographics; actual and potential profitability; and behavior in terms of distribution channel use and products. Effective segmentation will also enable the bank to find and focus on clients who will be treated as referrals by others (lindgreen 2005).

Findings of a preliminary study that was undertaken to provide some insight into the state of the relationship between Northern Ireland banks and their small business clients, in what is a mainly “branched-based” banking environment at present. The study was also used as a means of establishing the current level of adoption and usage of electronic banking channels by SMEs in Northern Ireland and the level of satisfaction
with the same. In the 1990s, Kaplan and Norton (1992) presented the BSC concept in Harvard Business Review. Their basic idea is that evaluation criteria should include not only financial measures but also other perspectives such as customer satisfaction, internal business process, and innovation and learning.

2.13. Customer management assessment tool (CMAT)

CMAT (or Customer Management Assessment Tool) Assessments bring together a range of tools and methodologies that provide a detailed, objective, benchmarked assessment of an organization’s capability to effectively manage its customers.

![Figure 2-13: A CMAT model (Stone & Starkey, 2002)](image)

CMAT is becoming recognized globally as the standard for assessing the policies, practices, people, processes and technology that an organization has in place to deliver Customer Management goals. CMAT services transcend many of the fashionable concepts in Customer Management, providing evidence-based assessments and
2.13.1. A model for evaluating the effectiveness of CRM

The CRM evaluation model is an iterative process that assesses the effectiveness of CRM. As Figure 2-14 shows, the first step in this process is to determine the mission and goal of CRM. Once this is decided, the next step is to establish a CRM strategy. The purpose of this step is to define the principal strategic factors. After figuring out the strategic factors, the next step is to find interrelationships among CRM activities and business goals (business goals being increased profits) (Kim, 2003). By analyzing these relationships, we can learn what should be done to achieve better outcomes and what perspectives are important towards achieving the outcomes. The outcome of the analysis is evaluated to identify the effectiveness of CRM. This assessment gives further insights into the CRM strategy and helps the marketer to determine the strategy of CRM. The iterative process continues until the current CRM activities become effective.

Figure 2-14: CRM evaluation model (Kim, 2003)

Figure 2-15 shows the cause-and-effect relationship and related perspectives in the CRM evaluation process. First, a company accumulates a huge amount of customer
information and creates a customer profile. Next, the company discovers large and hidden customer characteristics through data mining tools and techniques. As CRM has tremendous potential for collecting and storing customer preferences, CRM can make it possible to create new products and customize existing products in innovative ways. Second, the company integrates all relevant information on each customer across the enterprise in order to facilitate more effective planning, marketing and services. Identified customer knowledge helps to find customer needs when a company interacts with customer. As customer requirements and expectations are met, loyal customers are created. Customer value can be added by product and service customization, additional information provision, and quality enhancement. Understanding and collecting customer needs are critical to conducting these value-adding activities.

Figure 2-15: Perspectives in CRM process (Kim, 2003)
Third, satisfactory long-term customer relationships can be established, as channels aid employees to serve customers effectively and profitably. Finally, the company increases revenues and profits. Typically, business value can be added by improving brand image, establishing customer relationships, enhancing public relations, and generating sales leads (Kim, 2003). The cause-and-effect relationship can give a clue as to what perspectives are important to achieve business goals. As Table 2-2 show, the perspectives to reflect a customer-centric philosophy in CRM evaluation (Kim, 2003). The model consists of the following four perspectives: customer knowledge, customer interaction, customer value, and customer satisfaction.

<table>
<thead>
<tr>
<th>Customer-Centric Focus</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer value</td>
<td>Enhancing customer loyalty and profit</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>Achieving business value</td>
</tr>
<tr>
<td>Customer interaction</td>
<td>Promoting effective channels and pursuing operational excellence</td>
</tr>
<tr>
<td>Customer knowledge</td>
<td>Understanding customer and analyzing customer information</td>
</tr>
</tbody>
</table>

The customer knowledge (CK): perspective represents the status of the customer segment and customer data management. Customer knowledge focuses on technology learning, understanding customer needs, and customer profiles, which influence ways of interacting with customers. CK is a prerequisite and essential part of meeting the future needs of customers and improving management processes. Therefore, it is critical for
some organizations to familiarize themselves with the new technology to understand their customers well.

*The customer interaction (CI):* perspective represents operational excellence and channel management of customer services and management processes. Management and maintenance affect customer value, operational excellence, and high-quality CRM service. By managing and maintaining CRM more effectively, a company can satisfy its customers and achieve operational excellence.

*The customer value (CV):* perspective represents the benefits gained from customers, such as lifetime value and customer loyalty. If the customer is satisfied with the service of a company, there will be no problem concerning customer deviation. To maintain this relationship, the CV perspective continues to find ways to build customer commitment and loyalty. In addition, customers are identified by their value and are treated accordingly.

*The customer satisfaction (CS):* perspective represents the level of satisfaction achieved by products or services. Customer satisfaction is the feeling that a product or service meets customer expectations and determines whether the buyer will become a permanent customer or not.

### 2.13.2. Metrics of CRM effectiveness

As Figure 2-16 shows, a company interacts with the customer using various communication channels such as e-mail, Web sites, virtual communities, call centers, and service centers. This information needs to be integrated and analyzed in order to obtain a complete and accurate picture of the customers—their preferences, needs, complaints, and attributes that can make them life-long members of the organizational “network” of products and services (Berson, Smith, & Thearling, 2000).
1- Measures for customer knowledge:

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collecting appropriate customer information</td>
<td>Customer acquisitions (No.) Number of customers (No.)</td>
</tr>
<tr>
<td>Analyzing customer data</td>
<td>Web marketing</td>
</tr>
<tr>
<td>Acquiring new customers</td>
<td>Page views per day (No.)</td>
</tr>
<tr>
<td>Understanding customer needs</td>
<td>Visits per day (No.)</td>
</tr>
<tr>
<td>Improving skills of employee</td>
<td>Net sales/employee (%)</td>
</tr>
<tr>
<td>Improving CRM techniques</td>
<td>Technological capacity (No.) Frequency of hardware upgrade (No.) R&amp;D investment ($)</td>
</tr>
</tbody>
</table>

- Support R&D Data warehouse, Data mart, Data mining Multi-dimension analytical
- Service R&D Customer segment personalization Recommendation Web service Customer profile research ($)
### 2- Measures for Customer Interaction:

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriate response to customer request</td>
<td>Marketing campaign (No.)</td>
</tr>
<tr>
<td>Integration of business processes</td>
<td>Total cost for promotion ($)</td>
</tr>
<tr>
<td>Improving channel management</td>
<td>Frequency of contents update (No.)</td>
</tr>
<tr>
<td>Maximizing the effectiveness and efficiency of enterprise operations</td>
<td>Number of payment methods (No.)</td>
</tr>
<tr>
<td>Customizing products and services</td>
<td>Number of response channel to customer inquiry (No.)</td>
</tr>
<tr>
<td></td>
<td>Avg. delivery time after order fulfillment (No.)</td>
</tr>
<tr>
<td></td>
<td>Response time to customer inquiry (No.)</td>
</tr>
<tr>
<td></td>
<td>Transaction conducted by members (%)</td>
</tr>
<tr>
<td></td>
<td>Product diversity</td>
</tr>
<tr>
<td></td>
<td>Detailed product information</td>
</tr>
<tr>
<td></td>
<td>Timeliness sales in popular product</td>
</tr>
</tbody>
</table>

### 3- Measures for Customer Value:

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving customer retention</td>
<td>Number of retained customers (No.)</td>
</tr>
<tr>
<td>Profits increase</td>
<td>Net sales ($)</td>
</tr>
<tr>
<td>Improving customer service and support</td>
<td>Ordinary sales ($)</td>
</tr>
<tr>
<td>Building attractive virtual community</td>
<td>Asset/employee ($)</td>
</tr>
<tr>
<td></td>
<td>Profit/employee ($)</td>
</tr>
<tr>
<td></td>
<td>Channel interface</td>
</tr>
</tbody>
</table>

- Usability
- Attractiveness
- Navigation efficiency
- Contents search
- Consistency of site structure
### Measures for Customer Satisfaction:

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving service quality</td>
<td>Brand image (%)</td>
</tr>
<tr>
<td></td>
<td>Service level (%) (response to customer inquiry)</td>
</tr>
<tr>
<td></td>
<td>Number of daily customer inquiries (No.)</td>
</tr>
<tr>
<td>Establishing relationships with customers</td>
<td>Customer satisfaction (%)</td>
</tr>
<tr>
<td></td>
<td>• Assurance</td>
</tr>
<tr>
<td></td>
<td>• Reliability</td>
</tr>
<tr>
<td></td>
<td>• Empathy</td>
</tr>
<tr>
<td></td>
<td>• Responsiveness</td>
</tr>
<tr>
<td></td>
<td>• Tangibles</td>
</tr>
</tbody>
</table>

#### 2.13.3. Associating evaluation metrics with the business value of e-banking channels

By simply comparing metrics data with results can offer little insight for evaluating the contribution of an e-banking channel to the overall value that a bank produces as an enterprise. To do this, the evaluator should consider an e-banking channel both as a resource whose utilization must be maximized (internal view), and as an interface to its customers whose usage should directly support Customer Relationship Management (CRM) (external view). Together, those two view points constitute the frame work against which the evaluation metrics can be meaning fully interpreted in order to assess the channel’s value (Figure 2-17) (Stamoulis, Kanellis, & Martakos 2002).
2.13.4. **Association of evaluation metrics with internal and external value viewpoints**

As is the case with all resources within an enterprise, technology is used and managed so as to be efficient and effective in its mission. Furthermore, as IS can play a strategic role in cases where the business operation is vitally linked to their functioning, we should aim to improve IT utilization across all organizational levels. The value that IT can bring is IT value chain model consisting of four stages/elements: efficiency, effectiveness, market expansion and competitive advantage/strategic weapon. The first two are considered to be the ‘foundation’ elements, whilst the other two the ‘innovation’ ones. Using this model, the proposed evaluation metrics can be associated to those four stages for assessing the business value of the channel according to the internal viewpoint.

An efficient and effective channel may indeed leverage an expansion of the market for the bank that operates it. If customers are satisfied with the use of the channel, they will increasingly seek to handle more of their relationship with the banking sector through such a channel. Therefore, in choosing more products from the bank that owns
the channel, their dependence also increases. Through monitoring customer reaction time per offering (i.e. how fast any new product or service offered through the channel is being ‘consumed’), Stamoulis, Kanellis, & Martakos 2002 have empirically verified this assumption. Data shows that the potential for cross-selling level activities is high when a customer is an already satisfied user of an e-banking channel. Behavioral patterns analyses of the customer base are expected to reveal that the more a customer uses an electronic channel, the more profitable he becomes for the bank.

Channels must become innovative elements within the IT value chain. Technology itself cannot be labeled strategic unless it helps the bank increase its market share first and then create a competitive advantage. The former means that it is not only the products, but also the channel itself that prompts the customer to extend his relationship with the bank; via such channels customers can manage their financial affairs enjoying a high level of autonomy. The latter enables the bank to be second to none in what it offers, with obvious implications for its business success. It is noted that the ‘innovative’ elements of the IT value chain are assessed using qualitative approaches in comparison with the ‘foundation’ elements’ where quantified constructs are more suitable. The upper part of Table 1 depicts the association of the five perspectives of our evaluation model with the elements of the IT value chain.

A critical success factor for any business is how well it interacts with its customers. The external view dictates that the business value of an e-banking channel should be assessed according to the extent it supports CRM during the four phases of a relationship between a business and an existing or potential customer. These phases are creation, retention, expansion and selection. Initially, a relationship is created and the nit must be retained, otherwise the customer is lost.
Table 2-3: Association of evaluation metrics with internal and external value viewpoints (Stamoulis, Kanellis, & Martakos 2002)

<table>
<thead>
<tr>
<th>IT Value Chain</th>
<th>INTERNAL VIEW</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Efficiency</td>
<td>Effectiveness</td>
</tr>
<tr>
<td>Evaluation perspectives</td>
<td>Financial perspective</td>
<td>Customer perspective</td>
</tr>
<tr>
<td>Evaluation metrics</td>
<td>Minimization of channel's IT maintenance and upgrade costs</td>
<td>Channel's Usability</td>
</tr>
<tr>
<td>CRM Phases</td>
<td>Creation</td>
<td>Retention</td>
</tr>
</tbody>
</table>

mainly Quantitative methods & measures

mainly Qualitative methods & measures

EXTERNAL VIEW
The expansion of the relationship with up-selling and cross-selling strategies leads the business to decisions about selecting those customers that produce high profits and low risks. Critical success factor for any business is how well it interacts with its customers. If the transition from one phase to another is carefully managed, and CRM successfully applied, the bank should enjoy high loyalty rates and a profitable and low risk customer base. Hence, it is important to assess the extent to which an e-banking channel supports the phases of the CRM cycle.

If an e-banking channel is efficient and provides the means with which the execution of banking transactions can take place at a low cost, customers will be attracted and new relationships will be formed. As far as efficiency is concerned, the financial perspective of our model provides for the evaluation process at this stage of the cycle. When a channel is effective—i.e. “is doing the right things”—the customer is satisfied and thus, his/her relationship with the bank through the channel is retained. Because customers should be able to access the services offered via a selection of technological platforms (PC, ATM, cell phone, WebTV), the technology perspective is associated with channel effectiveness. Also, evaluation under the ‘customer’ perspective yields another relative assessment of the channel’s effectiveness. Customers who have access to the right product mix through the channel will most probably remain loyal to it as long as this continues to be the case. Therefore, it is deduced that an effective channel supports directly the retain phase of a CRM cycle.

Moving on to the third phase of the CRM cycle, extending the product range offered through the channel and in general enhancing customer propositions, affects decidedly the relationship between the bank and a customer who interprets this as a potential increase of the value he already receives. Positive marketing and sales metrics results should thus be seen as a sign that the channel being evaluated leverages the expansion of existing relationships.

Finally, for a channel that already serves a large customer base, as it is the case when a competitive advantage has been achieved, the bank enjoys the luxury of selecting and maintaining those customer relationships that are the most profitable and low risk
ones. Through the ‘strategy’ perspective evaluation results should guide decisions as to whether or not to perform selection procedures or to amend only specific ones in order to accommodate differentiated offerings to specific customers.

The lower part of Table 2-3 depicts the association between the phases of the CRM cycle and the five perspectives of our evaluation model. As noted, the left-most side of the table consists mainly of quantitative metrics, whereas the right-most part consists mainly of qualitative ones. Analyzing IS evaluation whereas in the academic community there are signs of a move towards interpretive, in the practical domain positivism remains entrenched. This was not the case with the Bank.

As described in section 2, Stamoulis, Kanellis, & Martakos (2002) adopted a process within which their role was of an organizer and facilitator. Within this process, the model was thus used by the bank as a tool to facilitate and support some form of social interaction amongst a group of users, managers and decision-makers. From this perspective, any constructs of measurement are seen as analogies that interpret ‘reality’ and communicate the reality so interpreted. Hence, any conflicts between an interpretive paradigm and quantitative methods are eliminated. The following section explains why a level of codification is necessary when measurement is perceived as a form of communication.

2.14. Summery of the chapter

The chapter’s overall goal was to provide an overview of the literature in the areas covering this research: Customer relationship management (CRM), e-banking, CRM characteristics, and CRM activities. First, a brief CRM history, functions, activities, definitions and benefits were reviewed and followed by an introduction of CRM activities in e-banking. Finally, the role of characteristics of CRM in customer profitability within the context of e-banking industry was investigated. In this chapter, a number of theories were presented which will eventually function as basis for the development of frame of reference in the following chapter.
Chapter 3: Research question and frame of reference

3.1. Introduction

In this chapter based on the research problem which described in chapter one and literature review in chapter two, the research question will formulated according to research problem. Subsequently, the selected model in this study will be presented to build a frame of reference.

3.2. Problem Discussion and Research Problem

As it mentioned is section 1-2, the aim of this research is to investigate the customer relationship management activities that are already exist in e-banking activities in Iranian banks. By motivations had been discussed in literature review Iranian banks are already adopt themselves through this mindset more or less. Iranian banks proceed to this important issue differently with different rates of success in customer satisfaction and customer relationship management. So, with a comparative approach their attitudes toward CRM will reveal and embrace their success and failure factors. So, the research problem can be described as “How can CRM activities in Iranian banks are described?”

3.2. Research question

The function of research questions is to explain specifically what the study will attempt to learn or understand. In the research design, the research questions serve two other vital functions: to help the researcher to focus the study (the questions’ relationship to your goals and conceptual framework) and to give the researcher guidance for how to conduct it (their relationship to methods and validity) (Maxwell 2005)

As stated, questions are asked to illuminate different corners of the research problem thus guiding the researcher to the solution step by step. Based on the literature review done in order to get into CRM activities description in Iranian banks, it is first asked that “How does the bank define the CRM?”, thus the first question of the research is emerged. After an organization defined CRM, it comes next the question of its benefits
for the organization. They have to move towards these benefits, adopting approaches to get them there. Then comes the question of how they implement their definitions and concept at the top of the organization's processes and how they have programmed the method to achieve them and how they view this way. As said in section 2.2 under the title “Characteristics of CRM”, CRM is divided in three general sections. It is important that how each bank is implementing each of these sections and also their implementation of that chain which results in CRM by the electronic banking activities. This way, research questions are recognized.

An understanding of how to manage customer relationships effectively has become an important issue for the banking industry. Banks among the most committed CRM proponents. However survey done by META group suggests that there are different answers about the view of CRM. So, the aim of next question is to find out: “How Iranian banks view CRM?” The most important part of the information management is the process that the company will do for the transforming the customer data to the customer knowledge in the analytical CRM, Due to this process what they will do and what are the strategies?

Moreover, few companies are transforming the information to customer knowledge and they miss the opportunity to provide value to their customer if companies are transforming the customer data into knowledge and then uses that knowledge to build relationships it will create loyalty. CRM is the tool that contributes to profit.

RQ1: How can the definition of CRM in Iranian banks described?

RQ2: How can the benefits of CRM in Iranian banks described?

RQ3: How Iranian banks view CRM?

RQ4: How Iranian banks can manage the analytical CRM?

RQ5: How Iranian banks can manage the operational CRM?

RQ6: How Iranian banks are managing their communicational CRM?
3.3. Frame of reference

The purpose of this section is to build an appropriate frame of reference for investigating CRM activities in e-banking of Iranian banks. Miles and Huberman (1994, p. 18) claim that a conceptual framework explains “…either graphically or in narrative form, the main things to be studied—the key factors, constructs or variables—and presumed relationships among them.” The conceptual framework, which may either precede or follow the formulation of research questions, will help the researcher identify who and what will or will not be studied (ibid.). The necessity of clearly defining concepts used in a research study is highlighted by Cooper and Schindler (2001), who claim that confusion about the meaning of the concepts could jeopardize the value of the study.

As it mentioned before in chapter 2 Sweeney Group defines customer relationship management (CRM) as “all the tools, technologies and procedures to manage, improve, or facilitate, support and related interactions with customers, prospects, and business partners throughout the enterprise”. This broad definition involves CRM in every process of a business transaction. A well designed CRM shares the characteristics as:

1- **Communicational/ collaborative CRM** for building online communities, developing business-to-business customer exchanges, personalizing services, etc. It makes interactions between a business, its channels and its customers possible. It provides the means for the customer to contact the company and enables collaboration between suppliers, partners, and customers.

2- **Operational CRM** for improving customer service, online marketing, automating sales force, etc. It is the automation of customer-facing processes. It handles the customer contact and processing. It manages and synchronizes customer interactions in marketing, sales, and service.

The functions include Sales Force Automation (SFA), automatically tracking a client’s account history for repeated transactions. The goal of SFA is to allow the sales force to concentrate more on selling and less on administrative tasks. Enterprise Marketing Automation (EMA) for evaluating valuable customers and segmentations for
some strategic marketing and Customer Service and Support (CSS) for delivering personalized and efficient services to the customers.

3- *Analytical CRM* for building data warehouses, improving relationships, analyzing data, etc. It uses customer data to create a mutually beneficial relationship between a business and its customers. This analysis, modeling and evaluation help to optimize information sources for a better understanding of customer behavior, so that make the contact to be more personalized.

These CRM technology applications link front office (e.g. sales, marketing and customer service) and back office (e.g. financial, operations, logistics and human resources) functions with the bank’s customer “touch points” (Fickel 1999).

As it mentioned before customer satisfaction is essential for increasing the competitiveness of companies and achieving customer objectives. To improve it, it is necessary to identify customer needs and expectations and ensure they are met. This requires the construction of a measurement system fed by information, part of which will come directly from the customer and part will be extracted from the company’s computer system. Data stored in the contact centric database is analyzed through a range of analytical tools in order to generate customer profiles, identify behavior patterns, determine satisfaction level, and support customer segmentation. The information and knowledge acquired from the analytical CRM will help develop appropriate marketing and promotion strategies. So, if the bank’s systems relating to various types of accounts and services did not recognize that the same customer interacted with bank in a number of ways, relating to different services of the bank, it would not be possible to take a complete view of the customer – and his/her value to the bank. In term 360 degree customer view has been coined to refer to this need for a view of the complete set of interactions between an organization and its customers (Kotorov 2002, Dyche 2001).

Continuing technological innovation and competition among existing banking organizations and new entrants have allowed for a much wider array of banking products
and services to become accessible and delivered to retail and wholesale customers through an electronic distribution channel collectively referred to as e-banking.

For the purposes of Jayawardhena and Foley, customer expectations from electronic banking can be conveniently categorized under four different categories, namely, view-only functions to have bank balances in check, action/account control functions to provide customers with the broadest range of access and control over their accounts, applying for new banking services to be able to make applications for core banking services and open new accounts (savings accounts, loans, etc) and integration reconciliation functions to manage their finances with software packages (Jayawardhena & Foley 2000).

On the other point of view; according to Reynolds (2002) customer relationship management applications can commonly include: call center automation, campaign management, contact management, data warehousing, e-mail management, field service automation, knowledge management, marketing automation, personalization and sales force automation. Rapidly improving technology has allowed organizations to make the best of each customer contact. Each relationship exchange incurs transactional and/or non-transactional data. Transactional data typically include sales amount, transaction time, place, and buyers while non-transactional data may include inquiries or feedback in the form of complaints or suggestions. Both transactional and non-transactional data must be organized into an integrated customer data profile because such information is what makes customer interaction powerful (Stone, Starkey & Williams, 2002).

Enabled by advanced information technologies, banks can now collect unprecedented amount and depth of data on their customers and turn them into information for their strategic business purposes. Here, the important issues are: to identify what kind of information they need; about whom they will collect this information; and how they will manage such information for future use. Once able to identify its customers, a firm can make its customer-base more loyal by collecting, processing, and applying customer profile and transaction data to create in-depth understanding of customer needs and provide fair value to all customers. According to
the content and interaction types, customer information can be classified into three types: information of-the-customer which personal and transaction data about a customer; information for-the-customer is the product, service and organizational information that is perceived useful by customers; and the third type is “by-the-customer” information. This is the non-transactional customer feedback information that includes customer complaints, propositions, claims, etc (Wells, Fuerst & Choobineh, 1999).

Segmentation is a key method employed by banks to better understand and service their customers in this increasingly competitive environment. The goal is to solve the conflict between the intentions to satisfy customer needs as individually as possible but also to allocate marketing resources as economically as possible (Machauer & Morgner, 2001).

By customer management banks are going to find the right customers (those with an acceptable current and future net value), getting to know them (as individuals or groups), growing their value (if appropriate), and retaining their business in the most efficient and effective way. So they can improve customer retention and loyalty customers stay longer, buy more, more often, and increased long-term value; higher customer profitability because of lower costs of recruiting customers, and no need to recruit so many to maintain a steady volume of business; reduced cost of sales, as existing customer are usually more responsive (Stone, Starkey & Williams, 2002).
The analytical part of the CRM should be able to create a variety of customer segments considering customer feedbacks from the database. These segments will be used to design decision making algorithms by the operational part and then will be presented to the customers. Unless the above mentioned steps are conducted one after another in a chain format the process will not be performed successfully. As a result of the literature review, figure 3-1 is presented which shows the emerged investigation of CRM activities in banking industry. The introduced model in figure 3-1 would be the basis of the current investigation on banking activities of a few public and private Iranian banks.

The next step of the research will be some comparison studies between two major types of banks which are privet and public in Iran. In this comparison some public banks and some privet banks will investigate with each other, some comparison between the banks and some within the banks.
3.4. Summary of the chapter

The goal of this chapter was to summarize chapter one and two and also narrow down the theories reviewed in second chapter in order to fulfill the overall objective of this study which is to address and answer each of the six stated questions within the context of banking industry. The next chapter, chapter 4, will outline the applied research methods in details.
Chapter 4: Methodology

4.1. Introduction

In the previous chapter, literature relevant to this research project was reviewed. This chapter will cover the methodology used in this research. The first three chapters served the purpose of justifying the study and defining the research problem and research questions. This chapter outlines the research methodology and describes the methods used to test the frame of reference empirically and thus provide answers to the research problem and research questions. First, research purpose will be discussed. Second, research approach will be investigated. Third, research strategy will be explored, and finally in the research methodology, case design and data collection will be considered through this chapter.

According to Cooper and Schindler (2006), research can be defined as any organized inquiry carried out to provide information for solving problems. They further explore that business research is a systematic inquiry whose objective is to provide information to solve managerial problems or management dilemma: the problem or opportunity that requires a management decision.

4.2. Research purpose

Based on research purpose, it may be classified as exploratory, descriptive, or explanatory. Exploratory researches generally seek to investigate phenomena that are not well understood (Marshall & Rossman, 1999) or deal with a problem in order to facilitate the development and formulation of a research problem. In such cases, the research commonly begins with an exploratory phase to assess what the study should be around and then, depending on the aim of the research, evolves into a descriptive or explanatory phase. In addition, exploratory research could be used to identify important categories of meaning or to generate hypotheses for further research (Marshall & Rossman, 1999; Yin, 2003). Descriptive research focuses on documenting and describing the phenomenon of interest (Marshall & Rossman, 1999).
Moreover, Neuman (2003) states that the purposes of social research may be organized into three groups based on what the researcher is trying to accomplish:

- **Exploratory**: become familiar with the basic facts, setting, and concerns, create a general mental picture of conditions, formulate and focus questions for future research. Generate new ideas, conjectures, or hypotheses, determine the feasibility of conducting research, and develop techniques for measuring and locating future data.

- **Descriptive**: provide a detailed, highly accurate picture, locate new data that contradict past data, create a set of categories or classify types, clarify a sequence of steps or stages, document a causal process or mechanism and report on the background or context of a situation.

- **Explanatory**: test a theory’s predictions or principle, elaborate and enrich a theory’s explanation, extend a theory to new issues or topics, support or refute an explanation or prediction, link issues or topics with a general principle and determine which of several explanations are best.

This study is exploratory since the reader becomes familiar with the basic facts, setting, and concerns. As the research questions and research purpose of this study indicates, it is primarily descriptive. The study provides a background of a situation and also a relatively detailed accurate picture; therefore, it is descriptive. Eventually the study will be explanatory since it elaborates and enriches and supports the previous theories through comparing the research’s answers with research questions.

In this study, the research problem and subsequent questions indicate that the aim is to investigate of how CRM activities in e-banking work, focusing on the general nature of problems and the components that relate to it. Bearing in mind that the phenomenon of CRM in e-banking is quite recent in Iran, the research purpose is to understand the area so it’s able to provide a comprehensive description of the phenomenon. Consequently, this research could be categorized as mainly descriptive, but also to some extent, exploratory. According to Marshall and Rossman (1999, p. 33), descriptive and exploratory research can “build rich descriptions of complex circumstances that are unexplored in the literature.” Due to the fact that this research does not seek to establish
causal relationships between the components studied, the intention is not to conduct an explanatory research.

Considering the above mentioned research questions and according to Yin (2003) the case study strategy had chosen since it might deal with the same kinds of evidence as the background, but adds the possibility of making interviews and direct observations. In addition, in choosing the case study strategy it was considered that they are preferred strategy when “How” and “Why” questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within real life context. The purpose of a study can be served in different ways, depending on what research approach the investigator chooses to apply, which will be discussed in the next section.

4.3. Research approach

Researchers of research methodology (Guba & Lincoln, 1994) discuss two general research approaches: quantitative and qualitative research. Quantitative research is commonly used when the purpose is to test hypotheses and generalize the results (Yin, 2003). Thus, quantitative methods are generally concerned with quantifiable and numeric data, usually expressed in numbers and statistics, and associated with large amount of samples, high concern for representative, and highly structured methods for data collection (Cooper).

In such cases where there is a limited understanding of a phenomenon, a qualitative research approach is often preferred, as it can be more exploratory and allows the researcher to be very descriptive (Cooper & Marshall & Rossman, 1999). Thus, when the focus is on providing a complete picture of the situation, aiming to discover and gain a deeper understanding of social processes and interrelations, qualitative research is more useful (ibid). Since the purpose is to investigate the customer relationship management activities that are already exist in e-banking activities in Iranian banks, the approach of the research will be qualitative approach. Case study research is especially appropriate for information systems research because the research subject cannot be clearly separated
from its context. In contrast of the typical use of numbers and statistics in quantitative studies, qualitative research basically involves data in the form of words or descriptions (Yin 2003). Qualitative research often implies small samples, little concern for representative, and unstructured methods for data gathering (ibid). Qualitative methods are primarily used in social sciences and have become more important as a mode of inquiry in this field of science (Marshall & Rossman, 1999).

According to Gummesson (2000), deductive research starts with existing theories and concepts and formulates hypotheses that are subsequently tested; its highest point is received theory. Inductive research starts with real-world data, and categories, concepts, patterns, models, and eventually, theories emerge from this input. Cooper state that a qualitative research aims to achieve an in-depth understanding of a situation and it incorporates a collection of interpretive techniques which try to describe, decode, translate, and otherwise learn to accept the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world. A collection of techniques includes case studies, individual depth interviews, observation, focus groups, action research, etc (Ibid).

Since the research purpose and research questions were developed on existing theories and concepts, this research will be deductive. As the purpose of this study is to gain an in-depth understanding of the CRM activities in e-banking of Iranian banks, the selection of qualitative approach was found to be more appropriate to fulfill the stated purpose since case studies are being used and it requires assessing abundant information. In addition, as this study is intended to explore, describe and find as many as detailed and complete information as much as possible, the qualitative approach is found the most appropriate method of study. Thus, the aim of this study is to establish a closer contact with the studied objects and not to make any generalizations.

4.4. Research strategy

Marshall and Rossman (1999, p. 61) state that research strategy is “a road map, an overall plan for undertaking a systematic exploration of the phenomenon of interest.”
Subsequently, the selection of a research strategy for this study is discussed and justified. Yin (2003) identifies five major research strategies within the social sciences: experiments, surveys, archival analysis, histories, and case studies. Each strategy can be used for all three purposes: explanatory, descriptive, and exploratory. However, all of them are associated with advantages and disadvantages and the boundaries between them often are unclear and blurred (ibid.). When selecting an appropriate research strategy, the decision should be based on the type of research question posed, the extent of control an investigator has over actual behavioral events and the degree of focus on contemporary events (ibid.).

The research strategy had chosen multi case study due to the fact that it gives the opportunity to conduct a thorough study, enhance the ability to compare the cases and investigate those cases from many aspects; therefore, it enables the researcher to see the differences and similarities among the cases and it can increase the level of assurance to findings.

The data for this study that will be collected is expected to be mainly of a qualitative nature since it is in the form of words and not derived from numbers. The data gathering will be semi structure interview. The instrument will be interview guide which will be conducted based on frame of reference of the literature review and also some information and knowledge from pilot survey.

4.5. Case Study Design and Unit of Analysis

Yin (2003) defines a case study as an empirical investigation that deals with a contemporary phenomenon within its real life context, and states that it is particularly useful in situations in which the boundaries between phenomenon and context are not clearly evident. This definition distinguishes case studies from other types of research strategies. For instance, experiments deliberately take away context while surveys have limited possibilities to deal with context.

A case study could focus on one single case or be designed as a multiple-case study (Yin, 2003). A single-case study is preferable when the single case represents an
extreme or unique case, a critical case, or a revelatory case (ibid.). Multiple case designs involve more than one case and has both advantages and disadvantages compared to a single case study design. The validity does increase with multiple case designs, and the results from multiple case studies are often considered more compelling and robust; however, multiple case studies also are more expensive and time consuming (ibid.).

Yin (2003) states that interviews are one of the most important sources of case study evidence and define the interview as a two-way conversation that gives the interviewer the opportunity to participate actively in the interview. The most commonly used interview method is open-ended questions. So, the instrument would be the interview guide. The interviews will be conducted in semi-structured form. In this research, multiple-case study design was selected due to the fact that this research is not dependent on a single, critical, extreme, unique, or revelatory case. Furthermore, multiple-case studies will provide more in-depth information about the research problem concerning definitions, profits and different characteristics of CRM in e-banking, thus will result in a higher degree of validity.

Besides determining how many cases to include in a study, an important decision regarding the design of a case study concerns what “unit” to analyze. Sullivan (2001) explains that “units of analysis are the specific objects or elements whose characteristics we wish to describe or explain and about which data will be collected.” That could include, for example, individuals, groups, organizations, programs, and social artifacts, which all are common units of analysis in social science research (ibid.). However cases also could be events or entities that are less well defined than a single individual such as: decisions, implementation processes, and organizational change (Yin, 2003). The case study design may involve one single unit of analysis (holistic design) or multiple units of analysis (embedded design) (Yin, 2003).

The research problem and questions of this research address the e-banking (banks) that have and run CRM activities that are already exist, implying that the banks were selected for this research case study are the specific objects whose characteristics will be wish to describe and from which data will be collected. Considering the fact that
the research problem deals with competencies between Iranian banks, CRM is an
opportunity that banks can avail to rise above minor advantages by developing actual
relationship with their customers, the unit of analysis is the whole bank (Marketing,
CRM, Public Affair, Credit and facilities, decision making and also IT departments). In
view of the fact that no logical subunits have been identified, holistic multiple-case study
design is appropriate for this study. Based on Cooper who offered the following figure 4-
1, research process is as follows:

Figure 4-1: Research process (Cooper, D.)
4.6. Literature Review

Marshall and Rossman (1999) emphasizes that “a thoughtful and insightful discussion of related literature builds a logical framework for the research that sets it within a tradition of inquiry and a context of related studies.” Yin (2003) states that importance of developing a theoretical framework, particularly when multiple-case study design is adopted, as it later becomes the vehicle for generalizing new cases. According to Marshall and Rossman (1999), the main role of the literature review is that it: shows the underlying assumptions behind the research questions, demonstrates the researcher’s knowledge within the area, shows that the proposed study will fill a gap in previous research, and refines and redefines the research questions by embedding them in larger empirical traditions.

Literature review was conducted as a review of more than 70 CRM and e-banking journal articles from 1999 to 2005, also some Master thesis from Tarbiyat Modares University, Tehran University and Lulea University of Technology. For the purpose of research methodology some handbooks were reviewed. The journal searched included International Journal of Bank Marketing, Business Process Management Journal, Marketing Intelligence & Planning, Managerial Auditing Journal, Journal of Knowledge Management, Information and Management, Industrial Management & Data Systems, banking and management. These journals were selected because they are regarded to customer relationship management aspect of e-banking and are highly ranked every time. Articles were selected if they involved research in banking and their title, abstract, or keywords emphasized customer relationship management (CRM), e-banking, operational CRM, analytical CRM, communicational CRM, CRM in financial services and self service banking. Because the scope of this review was customer relationship management, the following key words were also eventually added: customer satisfaction, CRM performance and evaluation customer relationship management.

Classification of the articles in this research was a two-stage process. At the first stage the articles selected based on the CRM concept. The articles selected if their title, abstracts and key words emphasized on empirical study of the customer relationship
management, customer centric, satisfaction or retention. As the second stage the banking articles were reviewed totally in order to determine the customer relationship management activities. The articles were classified regarding the operational, communicational or analytical parts of CRM; and also, the articles which empirically illustrate the e-banking activities in different countries (e.g., internet banking, customer knowledge in banking and evaluation of CRM in banking) were recognized.

4.7. Case Selection

Miles and Huberman (1994) indicate that sampling in qualitative research involves two actions: first, the setting of boundaries “to define aspects of your case(s) that you can study within the limits of your time and means.” And the second, the creation of a frame “to help you uncover, confirm, or qualify the basic processes or constructs that under gird your study.” In qualitative research, the purpose of sampling is generally to gain access to relevant evidence about the phenomenon under study (Potter, 1996). There are two primary reasons why the researcher selects a specific sample (ibid.). First, when the researcher is in quest of efficiency, sampling can be done by selecting cases based on convenience (purposive sample). Secondly, the sampling can be guided by formal purposes, such as representative, finding a critical case, finding a typical case, or striving for a set of cases that maximizes variation. The most commonly used argument for sampling is the one of convenience (ibid.).

The central Bank of the Islamic Republic of Iran shall be responsible for the formulation and implementation of the monetary and credit policies with due regard to the general economic policy of the country. The Banks that this organization is represents are: Eghtesad'e Novin, Parsian, Post Bank, Tejarat, Export Development, Refah Kargaran, Saman, Sepah, Saderat, Industry & Mining, Karafarin, Keshavarzi, Maskan, Mellat and Melli; which are separated to public and privet sections. Due to this segmentation there are differences in their structure and visions.

In this section, the empirical data collected from documents and interviews of four selected banks as it illustrates in figure 4-2 which are Egtesad Novin Bank (ENB),
Tejarat Bank, Parsian Bank and Mellat Bank. They are separated to two groups based on the public and privat sections. There are some reasons for selecting amount of them in this research for the purpose of case analysis. The reason why these four cases are selected is that they agreed to cooperate for the interviews with the staff and managers and specialists after the initial talk with the officials. In order to compare the two categories, a fourfold matrix is designed (figure 4-2) enabling us to compare and analyze. All the banks involved are commercial and target the same audience. They all serve the public.

In order to extract the suitable data, a search was done inside the organization to find the expert personnel who are somehow involved in the CRM process. They have interesting things to say. They are actually the sources reporting to the managers thus they are the people aware of the situation and issues of the organization. The results of these interviews would be presented under the title “Empirical data presentation” for each bank.

![Figure 4-2: Iranian Bank in the 2×2 matrix in two different sections.](image)

### 4.8. Data Collection Methods

According to Yin (2003), the process of data gathering is more complex in case studies than in studies based on other research strategies. Yin (2003) states that case study researchers, therefore, must have “a methodological versatility” and need to “follow certain formal procedures to ensure quality control during the data collection process.” Data sought in a case study project can be collected through various methods. Yin (2003) discusses six sources of data collection available for case studies: documents, archival records, interviews, direct observations, participant observations, and physical artifacts.
The various sources have their strengths and weaknesses, and many of the sources complement the others. To maximize the benefit from these sources, Yin (2003) recommends that researchers should use multiple sources of data, and states that “the most important advantage presented by using multiple sources of evidence is the development of converging lines of inquiry, a process of triangulation”. Triangulation gives the researcher an opportunity to obtain multiple measures of the same phenomenon, which is advantageous because it increases the validity of the research (ibid.). The aim of this study has been to use as many sources of data as possible within the frame of available time and financial resources.

Due to the ability of one case which was the Parsian Bank to obtain agreements to participate and observe, participant observation were considered as relevant sources of evidence in this study. This participant observation was held as a Customer Relationship management seminar in 6 meetings each for 2 hours with managers and responsible offices, according to the plan. In order to get pragmatic and working out the proposed theories and use the experiences of the attending specialist fruitfully, two fifth of the seminar time was assigned to the discussion about employing CRM system in Parsian bank. This seminar is actually a workshop and in order to make it more efficient a check list was assembled and handed to the attendants a day before the seminar. What follows is a summery of this 2 and a half hours workshop called: “The road map of employing CRM in Parsian Bank”. All the speech of the attendance was recorded and the results were added to the interviews information of this case.

Instead, the main method of data collection selected for this study was personal interviews, as this method is insightful (Yin, 2003) and makes it possible to gather large amounts of data quickly, with a potential for immediate follow ups and clarifications (Marshall & Rossman, 1999). In addition to personal interviews, documentation, mainly containing company information (annual reports, organizational charts, brochures, Web pages) has been used as a means to confirm and strengthen evidence from other sources.

Interviews can be characterized in various ways. For example, interviews can be conducted by telephone or face-to-face, be formal or informal, casual or in-depth, and
structured or unstructured (Marshall & Rossman, 1999; Potter, 1996; Yin, 2003). In the context of case study research, Yin (2003) discusses three different forms of interviews: open-ended, focused, and structured. The open-ended interview is the most common and the least structured type, allowing the respondents to express opinions and insights more freely. The focused interview allows an informal conversation, though it is partly structured: “following a certain set of questions derived from the case study protocol”. Finally, the structured interview is guided by a thorough set of pre-designed questions and, thus, resembles a formal survey.

In this research, data collection through interviews was essential to tackle the research problem and subsequent research questions, due to the complexity of the phenomenon under study. The instrument was the interview guide in order to explore and describe the overall concepts within the emerged frame of reference. In the spite of preparing the interview guide, made some connections with e-mail to the authors that represented the theories and models and requested their instruments for the guideline. Some of them answered. By using an interview guide (Appendix 1) with open ended questions, opportunities were left open for any type of response, despite the fact that the interviews were focused. The interview guide was pre-tested by a number of researchers from CRM, management and banking fields, at Tarbiyat Modares and Tehran University, and also by industry representatives.

Based on the research questions that defined, CRM definition and benefits are will investigate. The data would be gathered from Iranian private and public banks. For the data analysis phase a data catalogue would be constructed. A data matrix would be extracted from the data catalogue, which results in final analysis.

4.8.1. Pilot Study

Cooper states that a pilot test is conducted to detect weaknesses in design and instrumentation and to provide proxy data for selection of a probability sample. It should, therefore, draw subjects from the target population and simulate the procedures and protocols that have been designed for data collection.
In the pilot study of this research one public and one private bank were selected to refine and validate the interview guide in order to be most efficient. It is important to see if the attributes are meaningful for the attendance’s point of view. Instrument were examined and finalized after the pilot survey.

4.9. Presentation and Analysis of Empirical Findings

In order to draw valid meaning from gathered data, it has to be ordered, structured, interpreted and analyzed (Marshall & Rossman, 1999). According to Potter (1996), various methods of analysis are available for qualitative researchers. Yin (2003, p. 109) states that every investigation should start with “a general analytic strategy, defining priorities for what to analyze and why.” Moreover, Yin states three general strategies that can be used in case study analysis: reliance on theoretical propositions, thinking about rival explanations and development of case description. The first, and more preferred, strategy implies that the theoretical propositions that led to the case study should be followed in the analysis. The second strategy involves defining and testing rival explanations and can be related to the first. The third strategy, which involves the use of a descriptive mode to present the case, is used particularly in situations in which theoretical propositions are absent. This study deals with a complex phenomenon of context and a variety of cases studied (private and public banks) within a predefined conceptual framework. Thus, an analytical strategy that relies on the theoretical framework developed has been used.

According to Miles and Huberman (1994), data analysis indicates three concurrent flows of activities that the researcher should go through: data reduction, data display, and conclusion drawing and verification. Data reduction implies a process of sharpening, sorting, focusing, discarding, and organizing data so that final conclusions can be drawn. Data display is an organized, compressed set of information. The third activity, conclusion drawing and verification, indicates that the researcher begins “to decide what things mean is noting regularities, patterns, explanations, possible configurations, causal flows, and propositions” (Miles & Huberman, 1994). The analysis of the empirical data in this study has involved all three activities proposed by Miles and Huberman (1994).
Field notes and documentation have been translated from Persian to English because all the interviews were conducted in Persian, rewritten, revised, coded, and displayed in accordance with the conceptual framework. In addition, the cases are presented separately, following the structure of the conceptual framework and based on the answering of the research questions.

Empirical evidence was frequently displayed in the mail model and tables to facilitate the analysis and the drawing of conclusions. As previously mentioned, the purpose of this research is essentially descriptive, and to some extent exploratory, and the general research design is a multiple case study design. Empirical data have been presented and analyzed in this study following methods proposed by Yin (2003) and Miles and Huberman (1994).

According to Miles and Huberman (1994), the analysis of qualitative data consists of three activities: data reduction, data display, and conclusion drawing. Also they said that data reduction refers to the process of selecting, focusing, simplifying, abstracting, and transforming the data that appear in written-up field notes or transcriptions. Data reduction is not something separate from analysis. It is part of analysis. Qualitative data can be reduced and transformed in many ways: through selection, through summary or paraphrase, through being subsumed in a larger pattern, and so on. Looking at figures helps the researcher to understand what is happening and to either analyze further or take action based on that understanding. Better displays are a major avenue to valid qualitative analysis. As with data reduction, the creation and use of displays is a part of analysis (Ibid). Conclusion drawing and verification is the third step of analysis activity. From the start of data gathering, the qualitative analyst is beginning to decide what things mean and the competent researcher holds these conclusions lightly, maintaining openness and skepticism. Final conclusions may not appear until data collection is over. Conclusions are also verified as the analyst proceeds. The meaning emerging from data have to be tested for their plausibility, their sturdiness, their conformability that is their validity (ibid).
Miles and Huberman (1994) further point out that there are two methods of data analysis: Within-case analysis and cross-case analysis. The within case analysis is carried out when collected data in a single case will be compared with the theory included in the frame of reference to identify the differences and similarities. In the cross case analysis, where several cases are involved, the objective is not only to compare those cases with each other (Ibid).

The above-mentioned three steps were followed for data analysis of this research. First, the data will be reduced through a case analysis where the four cases compared with the theory in the frame of reference. Second, all of the data was further will be reduced further through being displayed in order to have a cross-case comparison between cases in each section means private and public banks and then in the third step it will have cross-case analysis between each section means comparison between private and public banks based of the research questions. Finally, conclusions will be drawn based on the each case and cross-case analysis.

**4.10. Validity and reliability**

As it illustrates in table 4-2, concerning case study research, Yin (2003) discusses four tests to establish the quality of the research: construct validity, internal validity, external validity, and reliability. Yin’s tests with respect to construct validity, external validity, and reliability have been the quality criteria used for this study. Internal validity concerns only with explanatory or causal studies (Yin, 2003); thus, it was not found to be a relevant quality criterion for this study.

According to Yin (2003), construct validity is “establishing correct operational measures for the concepts being studied”. In order to enhance the construct validity for this study, data were collected through multiple sources such as personal interviews were complemented by the use of internal documents and web pages. To establish a chain of evidence, efforts were made to follow the same logical stream throughout the documentation of the thesis: from the definition of the problem to the presentation of data and following analytical considerations. Internal validity involves establishing a causal
relationship and is only for explanatory or casual studies. Yin (2003) explains external validity to be about “establishing the domain to which a study’s findings can be generalized”. According to Yin (2003), the criteria of reliability deal with “demonstrating that the operations of a study, such as the data gathering procedures, can be repeated, with the same results”. Furthermore, Yin states that reliability aims at minimizing errors and biases in a study. In this study, attempts to reduce the biases have been made by carefully describing the data collection method, and through extensive and thorough documentation of each bank.

Table 4-2: Case Study Tactics for Four Design Tests (Yin, 2003)

<table>
<thead>
<tr>
<th>Tests</th>
<th>Case Study Tactic</th>
<th>Phase in Research in which Tactic occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct Validity</td>
<td>Use multiple sources of evidence</td>
<td>Data collection</td>
</tr>
<tr>
<td></td>
<td>Establish chain of evidence</td>
<td>Data collection</td>
</tr>
<tr>
<td></td>
<td>Have key informants review draft case study report</td>
<td>Composition</td>
</tr>
<tr>
<td>Internal Validity</td>
<td>Do pattern-matching</td>
<td>Data analysis</td>
</tr>
<tr>
<td></td>
<td>Do explanation-building</td>
<td>Data analysis</td>
</tr>
<tr>
<td></td>
<td>Address rival explanations</td>
<td>Data analysis</td>
</tr>
<tr>
<td></td>
<td>Use logic models</td>
<td>Data analysis</td>
</tr>
<tr>
<td>External Validity</td>
<td>Use theory in single-case studies</td>
<td>Research design</td>
</tr>
<tr>
<td></td>
<td>Use replication logic in multiple-case studies</td>
<td>Research design</td>
</tr>
<tr>
<td>Reliability</td>
<td>Use case study protocol</td>
<td>Data collection</td>
</tr>
<tr>
<td></td>
<td>Develop case study data base</td>
<td>Data collection</td>
</tr>
</tbody>
</table>

To increase the validity and reliability of the research instrument, used to collect data, the interview guide was evaluated by attendees from banks participating in the pilot study so that it can provide a comprehensive view, the interviewees were contacted in advance about the matters were going to be discussed and also to assure that they are qualified for our interviews. Some suggestions resulted in modification of the interview guide. Additionally, the instrument was also reviewed by a number of researchers from Tarbiyat Modares and Tehran University, thus, higher level of validity and reliability could be
achieved. Suggestions from this group resulted in an additional modification of the interview guide.

To increase the external validity and replication logic in multiple-case studies, an interview guide, which can be found in Appendix A, is developed and followed through the study. In order to increase the reliability of this research, the researcher will try to avoid leading, subjective questions and will take notes during the interviews. Furthermore, the interviews were recorded by a voice recorder. The data validity was ensured through multiple sources of evidence (multiple interviewees and document analyses) and by the interviewees reviewing the case interpretations.

The second stage involved the cross-case analysis of the data, thus locating and examining similarities and differences across the cases. The value of this qualitative stage of the research was established by the use of the research methods presented in the literature, credibility was established by connecting all participants with the issues which emerged from the interviews. In this way the participants were given an opportunity to corroborate or disagree with the main findings of the study.

It is important to say that, the interview protocol included questions standardized around topics such as a manager’s perception of what CRM constitutes the objectives and the benefits of the CRM programmed on the technological and organizational infrastructure of the bank. The questions were kept deliberately broad, to allow respondents as much freedom in their answers as possible which is the necessity of open ended questions of interviewing. The final emerged theory would be once again validated by interviewing a sufficient number of experts in each case, using the feedback method which means that after the analyzing the data which were gathered the result were shared with experts in each bank and check them all.

4.11. Summary of the chapter

In this chapter, the research methodology employed to address the research problem and research questions were discussed. The research purpose, approach, strategy, case Study design and unit of analysis, methods of literature review, case selection, data collection
methods, sample selection, the way of presenting and analyzing the empirical findings and quality criteria in case of validity and reliability were presented, discussed and justified. The next chapter, chapter five, incorporates the empirical presentation of the data collected.
Chapter 5: Empirical data presentation

5.1. Introduction

In this chapter, the empirical data collected from documents and interviews of four selected banks will be presented. The banks are Egtesad Novin Bank (ENB), Tejarat Bank, Parsian Bank and Mellat Bank. They are separated to two groups based on the public and privet sections (chapter 3). The data is collected based on our frame of reference and the interview guide. Each section will start with a brief introduction about the bank and will follow with the data collected from the interview.

5.2. Egtesad Novin Bank (ENB)

5.2.1. A brief history

When Islamic Revolution succeeded in 1357, private banks merged into public and banking was confided to public sector. In order to provide competition opportunities between the bankers and better services for their customers, congress legislated a bill in 1379 allowing the private sector to get involved with banking industry. Based on this, “Bank E Eghtesad E Novin” (literally meaning : New Economy Bank) was constituted in 1380 with the authority of Central Bank to begin registration for stocks and later in the same year public board was assembled and the first private bank started to work with a capital of 250 billion Rials. During the first four years in business, bank opened 24 branches and increased the interests of its shareholders from 250 billion Rials to 500 billion. Bank acquired around 128'000 customers with about 156'000 open accounts.

5.2.2. How customers information are analyzed

The amount of deposited capital is inquired from each branch separately and then compared to the expected value on a weekly basis. Deviations are analyzed and results are cited by the responsible office in weekly meetings concerning marketing and
customer’s affairs. Facilities and other provided services undergo the same process and results are cited in the very same meetings.

In addition to the above, a system called “Negin” as a core banking system is currently storing diverse information like name, number of accounts and their balances, facilities etc regarding customers. Another system with the purpose of analyzing customer related data is CRM (Customer Relation Management) which is under development.

5.2.3. Measuring customer satisfaction

Bank measures the satisfaction of its customers with the aid of a regulated poling program preformed in specific periods in the year. Query forms are distributed among branches and customers are asked to put their views about the services. Customer satisfaction is measured using a predefined formula and various parameters are calculated. Finally the results are handed to the responsible office to locate the powers and weaknesses of the system. One of the methods used is to compare each parameters values to the past periods in order determine the changes.

In addition to the mentioned methods, customer satisfaction is measured by the call center “Salam E Mehr” system (either regularly or occasionally). Customer reviews and comments are also taken in consideration via the bank's website to eliminate deficiencies. Following methods are also used in order to study customer satisfaction in a regular basis:

1- Weekly control in each branch regarding customers affairs.

2- Creating and prioritizing customer programs considering the importance of the customers.

3- Visiting the customers regularly or circumstantially according to the mentioned program.

4- Gathering customer reviews and attending to feedbacks using the relevant processes.
5- Delivering the results of these visits to responsible offices in order to remedy the weaknesses.

5.2.4. The methods of acquiring new customers

- Identifying potential customers by the heads of the branches, heads of the staffs, stock exchange website etc.
- Using face-to-face approach for bigger customers like financial and investment institutions, loan provider organizations etc.
- Calling potential customers or writing to them, offering banking services by either head of the branches or assistant at the Marketing and Customer Relations office.
- Negotiating with customers regarding their expectations and requirements.
- Using simulative mechanisms worked out by the employees in branches.
- Creating new areas of interest and motives for customers or even heads of the branches.

5.2.5. Serving the customers

Broadly speaking, Eghtesad Novin Bank (ENBank) provides its services in two were for serving the customers:

- Via branches and traditional banking system: Increasing the number of branches from 24 at the end of year 1384 to 156 at the end of 1386 with the purpose of extending services according to the devised strategic plan. Assuming there would be no serious modifications to this plan, the number of branches will reach 300 at the end of the year 1387.
- Via expanding e-Banking: Considering the priority of electronic banking, ENBank provides such services employing various mechanisms with the purpose of providing customers at their home or work during the two past years. This approach includes marketing activities in following areas:
1- Electronic Card services: Perusing public and private organizations to use such cards for paying salaries or bounces.

2- Extending the use of ATMs and POSs

3- Expanding the internet payment method

Identifying and contracting one-by-one with the web sites offering e-selling services.

4- Telephone Bank, SMS Bank and Internet Bank

- Customers may access their accounts
- Customers may transfer money between their accounts
- Customers may transfer money to others accounts
- Customers may issue regular payments
- Customers may view the reports of the above activities
- Customers may request for an Internet check
- Registering the value of customer check before cashing
- Closing some checks
- Closing the Internet Card
- Changing password
- Informing native and foreign customers along with employees via the bank's website
- Online Payment services for sellers
- Customers may buy from Internet using bank's electronic payment gateway
- Banks uses SMS to inform customers about accounts, transfers etc
- The exact above information are provided to the customers by the Telephone Bank system
- Call center services in order to respond to customers and employees
• POSs to perform transactions regarding Shetab network
• Off line POSs for special seller-buyer transactions like malls or delivery companies
• ATM devices inside and outside branches connected to Shetab network
• All cards connected to Shetab network are served
• For residents of Tehran, electronic payment of all sorts of bills regarding public services like water, gas, telephone, electricity etc
• Customers can pay their cell phone bills all over the country
• Anonymous (one time use) or named (rechargeable) Gift Cards with customer specified value could be cashed all over the country. There is also a certain type which could be used to buy form the network only (not cashable)
• Cards which could be cashed by ATM or POS devices
• Debit cards usable in short term accounts in Shetab network
• Credit cards with different amounts of credit (under deployment)
• Anonymous Internet Card
• Internet access to all accounts for all customers in all branches countrywide
• Registration for mobile phone services as the representative of the provider companies.

5.2.6. Shetab network

Using smart electronic cards in banking industry is as huge improvement. Shetab network could rightly be considered as a great modification to the body of the banking system in the country. From 1381, Central Bank was trying to connect all banks and financial institutions to each other with the aid of the so called Shetab center as the focal point. These efforts eventuated in the realization of the “Unified Payment Network”. National switch is currently in phase one, connecting all card banks. The next phase would be to extend this to include all sorts of transactions between banks, checks, payment letters etc. Membership in Shetab network is subject to the regulations passed in 1381.

All members of the Shetab network may provide their services on ATM and POS devices connected to the network. So by proper investment of the banks on these fields, all of them may use the results of each others efforts. Customers of the member banks
may withdraw from ATMs or pay at POS devices provided they are connected to the Shetab network. Shetab does all the connecting and coordinating jobs. Shetab services could be summarized as follows:

- Routing and directing transactions to the proper bank according to the card used
- Logging transactions and events occurring in the system
- Performing alternate transaction if the main transaction fails
- Settling at the end of the day between the member banks

There is no diversity in Shetab. All services are unified. Fourteen members interact with each other and no one's data could be seen according to regulations the only a communication without any sight. Competitors have an opportunity here to offer more polished services. Take an ATM for example. If a customer of ENBank is unable to receive cash from one of their ATMs and goes to one of their devices, they have lost here. Money transfer with Shetab; all banks are going towards this little by little. The bank should be there in about 3 months. Others may not want it. But the central bank is putting some force to make other bank join the Shetab. Being a pioneer is important here. ENBank joined in 1384. Shetab started 1382.

5.2.7. CRM and e-banking activities

As it mentioned before, the banks was constituted in 1380, but until 1384 it was more of a small financial organization meaning limited activities but even then customer relationship management was on the table thought not that seriously. This was the case until the new management came with new ideas regarding customer affairs. In addition to quantitative increase in number of branches or electronic payment devices and mechanisms, a parallel approach has been taken regarding customer relationship management which was actually concurrent with the former advances. Bank has currently 162~165 open branches, around 250~300 staff employees and around 1200~1300 employees in branches.
At the beginning this was very raw and premature but slowly it took the shape of this new CRM with some cultural efforts inside the organization. It wasn't this at first, EN Bank started its carrier with a limited and special set of customers requiring few branches and no need for such a system to deal with customers. But when the so called paradigm shift occurred it required attracting customers and offering competitive benefits. Actually marketing and customer relation management office slowly formed from there. It has been tried to take it in consideration either from the practical and theoretical standpoints by using skilled personnel in order to define competitive services and better serving of customers, as is duly expressed by the motto chosen by the CEO: “Valuing Customers”.

Then they defined sub sets of this valuing the customers meaning customers are duly and appropriately served which leads them to regular contact with the bank like offering them all their needs in a basket full of supplies. This was they tried to establish a creative relation with customers leading to added value for them.

Works done according to this method are: Setting up a call center “Salam E Mehr” which is currently active employing 25 skilled personnel and 8 lines serving other subordinate organizations along with customers. This is the most primary support provided for the customers in case they have but encountered a problem or a technical question. This is also used to first capturing customer's interest in bank and then communicating with him regularly so he feels like a permanent and real customer. As an example to this approach, Bank may draw the customer’s attention to the prizes the bank offered at the beginning of its carrier which was supposed to form a basic communication line to the customers. Later the bank molded this into a professional and complete relation. Some high ranking managers in the organization suggested opening an account for all customers without their explicit request for such an account and informing them only when their account is charged. This was even those who was considering becoming a customer and then changed their mind for whatever a reason was included in the process of recalling. Some even won prizes and this whole thing motivated them.
To achieve this first a database is required which contains all sorts of useful data. Such a database wasn't available at the time and perhaps it is not available in its advanced and complete shape yet but the idea was that banks gather diverse information from customers regarding what they want like what is it they want to include in assurance or some documents are necessary for the loan. Some of these data didn't need for the customer relationship management but they were entering into the system. Later banks realized it is not required to store all these information so they built some subsidiary systems like MIS and CRM to extract valuable data so they could create reports upon them regularly. This was the objective for MIS and CRM, how efficient they are they left to be judged by practice. Design is done and they are active. Some reports are being made mainly from big customers which are mostly organizations. These are sent to the CEO and Marketing and Customer Relationship Management office to do what is necessary. MIS is not in a shape to categorize all customers information (some information are considered of high priority and are managed first, as time passes this enlarges and includes more data but first important data are used). This is private bank which is a member of stock exchange not all other private banks are like this. Their big customers have considerable turnovers and bank activities influence the EPS and stocks. So, it is apparent that they need to be well involved with these customers. A short summery regarding these customers are of great aid to bank. It is on the table to be discussed that IS database capable of being integrated to other divisions and is actually part of the vision to have a data storehouse so MIS, CRM and Risk Management can pull out required data. Right now they have a data store these systems use.

At the moment ENBank do not have a sophisticated system to log social behavior of the customers but perhaps in future everyone who is involved with them may input data into CRM system. They store some data categorizing customers’ behaviors acquired by scattered statistical inquiries. There is a CRM in the IT department and another one at customer support center which they use to categorize and store their customers’ behaviors for both ordinary customers and those having a POS device given to them so they are providing service to all customers in a sense. The bank’s CRM is not as capable yet. Software part is fully customized to their requirements and is built from scratch in order
They haven't used any analytical or statistical software available on the market.

This group means the marketing group delivers market and product analysis. Their job is design new products and services and then gathers the feedbacks created by this new stuff. Otherwise they cease to care about out customers or they will require some new services the bank does not offer, either way if the bank not asks them about it they will be disappointed or even go to their competitors. If such a thing ever happens, first the bank tries to win the customer back, asking him: what are the shortages that they do not have? Why did he abandon ENBank for another bank? What is the bank weak point compared to others? They even take a different approach about designing new products so they can excite a wider range of audiences. Marketing guys do the categorization and the IT guys are not unaware of them. In all banks customers are mainly divided into two broad categorizes: Real people and Legal entities. Regarding legal entities marketing was responsible to deal with them in special way trying to incorporate their subordinate organizations. The bank goes to them and makes them nice offers fitting their situations. About real people, the bank were actually transcending from a small bank with few branches to a large complex so we divided them into 2 or 3 broad boxes. Consider for example school teachers. This is a large group with a special sub culture. The bank should study on how to deal with them. They changed some of their products. They even modified the manual accompanying the cards to say they heard them. “Dear customer! We saw you and we treat you different.”

This process of knowledge gathering about their customers begins at the branches. When a new branch starts its job, its customers are known after about a mount, perhaps by their amount of turnover at first. When some customers turn over a certain amount, banks exceeds takes the first step and gives them a low interest loan. This is the way that good customers are known. Then head of the branch or head of the customer’s affairs office focuses upon this branch because there are a number of customers with good deal of turnovers. This is pretty much a new approach. The bank provides a list of these customers and attends to them. Offer them loan if they need it and this way bank involve them for one thing and know about them being good pays for other.
Few branches provide very special services for extremely good customers like they call and ask to withdraw a certain amount of cash from their accounts and give them a special kind of check called “Iran Check”. Branch does all the paper work and sends the check to customer's work place because he is short of time of his time is very valuable to him. This kind of service is not intended for all customers. Right now bank use a hybrid of systemic and traditional banking methods. MIS and CRM should be strengthened like they should emerge from the heart of the system so bank can minimize the mistakes and pitfalls. Heads of the branches are apt to all sorts of human mistakes so if for example they wrongly identify a customer as a good pay and that customer takes out some resources from the bank and then bank face difficulty to compensate for this loss. That's why management is eager to pinpoint and eliminate its deficiencies. It is even very probable that they take this tested and working CRM of theirs into another bank and it brings about failure due to difference in visions.

Marketing department does not have access to financial data. They are given some reports and just a little sight of data. The story is different inside the bank which is responsible for providing actual banking services.

Managers rapidly adapt themselves according to customer requirements and move towards new serving approaches. The bank estimates the costs, they buy hardware, software, and they buy communication, and then start the new service. These all have the special divisions. In order to peruse management for this new investment, they look at foreign banks, they do benchmarking, they take it the optimistic way, the pessimistic way, the middle way and calculate gained numbers in all cases and then managers decide whether to launch this new service or not. Stock exchange is the break here. IT department comes up with new ideas, costs and interests, business plans etc and the period required for this to become beneficent. Management decides to launch it and then Financial Affairs determines, by the daily reports whether it is approaching the destined goal or not. The special study projects separately because the budget is assigned separately for each project. And also pathology defines.
Outsource companies provide services. Some company uses POS another installed an ATM. These outsource companies justify the market vision and social and economical problems. Many jobs are done outsource, management seeks to avoid inflation in the body of the organization stating it creates unnecessary complexity especially from surveying and controlling angles.

Entering the World Wide Web was different from what happened in branches and telephone bank. It didn't deliver any special data and the audiences were a special range. It had a dim role gathering more information from Internet like for example sending new services to email addresses. The bank kept an eye on website visits but broadly studied, they corrected some processes from studying competitors because customer’s feedbacks were not direct. They designed a portal to offer all their services together like exchange, assurance, leasing etc. They provided username and password to their good customers, giving them loan and making them members of the portal, turning in to VIPs so they could motivate partners to become their customers, thus acquiring new ones.

As regards credit cards, with began with employees. The bank built a loyally system so employees could come and get bonuses and raise their ranking so bank continuously have feed. They should be different in order to sell and attract. But competitors already have credit cards so ENBank made it systemic thus scoring is done not by the heads of the branches but good customers are automatically detected.

In 1385 ENBank created a scoring system in order to provide huge loans. They scored applicant and decided this or that customer has such a score permitting bank to do them what they wanted. The bank even paid above their expectations occasionally in order to prize them, like a financial advisory. “Rah E Eghtesad E Novin” (literally: Way of the new economy) is a subsidiary corporation acting as an advisor.

In call center “Salam E Mehr”; the ENBank periodically announce that high ranking managers will be listening to customers. CEO will be there personally talking to people directly. There is a voice box in which people may put messages for high ranking managers along with email. CEO himself listens to all of them.
5.3. Tejarat Bank

5.3.1. Brief history, Philosophy, Vision and Motivations

Bank Tejarat was established as per Legal Bill of Department of Banks Affairs approved in September 1979 upon amalgamation of eleven private banks that became twelve banks by joining Iran-Russia Bank with a capital of 39.1 billion Rials on 1979. The merger eventually has rendered Tejarat Bank the unique opportunity to be the sole commercial bank in Iran to have taken advantage of the precious experiences of the past and the present mixing long time successful international banking record with local knowledge and understanding. The priceless legacy and experience of such banks as “The Commercial Bank of Iran”, the first private bank established in the country and the almost century-old “Iran-Russia Bank”, as well as the multi-national knowledge and expertise of years of European, American, Japanese and Russian style of banking are now hand in hand at work in Tejarat Bank. Twenty six years on, as per economic requirements of different regions of the country, Tejarat Bank is now maintaining 2010 branches throughout the country. This bank is a composition of some banks. One of them is was “Iran & India Bank” which had a system called “SGB”. This SGB was actually a Core Banking system with a good infrastructure so it could be easily extended. It was responsible to do the calculations. All documents were held in a written form without any digital computers or something like that. Documents then were sent to the central office being punched by a huge punching machine there by some 100 or 150 workers attending this job. After data being punched, SGB performs the calculations and compares the results for each branch, sending back the documents if any differences occurs in the results. Little by little this mechanism moved towards branches, each performing these by themselves and sending the results to central office. Central office then distributes updates back between the branches.

There is no such a system as CRM or whatever here. There are divisions doing this in the traditional way. Public affair does the customer support and advertising like informing people what services are offered and etc. They have built a call center which is going to become a Contact Center. Except for phone, other things like SMS or Internet
are pretty new here. They are responsive but the backing tree of knowledge is flawed. There is no special thing for the customer like CRM. There is an activity cycle with some parts manual, some parts are batched and some parts are automated or on line.

SGB does the financial calculations in the central office. Everything done in the branches are documented and information is fed into a computer system. In the branches everything is real time. Then information are aggregated and sent to supervisors. There are 40 such supervisors. These then use FTP to upload data to the final supervision office. Supervision office then connects to every branch and collects the data. Branches does not send anything themselves except through supervisors. Supervision office then merges the data and puts them in its FTP server. At around 7~8 at night, all data are available in the central office. After 24 hours branches are allowed to update themselves. Besides there are two other on line and real time systems:

1. Card system: Using ATM or POS devices, customers may transfer money. Withdraw and deposited are possible but paying for public services is not implemented yet.

2. Roaming accounts are logged all the times in central office. One copy there and one copy in the branches. Until the central copy is updated, no update occurs for the branches. A customer may request to convert his current account into a roaming one in which case checks from that account could be cashed in all branches. This service takes about 10 days to be done for an account. This is applicable to 2100 branches.

All other subsidiary systems like Telephone Bank, Mobile Bank or Internet Bank are working off line. Meaning they report last night's balance to the customers. If a customer wants to transfer some money, they take orders and post pone the operation to the tomorrow night.

5.3.2. Structure of the database, Definition of the data input and output

In branches all data are stored in files. In server everything is stored in SGB again in indexed files on sequential storing devices. Roaming accounts and card system have a
database and does the job online. Central database is DB2. The bank created something like SGB in roaming accounts and card systems. Roaming accounts are stored in database on a mainframe. Transaction servers are put in between. The whole structure is like SGB due to its high reliability.

Card system is stored in separate files. They gather data from ATM devices at night, then they are synched from server to SGB and changes are reflected to ATMs again.

Channel Manager Project is supposed to be launched but we have serious problems doing it. The idea is that some “Channel” sits in between and listens to the messages and dispatching them to the appropriate core. For examples, an ATM can connect to a Roaming account using this mechanism as an integrator. If CRM is ever build into the system, it will use this as an interface to send messages and feed itself.

Due to branches being traditional, it is very difficult to say, give customers a tracking number so they can SMS to CRM in order to track their operations. The bank is considering buying e-Banking or unified and inclusive systems. Such software has Channel Manager, CRM, ERP and other things. They slowly substitute as a general layer. There isn’t a Big Bang phenomenon. Because this Channel Manager recognizes the messages so CRM can smoothly work with it but it creates problems because lots of data are not message based. Branches network could not be easily connected to CRM because mechanisms are old. “It takes a little time to get there but we will finally do it because we have to.” They try to communicate with customers using advertisement.

Website is just informative and no feedback could be sent from it. But they hope for implementing cycles like when a customer asks for cheque book, and then a message is sent to him stating that job is done using Internet. Currently Internet database is separate but when this Channel Manager comes, it could be well integrated into the system.
5.3.3. Statistical operations, researches and segmentations regarding customers

There are a few segmentations of the branches, grading them on how many accounts with a certain amount of deposited money they have, their returned cheques and requests for facilities. There are grades 1 to 4. When a branch reaches grade 4, it will be closed. Customers who requested facilities above 100 billion Rials and couldn't return it are known along with those who issued cheques with short accounts. System detects such things automatically by searching upon central database. System has a report generator which issues non-complex reports used by strategic planning office to create reports useful to managers. It is important for the bank to know the customer. It could not be done with name and family, it requires national code. For old customers they find out about their national code, but this could not be done with new customers. “You may see a summery based on account number but you can’t see the history by name.” One may have five accounts so it should be sum of them which is reported or otherwise, it is all wrong. Real people are like thins.

Companies and legal entities are very important but they have a registration number which is not unique. Doing the job based on names is very error prone here. We are pursuing responsible registrars to implement a unique coding system because it is actually their job. CRM depends upon the customer identification code which is not defined by the bank.

Analysis is preformed bases on customer dissatisfaction and roots are discovered. Based on traditional acquaintances between the branch and the customers, branch is aware of the reason why the customer left us. Marketing is poorly done regarding identification of potential customers and contacting them due to lack of the required data. Supervision checks why Iran Khodro (largest automobile manufacturer in Iran) abandoned us. When such a thing occurs, everyone knows about it in no time. But this is not the case in foreign banks, although only 5% of customers are actually beneficent there, but they may go by the slightest inconvenience, damaging the bank by taking out the resources. Even the heads of the branches can take out the accounts so it has a high
Focus is there upon all the customers. Even when customer is not an actual one, bank does all the procedures based on customer satisfaction. Big customers do not include any loss but when CEO substitution occurs, some very huge transfers happen.

“Keeping the customer is less expensive than attracting new ones. Banks has not competitive advantages over each other. Good manners, serving well and providing customers with their demands do the job.”

### 5.3.4. Customer feedback

Polling forms are distributed by the marketing section. There also some Idea Sharing sessions held in hotels with important customers as guests so we can both keep them and be aware of their needs. Strategies of how to treat special customers. There is no special strategy regarding special customers. There is no particular plan. Marketing is done in its traditional way; customer expenses for Internet channels, branches or ATM devices. There are methods to calculate expenses regarding those services done by ATM devices and alike. Some charge the customer an extra fee for such services like when they for public services. For example, the bank have closed a contract with national electricity company so when customer asks, their bill comes to bank and they pay from their account. But this service is not well received here and there are only 1900 subscribers using it currently. It is not profitable at all but the bank still continues it! There has been advertisement but problem lies somewhere else. The customer has to pay four other bills of public services and sure they are not going to do all these just for one service. Another problem is the trust. Customers are to find their accounts emptied by bank. System costs to be held going by the bank. Perhaps this whole “billing” has something wrong with it!

Internet bases informing so requests are available on the net. Some operations could be tracked using a tracking number. Data are entered manually in the branches. There is no filling cycle in the Internet. We don’t know about its wide or narrow usage accurately. System is very new. Currently few are using it.

Public banks have public support. Their managers are not ok with electronic systems. They do not resist but nor do they want to do it. They don’t pay for Internet
Banking but rather prefer to spend money on the branches. Trust in electronic banking systems in Iran is important (About handing complains to the responsible office) so, it is not widely used. CEO does not check his email or voice box. Public Affairs listen to complains, selecting important ones and then prints them so managers could read them. Each manager blames the subordinates and wants them to explain what happened. Each branch has a system called “Seda Ye Moshtari” (literally means: Voice of the Customer). Customer may put voice messages describing their problems. Branches try to solve this be themselves but they report it to the superior offices if they fail. Communication between the central offices and branches is weak, so it takes long to pinpoint the problem which should be much shorter.

5.3.5. Marketing Department

Bank started its marketing department in 1378. Policies have been changed due to substitution of the high ranking managers. Marketing is connected to the so called 40 supervision zones and they in return are acting upon branches. Unfortunately this bank is the last in the ranking of Iranian banks so; it is the first motive to do the marketing in a proper way. They are hiring some advisors in this regard and have short term programs including quick researches, rapid studies, fast training of employees and these are all aligned with long term objectives. They use the website, study their competitors, do some library researching, try to offer patterns etc. Before being concerned as project or as a separate office, there hasn’t been any thing like research about target markets. Management used to do this alone. Contractors propose their offers and execute the projects.

Specialists find the customer by the branches or Shetab first, after inquiry they go for marketing and other things. It is done fully in the traditional way; no customer segmentation is done but is in the table for further study. Statistics office has provided a report stating how many customers have left the bank in last 3 years and how much capital is taken out by theme. But it is just the report, no plan for attracting new customers; “we have done a pretty job keeping our current customers.” No plans are defined for marketers to identify those customers who abandoned the bank and why they
chose to do so. There is no information! Studying the branches is defined as a project in a traditional approach. Polling for customers opinions is defined also including all electronic mechanisms at hand. This whole department is temporary. Advisors are form outside the banks. Some colleagues are working with them and the Project Manager is from inside the organization.

5.3.6. Risk Management Department

Financial indicators are determined, some categorization is done and then reports are generated. All banks have some sort of customer relation mechanism at the beginning because it is the customer who provides the information they need so; they have to store this data. “This is the nature of the work.” Communication with customer has been there from the start. Branches were not automated like they are today. Everything was manual. It was hard to connect the customer. In 1381, all branches get equipped with automated mechanisms and became part of unified whole. Afterwards there was an improvement in knowing our customers. Data for a specific set of customers is asked and then this data is extracted and analyzed in this department.

Call Center is the main subject of discussion regarding CRM. In Tejarat bank, call center is converted to contact center so it is not limited to phone. It could be reached by cell phone, letter, fax, Internet etc. Hardware equipment is purchased. Each branch will have its own CRM and handles its relation with customers. Central office does the same thing but it is supposed to be secondary relative to branches; right now, central office does it better. Identification and segmentation of the customers is done in the branches.

Customers are provided with a card and are identified by this card in the branches so all branches treat customers uniformly. This is called the VIP card so customers actually identify themselves this way. It is planned that customers use these cards with queuing devices. Special customers can use some discounts about extra charges applicable in their branches but they are known using this card everywhere else. This whole thing is under deployment. Database is being designed.
Regarding feedback and complains and suggestions, there are letter boxes installed in the branches which could only be opened by the supervision department. Call center also accepts complain reports. These are then stored in the database and reported to the risk management to study them. A virtual Customers Club is being installed on the website. There will be a real one also. In the real club there would be meetings and customers may put messages, asking questions, on the website. Focus groups are held in which some customers are invited to talk about a special issues regarding bank’s situation or the quality of the services in a suitable condition. Customer will be given an opportunity to talk and read their articles regarding banking and its problems. Then 5 or 6 customers state their problems and get explanations from specialists. This program is being run in various provinces. Very high ranking managers attend these meeting so customers feel they are actually influencing things and bank does its research. Attendants are customers who either communicate with bank extensively or deposited huge amounts of money in which in both cases it is important to keep them. There also some customers benefiting the bank very well due to their demand for special services. Generally attendants are selected according to their turnover. It differs whether we want to device new services or perform statistical predictions. Former is done with special software but later is done with SPSS.

For market analysis and targeting new markets social indicators are used. A new service is designed and then interested customers are contacted. If the new service is targeted for legal entities rather than real people, then customers should be found using data provided by statistic center. Secondary data are purchased from supplier companies. Such companies perform analytical operations on the society. This kind of information could not be found inside the bank.

When a customer enters the bank, no matter what services he wants exactly, he will usually remain a customer. Not all customers all important for us. When an occasional customer comes to pay for public services, it is all loss because there is not mush in it for the bank. It takes energy and time to do the job with almost nothing as a wage or earning. Yet back office and the management encourage the employees in the branches to treat all the customers and serve them well because it is probable that they
want to become a customer due to our good manners and well serving; and there are some ranking and bonuses for the branches should they handle for such public services.

Generally customers all segmented in three groups: those who deposited money, those who want facilities and those who want to use services and these could be either individuals or legal entities. Depositing customers are again segmented according to the amount of deposit, each being treated with a certain strategy. Risk is calculated regarding these deposits. If they are large, then bank will encounter a high risk should they leave, taking out resources. But expenses are low with these customers because there are few of them and they don't need any exotic services save for ordinary money transfers. Low or medium amounts of deposits involve lower risk for the bank but this way there should be lots of employees in the branches to service many customers which takes energy and costs us so you see there should be a balance. Regarding facility customers, the important thing is being a good pay which is implied in their histories. Service customers are beneficent due to the amount according to the volume of the service they want; opening a credit, issuing LC etc. The bigger the amount, the more beneficent the customer is.

In all cases integrating customer information helps a lot. Now that data entry is done electronically, customer could be traced by their national code (for individuals) or registration code (for companies and so). This way bank can identify them and fetch all sort of information regarding their activities.

Till not so far ago, website was not that widely used according to the count of visitors. The bank is working on it and a group has been formed to work it out. Website is currently accessible in four languages. Bank structure is not ready to provide customers with all the information they want to know on line yet. Because a part of the job is to analyze the customers, much information arriving from various channels may prove useful. Evaluating branches has improved. There are procedures and methods designed to do this. Branches got evaluated and then are ranked. There may receive some rewards due to their throughput. This way work staff is promoted to do the job right. There is an intention to lead them towards team work.
Branches are graded according to how much facilities they have provided or the amount of credit they have granted. This way they are promoted to do some marketing. Management plans its strategy according to its service evaluations. When resources are required, it promotes branches by valuing resource gathering; thus managing branches. Recently decision making group have added Customer Satisfaction Indicator to the other ones. Some questionnaires are distributed in the branches thus motivating staff to well behave with customers. As regards cost evaluation of services such as payment letters, payment for public services, ATM and POS transactions and etc, it is done and wages are defined.

Visions are different in public and private banking. Tejarat Bank’s ultimate goal is to meet their shareholders expectations. Considering their only shareholder is the state, they should do as to satisfy state's expectations. State wants them to receive people payments for public services and such, although it incurs loss. “So you see that public serving is important here.” Public banks are supposed to create job opportunities, invest in new services like highways, metro or public civil and construction projects. Providing public companies with facilities is regarded as the last in benefit making. Complementary services like cards or ATM is important here because it attracts customers. Otherwise it has lost the competition to others. Customers are now well aware of what they want and who can give it to them.

In order to acquire really big customers, they should provide service not directly beneficent. The way of providing these services is important here e.g. Tejarat bank don’t buy ATM devices but rent them or they surely provide POS services but they did it outsource.

After objective allocation which is done annually, growth shares are divided (for the branches to). So, branches go after their own customers. This story begins there, in the branches. If it worth’s it, they go meet the customer ask him what he wants or motivate him should he be not much active analyzing whether they can do what customer want. Sometimes customers may ask for some unreasonable services, taking advantage of the competition between the banks. When a customer decides to leave the
bank, they set up an Exit Interview asking him why he wants to leave. If the bank lacks something, they try to work it out. If it is about customer, they try to make a new offer keeping him with them. Bottom line is that there is nothing the bank can do and they leave. This is all good but the real problem is that this whole thing is not systematized yet. For example there has been case in which customer just changed his mind and decided to stay with Tejarat Bank at this exit interview. When asked for the reason he changed his mind, he said that it show the bank care about him when they came after him to ask why he left. “And of course we worked out his issues.” Legally speaking, they can't pay as much interest as private banks pay for this sort of accounts. Some customers prefer the private banks. There are some customers who have been inactive for a while. There is an analysis going on about this.

5.3.7. About Shetab

Bank to Bank transfer network is shrunk to the level of Card usage. Sometimes it is used for paying bills, sometimes for transferring money. This switching is done by the Informatics Services and includes extra charges for the involved banks. Banks are settled every night. Each bank has its own monitoring system, including the central bank. They are supposed to be confirming each other.

A cooperative analysis could be acquired from Shetab. Tejarat Bank analyzes it. For example if customers use other banks ATMs, this indicates they have got a problem in their devises and ATM devices require maintenance. They look to issue cards not less than other banks so they can keep their share in the market and keep their brand by increasing ATM devices.

5.4. Parsian Bank

5.4.1. The Company history, objectives and strategy:

Parsian Bank held the founders’ assembly in July 2001 by virtue of the Act for Establishment of Non-Governmental Banks ratified in April 2000, and on the strength of the provisions of article 98 of the law for the Third Plan of Economic, Social and Cultural
Development Program of the I.R. of Iran, approved by the Monetary and Credit Council and obtained business permission from the Central Bank of the I.R. of Iran, having fulfilled all formalities and officially registered with the Tehran Registration Office for Companies and Non-Commercial Institutes. Parsian Bank’s opened for business in March 2002 upon concurrent inauguration of four branches.

Economic development of different industries specifically the automobile manufacturing and the related industries through providing services, granting facilities and devising and expanding modern banking instruments as well as financing different sectors and classes including: manufacturing, commercial, consumer. To accept popular savings and investment deposits with the purpose of absorption of resources, and to grant credit facilities based on the provisions of the law ratified by the Monetary and Credit Council, and on the strength of the monetary and interest-free banking rules as well as other banking operations. Parsian Bank’s aim is to improve economical affairs by developing industrial activities, specially the car industry and related industries by supplying facilities and expanding new finance tools and also financially supporting construction, trading and consumption industries.

Parsian Bank commenced its activities in the money market by rendering retail banking services. However, it intends to enter into investment banking and utilization of capital markets in order to facilitate development of economic sectors and to deliver value to project investors.

5.4.2. Banking automation system:

In recent years, rapid development in utilization of information technology has led to great changes both in approaches and methods of rendering services in the country’s banking industry. Utilization of information technology has not only contributed to emergence of new approaches on rendering better services to customers, but has provided new horizons for rendering modern banking services and applying new methods to traditional banking operations. A corollary of its benefits is the government’s interest and investment in the project of development of the Information and Communications
Technology Application project. It seems that the future of the banking industry and its survival depend on success in utilization of Information Technology. As a proof for this are the great efforts and enormous investments made by the country’s banking system for in innovation and development of software instruments and hardware.

With a proper realization of the present situation, Parsian Bank has focused on rendering banking services based on the information technology. To this end, the bank offers all banking services on an “online” and “real-time” bases supported by a network infrastructure. Today, all Parsian Bank branches transact as one and the customers can receive banking services from any branch available, regardless of where their accounts have been opened.

Parsian Bank is joined to Shetab Center (Center for Payment and Settlement). Once this accomplished, ATMs installed and the first series of Parsian Debit Cards issued. The executive arm of Parsian Bank for all operations related to bank cards is one of its affiliated companies, “Parsian Electronic Commerce Co. (Private Joint Stock)” that is in charge of cards management and installation of POS and PINPAD. The increasing growth in the number of internet users in Iran has provided a suitable ground for utilization of e-banking services.

Parsian bank opens the following accounts for its customers: Savings account, current account, short termed investment deposit account, special short termed investment deposit account (joint to current account), special 3 months, 6 months & 9 month short termed investment deposit accounts and long termed investment deposit accounts.

All Parsian bank accounts are Online & Real-time. Customers can obtain information about their account outside the branch by using one of the following methods ISS, EMS, SMS and the telephone. By visiting one of bank’s branches all eligible & legal persons can open a bank account. According to the central banks notice, applicants must not have any bad cheques or bad records; they must show the bank a valid & appropriate occupational document.
Parsian’s customers can benefit from the following banking services: on-line services, issuing bank cheques (cashier's cheque), issuing different bank drafts, issuing inter-bank cheques, Automated Teller Machine (ATM) and other ATM’s belonging to Shetab, paying different cheques belonging to other banks, issuing different types of electronic cards for example debit, credit, gift and Zaer (pilgrims) cards. (For further information please feel free to visit Parsian E-Commerce Company), overdraft for current accounts (by using public limited partnership (Mozarebeh) contracts). Paying for public services is not done in branches but customer may pay using ATM devices or via internet.

There is a kind of special short term account which is connected to customer's current account. Should customer’s current account come empty; the bank fills in their short term account without informing customer so it acts like a support account.

Each customer may have a cheque book with different number of cheques (10 or 50 cheques). The first time it is a 10 page book but according to customer being a good pay (or not), it may be 50 (or naught) the next time he demands for it. It is studied accurately to decide whether to give him that or not. Reports are sent to customers, monthly using e-mail. It could be done in shorter period should the customer ask for it but ordinary customer does not often ask such a thing. Some particular customer and legal entities often want the so called report sooner. As regards facilities, loan settlement mechanisms are customizable so customer may change the installments.

“Zaer Card” (literally: Pilgrim's Card) was designed to be used by pilgrims in Saudi Arabia but it wasn't well received. Most of these pilgrims are elder people who either don't know how to use ATM or have problems using it. Many of them simply don't trust this thing. If Parsian’s bank used the same service for other foreign cities, perhaps they would have had better success.

Money transfer could be done using ATM. Public services could be paid using Internet but not money transfer because of the security not being totally solved. Internet shopping can be done. Accounts could be closed should the customer himself comes and
demands it. Cards could be canceled by the phone in case a problem occurs. Customer calls the 24 hour support and it is done. Customers may contact the help desk should they encounter any problems or difficulties but no personal information is stored. There is a call center under implementation but not run yet. Some activities related to CRM like call center and customer satisfaction measurement is done by units independently.

5.4.3. Definition and benefits of CRM

CRM is done inside the banking system without any specialized sub system or anything. The only reason to do CRM is the competition to keep the customer there and satisfied because it is the customer who keeps the bank running. There is this competition between the banks and particularly between the banks in the private sector. Growing branches, lack of qualified personnel, the necessity for providing precise and whole services demands CRM systems.

CRM is possible when accompanied by strategic management and planning. If the customer knows that the system is operating according to the current needs, he will keep his connection with the bank continuously (mutual relationship). The only way to see and keep the customer's needs close is to store them uniformly in a database. There are also some troubles coming from the outside of the bank like economical conditions or inflation causing unstableness.

Transparency in advertising is very important, meaning the customer should see that users at the branches are able to provide those services. This requires updating of those users interacting directly with customers with the decision making and public units.

By performing various queries on the database, useful reports and analytical results may come out which then provide a foundation for installing CRM systems. At the moments, these data are stored in different databases. In order to make the suitable for the CRM, they should be unified and stored into a data warehouse. These data help the banks to determine what is demanded by the customers and how. Knowing the current, past and future state of the market aids the bank.
When opening a new an account, all the personal data of the customer is stored in the core banking system called “Bank e Iran” (Bank of Iran) and is accessible. Considering they are an online bank and all the transactions are done by the system, it becomes obvious that all the services done for the customers are stored in the banking system. This results in the relevant data of the services being defined in the system. Different units like Informatics, International, Customer Care and etc are working separately and there is no synchronization among them, causing the data of any not available to others. Units are not aware of the new services provided by others.

Queuing and waiting system provide such information as the average waiting time, number of customers and alike. These data are stored in the branches and are used to aid some decision makings like whether to buy a TV set for that branch or not. Branches with a specific or greater average waiting time are included in this service for example. Data of the branches like the amount of resources and their debts are studied daily and some actions are taken regarding them.

Complain & Suggestion forms are available in the branches and customer may state their opinion. Direct number of the CEO's representative is also there. These data is investigated and controlled by the Public Affairs unit. They have this self-service e-commerce on the table but there is no concrete CRM program.

Customer may issue an Internet report with a 24 hour delay and she can buy online with Parsian Card. Account transfer is possible using telephone-bank. Customer management unit tries to market, serve and attract customers. They use applications like SQL, Oracle and Excel in order to analyze customer financial reports and registration information.

Strategy of customer management is determined face to face by the heads of the branches. Customer segmentation is done differently in each unit according to their own criteria. For example in the Credits unit, the amount of the facilities, deposit and customer's life cycle are considered as the criteria for segmentation. Customers are segmented on the other hand by some different things like legal entities and individuals,
permanent or temporary, commercial or non-profit and etc. Customer segmentation is done according to history, beneficence, satisfaction and loyalty but none is done systematically but occasionally and for some special customers. Customer's income is also considered as an attribute for segmentation. Parsian Bank tries to discover customer’s demands by studying their way of living and priorities in their requests, and then they design new services and tools. This is yet immature and is not performed amply. Anyway, environmental and economical fluctuations have a huge impact on the bank.

It is possible to have a report of resource allocation regarding branches. This capability is built in the core banking software. Due to the bigger availability of the customer data it is possible, say, to send a happy birthday message to customers causing them to feel satisfied and being paid attention upon. They don't charge any extra fees for their Internet services. SMS, EMS, telephone-bank and ISS services are activated upon request and freely.

As regards with special customers, a particular unit takes care of them should the necessity arises but normally they are taken care of by the branches themselves. Customer data are gathered to some extends and they are being used for planning and evaluation purposes but the process is not uniformed yet. In commercial department, fast services are important for the customer's loyalty. The way of serving and its expenses are also very important. Online services are important in acquiring customer's loyalty.

About stating customers complains to the management, it is not very well done right now. Usually heavy business schedule and work traffic doesn't allow the personnel to do it and the underlying culture pays not much attention to this sort of work. For measuring banking operation efficiency by the bank's benefit making, they chose per capita amount of the expenses of each employee, expenses of each branch, amount of attracted deposit and granted credit as design patterns.

5.4.4. Information gathering, segmenting, analyzing:

Due to inability of the secondary information to be used in tracking the customers, national code is very vital. It even could be asked from the central bank. Clarity in
accessing information regarding customer's account is very influential in knowing them better but our cultural infrastructure does not easily permit that. Because of the sluggishness of the core banking system, customer transactions are performed slowly and this may causes dissatisfaction. Core banking software has many problems and it should be seriously revised.

Right now all the data gathering and automation systems within the organization work separately so there is no integrity and work. Even some departments may be unaware of others carrying out a project. Even inner organization informing is done poorly. But it is possible to do this considering the automation system they have got.

Some processes are done batching. Big customers like large legal entities often ask for special services or even open accounts on behalf of their staff so bank can pay those prizes or bonuses etc. These kinds of services are the responsibility of the one of the subsidiary companies. They come up with new ideas and carry them out; the remaining is the staff’s job to do. They are facing some customer dissatisfactions because performance is not that good sometimes or support is not the way it should be. After launching, like, internet services, no program to determine the quality of service or customer satisfaction of gathering their information is executed along with it.

Branches are ranked by the supervision by their quality of service. Employees are subject to prizes to motivate them. When a branch is doing their job well, they receive more rewards. When this exceeds a certain amount, back office staff and other personnel also receive rewards but they are not aware of why. This way they remain motivated and generic to do their job better. Knowledge and announcing may prove very influential because back office indirectly affects the branch. Staff is assigned to special services only if it comes with benefit. Regarding Shetab transactions, wages are defined.

According to unstable social and economical conditions in Iran, Bank does not risk selling its shares or doing counseling services; it proceeds with caution. Having different cards for different things focuses the customer and raises their expenses. They each have a different password and are used for a different purpose. This is not good. As
regards customer segmentation, big customers are defined but inner organization informing is not done; so it is difficult to extract big customer’s reports. This is not done with much integrity. In order to encourage customers we should consider environmental effects.

One the important thing regarding ATM devices is charging them. Due to the huge amount of transactions and bank note transference, it costs a lot money and energy to keep these devices in proper conditions. For ATMs, they inspect all the transactions and suspicious or unusual cases are further investigated. Monitoring is very well done for ATM devices in a way that they could be remotely controlled and the problem is traced this way. All ATM devices could be tracked on line. Branches systems could be remotely managed.

Regarding foreign exchange and facilities, due to the important need of the customers to inform them step by step about the progress of the work, they are allowed to trace the transfer. First it was done by fax but now it is done by email because of the large volume of the work. The last authorizations are sent via email automatically. For those customers who use foreign letters of payments, it is important to now when exactly their job is done and moments are of the most importance here. Customers are informed about this all the moments. “This is important for them to know we care about their job.” When a customer comes for the registration, their email address is asked along with other information so they can send them messages should the necessity arise. This is done automatically in the database.

That department dealing with big customer, they are not able to acquire all the required information like customer's history, loans, facilities etc by themselves. They have to inquire all the relevant divisions. Recently there is a system which is capable of announcing information about the current accounts but it is flawed. Due to security measures, not all the staffs are authenticated to view transactions. If a customer is know to be a bad payer by one account and requests for facilities by another account, he could not be identified. A customer may ask for facilities only in his branch which is the result of the inability to manage customer data. “All parts work like separate islands.”
Unfortunately there are some processes which are not correct. Automating these would not improve anything.

If staffs are trained and the importance of the customer is known, they can study it when a customer leaves the banks. Why they decided to leave? Those customers who have large turnovers are segmented as VIPs but no special attention is paid to their special needs and requirements. “Quality of service is not studied either.” Suggestions and complains inside the organization caused some troubles to be discovered thus staff may better serve now.

Queue system in which customers are queued automatically is functional in Parsian bank but the data coming out of it, describing how much it takes to serve a customer, may be under the influence of many things. It should be studied.

Segmentation is done regarding facilities according to the trade customers have with the bank. It is possible that they are active in industrial part like automobiles and alike which then segment their customers in commercial and non-commercial segments. As regards those who import goods or foreign exchange or services, they are divided in two: those performing commercial transactions with us and those who doesn't. In the facilities segment, manufacturing, distribution and commercial it is done. There also a public and private segmentation of the customers. The primary segmentation is individuals and legal entities.

The other segmentation is between permanent and temporary customers. It is possible that customer transfer money to a foreign country due to a deal that he has done just once. But there are customers who do this regularly. They are considered special customers. They have account numbers. They wanted to segment the customers by the Rail and Foreign exchanges also. Although a customer who has foreign exchange jobs has Rial requirements also but these two are done separately and could be distinguished. In big customers segment, a division is held by the amount of the facilities they demand. Less than a certain amount and more than that are considered in different segments.
Big customers are sent notifications and cards in year events, describing to them new services and showing them the bank care about them but this is done not in a regular basis.

If the customer used to keep a trade with bank and he is known as a good payer (no debt) then marketing is done about him. For customers not directly connected with the bank, marketing is done in the traditional way based on the staff human connections and links.

A new department is opened called risk management. After observing that some customer’s large money cycles it was known that constant resources are low in the bank. Thus a new strategy is adopted to promote customers to open and keep their accounts. So at the back of the new services, there stands data analysis. In order to perform risk managements, it is required to investigate strategies and validate the data. Some projects about customer churn and CLV (Customer Life-cycle Value) are active but some more widely planned projects are required. There is a project under investigation which aims to offer commercial advisory services to the customers like companies and alike.

Bank's website is not clearly showing any special strategy right now. It is not obvious whether it is mere informative or bank's Intranet. Even internal data is not uploaded.

5.5. Mellat Bank (literally: Bank of the people)

5.5.1. The Company, history:

Bank Mellat was established on 1980 by virtue of the resolution adopted by the General Assembly of Banks, with a paid of capital of Rls 33.5bn as a merger of ten pre-revolution private banks. The ownership of it is the government of Islamic Republic of Iran 100 % with 1954 braches all around the country.

In the direction of development of electronic banking services and in order to provide a proper ground for easy access of clients to the said services, the first around-
the-clock drive-in base was established on 2006 at the Auto bank Branch. The said base has 4 Cash Dispensers terminals for clients while they are remaining in their automobiles, 2 terminals for on-foot clients and one appropriate and there is a covered counter for rendering banking services (Mellat electronic current and Mellat card).

This is the first around-the-clock Auto bank base in the whole country which citizens, using its facilities, can receive services from Bank Mellat Cash Dispensers terminals while remaining in their cars.

Bank Mellat, as a pioneer bank in providing electronic services, has designed and commissioned the first automatic teller mobile bases in order to offer bankcard services in required locations and districts. This base, having two cash dispenser terminals and using satellite communications, becomes operational and provides diverse services for the holders of Shetab member bankcards within the minimum time.

The principal idea of designing mobile base in Bank Mellat has been shaped based on offering up-to-date services at the required time and in proper population centers, for development of which, the necessary measures is being taken.

5.5.2. e-banking services:

Access Card is a magnetic bankcard is for offering around-the-clock and up-to-date services to the holders of focused accounts such as JAM, Electronic Interest-Free Deposit and etc. The Features are: Using in the internet environment, shops possessing POS terminals, Bank Mellat Cash Dispensers terminals and other members of Shetab Banking network in Iran with more than 1175 units of Bank Mellat Cash dispensers.

With Mellat Card customers can check their balance of account, payment of bills of electricity, telephone, etc. In addition to using Bank Mellat cash dispensers, customers can supply their banking needs form majority of bank cash dispensers in Iran by Mellat Card and via network of data exchange among banks, which is abbreviated as Shetab. Mellat card enables customers transfer money via cash dispenser terminals to the accounts of other holders of Mellat Cards momentarily and without extra expense. They
can easily make their shopping via POS units. This Card acts as customer’s electronic wallet, enabling them to withdraw form the cash dispenser offline in case of disruption in the electronic network. In addition to acting as customer’s electronic wallet, they can withdraw another amount online.

Another kind of card is the student culture card; it bears the following form and has the same features as Mellat Bon card, which is issued in compliance with the request of Ministry of Science, Research and Technology for culturally active students. Using this card, in addition to shopping from all shops equipped with electronic payment terminal (POS) or from the Internet environment (virtual shops), students shall be able to use special discounts for purchasing goods and services in the stores and institutes and scientific and cultural places which are parties to the contract with the said ministry.

JAM Telebanking (Having 420 lines) has some special services which are: receiving turnover of the account, announcement of a certain turnover, receiving the statement via fax, changing the password and also payment of bills. Special services of SMS banking are: getting information of turnover, getting information of certain voucher, payment of electricity and fixed telephone bills (only for Tehran), changing the password, morning announcement of the balance and announcement of a bounced JAM check.

Special Internet Services of JAM Accounts are: sending internet drafts among all focused accounts, transferring sums, possibility of receiving turnover of accounts in various formats, confirming the sum of check, identifying the depositor of the sum to the JAM account via inclusion of the name of the depositor in the statement (only for Special Clients), possibility of deactivation of card in case of missing or theft, management of bills, including payment of the bills and obtaining the report of payable bills.

5.5.3. Data collection and analysis:

A loyal customer uses the services again despite his dissatisfaction because the bank has made a special impression upon him, attracting him again. As a matter of fact, loyal customers are not the same as satisfied customers. In different levels, different offices are responsible for taking care of why a customer became churn. Customers demands are
studied to determine if it’s worth it to provide requested services for that special customer or not. Customer has different values like financial benefits (interest of the deposit) or structural (special services) or their relation with the bank. It should be a special cooperation with any of these customers.

It is the responsibility of the branches to discover customer’s needs. There is no particular job title assigned to discover customers need like a one who demands social respect or whatever. This need is recognized in the branch and it is their job to keep the customer satisfied. If he goes to another branch, he is not identified and this may cause him dissatisfaction. We are running a project targeted at identification of these special customers. The strategy of treating an unhappy customer which intends to end his cooperation with the bank should be regulated and trained in the branches.

In order to control the branches there is a special supervision program. Branches are ranked according to indicators. One of these indicators is the total balance and the resources of the branch. Thus big customers with huge amounts of deposit are important for the heads of the branches and they keep them happy but this is done in the branch level. If the customer is special having huge amounts of deposit, he gets discounts when charged for the services such as reports or cashing cheques issued for the other cities.

Decentralized ATM monitoring system is an applied project targeting at an increase in the usefulness of the ATM devices. Then system was ported to web so information could be viewed real time so in case a situation occurs, responsible staff is alarmed and managers may see a report.

There are two kinds of customers. One is the organizations like Azad University which they help for task like Internet registration of their students and such customers demand for special services, and there is another kind requiring other services like Internet banking or Mobile banking. At this level, customer and service identification are done in the traditional way. There is no automation.

Customer asks for the activation of Internet banking by a written request in order to avoid any troubles. Deactivation could be done via Internet. Special customers, those
who demand for online buying or POS services, require special customizations upon available services.

Marketing and customer identification is done in its traditional way by the head of the branch but there is this project at hand by which customers register themselves online providing their email address and demanding their service. This way we can trace the customer. Customer data is entered in the branches. All the translations are viewable. Analysis is done and traceable by the MIS systems for the special users. Analysis applications are not doing anything for the database. Segmentation is not uniformly understood in the bank but based on the balance some segmentation is done.

There is no special mechanism for the measurement of customer satisfaction, nor there did any automate way of analyzing their views. Customer call and state their opinions based on the business they have with the bank. Personnel believe they are so busy with serving that there is not much left to pay on feedbacks. There is a section in the website called “Customer Contact” in which customers may leave messages. Usually Public Affairs division is the recipient of such messages. The thing is that other groups or units inside the bank are not aware of such service or its usage.

There is unit accessible via phone number 1556 which answers the customer’s calls and registers their information. Some feedbacks are acquired from this source like when there is a new advertisement; they measure its influence and impact by the number of customers called with regard to it. Or perhaps the ad was a vague one leaving the audience with questions to ask. It may be even without any impression of whatsoever because nobody called. Public Affairs divides these messages into two categories: those about general bank's policy and complains about bank's behavior and work.

On the website all personnel have a personal page. They can do internal communications there or even read customers reviews. This is going to play the role of informant for staff of different departments.

Automation plays an important role in general management improvement when there are lots of branches and vast dimensions. Customer’s information is available for
the staff in the internal site and inside the branches. Certainly Public Affairs study these
complains and take the appropriate course of actions then, suggesting personnel
approaches and methods to improve the whole situation.

Collecting potential customers and offering new services to a special segment of
customers is the responsibility of other staff and specialists. A project called “Smart
Customer Communication” is being studied along with telephony software. This smart
system is the foundation for CRM and is divided in two sections complains and
suggestions. After data gathering and analysis they have a tree of possible problems
customer may encounter and the question they asked them about how to approach the
solution. A collection of questions is available. In order to participate in this, customer
should submit to the program so they can track him back. The questions and answers are
dynamic. A Form Generator was designed for this. Information and analysis are collected
from branches and supervision department. The system is smart because it responds
according to a set of rules and is backed by a data mining system. There was a plan to
design an algorithm so the system can learn new things and forgets about expired things.
This is done to some extents and is the bank's first step towards communicating with
customers. Scientific basis of the project is sound but there are some difficulties in
implementation.

Bank's Call Center with the phone number 1556 is another activity working right
now with a bunch of operators answering the customers. After the bank is closed,
automated answering system takes customers messages. This is linked to complaints
system. Call is diverted from the call center and the rest is registered in the complaints
system. In complaints system customer may also use fax and letter or they can directly
come to the place. Phase two of the contact center is being executed which includes email
and fax servers so communicating with SMS, email and fax is possible. Phase two also is
going to be put on the knowledge tree of the contact center. A CRM working in a work
flow manner is supposed to do all the cycle at the back of this phase. This causes the
customer to feel safe and able them to see how their work is done and by who.
At the supervision division, there is something like an MIS which extracts daily reports from the gathered information. At the pilot division of this project there is a PLS system working to provide the manager even the ability to warn various departments so he can supervise and control bank's sections. For example he can see which department is complained about the most. At some level it has been a connection with the data warehouse.

Due to the data in the warehouse being dated, the connection was severed causing troubles. Until the end of the current year the centralized banking system will be installed so it would be easy to fetch the required information and customer tracking is done painlessly. Customers are given their national code as their identifications. If this is done outsource by other companies and groups, the work goes well and reaches the practical phase. It has been foreseen a basis for up-selling and cross-selling so that sales and services issues are controlled and managed and this is ideal. No such capabilities are planned for the compliant system but it is planned to be inserted in the executive section of the contact center.

Information Unit gathers and stores customer’s data in a traditional and manual way. Such plans as “Tarhe Pezeshkan” (Physician's plan) are done little by little and not in a systematized, uniformed manner.

In the complaints system it has been tried to gather the minutest of details from the customer in an imperceptible way so they don't feel insecure and exposed. There has been a theory like if an operator heard a baby cry from inside the customer’s phone, she will promote the customer for the special services or to send an SMS messages at customer's birthday. In this way customer will feel that the bank is valuing him but current policies prohibit such things. Special care towards customer, the fact that they should be recognized and being taken care of are done in a traditional way but not in a systematized way.

In the complaints system some information are collected and some rules are concluded and handed down to the managers to use them. But because there is no access
to the customer’s financial data in this system, no work is done for it. It requires an inclusive plan. They have been walking towards it for 2 or 3 years but it takes a long time considering the size of the organization with around 2000 branches.

Electronic banking is done very well here comparing to either public or private banks but it is not known due to the lack of adequate publicity. At the moment data mining is done manually and there is no software for it but in order to solve infrastructural problems like reliability there is an Internet based system.

Although there is resistance due to traditional and organizational reasons against the new systems, managers and personnel feel more comfortable after using because it gives them more power, exposing customers data to them easily. It cost lots of time and energy to get even a slight bit of information but now these are all solved. There is no internal controllable and manageable intranet responsible for inter organization communications so customer feedback is not redirected to the managers.

The first idea about the contact center was to provide an economical advisory service to the customers so if a customer requires directions he may call and receive an answer. Because of offering special services to big companies and organizations, they are attracted to them. For example by using internet banking services for a large car manufacturing company they were able to control their sale cycle. It is possible to assign a tracking code to each buyer so they can track him to see from which gate or representative it was that he come through. They receive the bill hourly via email and automatically. This kind of services interest big customers and are not available for usual ones. Segmentation is not done by software. Transactions are controlled and analysis is done by the specialist upon the database. It has been known for Mellat bank that big customers asked for some particular service unavailable at the time, but such things cost and they first evaluate and study them. Then they may reach practicality.

Transaction thorough Shetab transfer is not available although the central bank’s policy dictated that all banks should connect to each other via Shetab’s internet network. But internal accounts and services are all connected and money transfer is available.
Customer’s index software is being designed. A conceptual model is defined and designed. Some questions are asked from the customers who are analyzed beforehand. Some indicators will be determined after the information gathering and goal recognition is done according to a mathematical model.

Customer problems are solved face-to-face. But for big customer it has been a course of 30 minute interviews. Information is gathered and requirements are identified. Problem solving (for customers) is done via supervision and in the branches. Right now branches are more interested than other divisions to keep customers happy because it causes them to promote.

At the moment branches treat big customers differently according to their own experience but the same customer will not be treated the same way in another branch. There is a program for the future so such customers are known in all the branches. In order to arrange those interviews big customer were defined and heads were asked to introduce them. The criteria for choosing big customer were the amount of their balance and the residue of their account. Residues of current accounts are more important than the other criteria. Customer life time value has not been measured yet. Balance Score Card and Master Plan are other projects which were being studied.

Balance Score Card (BSC) is a strategic management evaluation system which evaluates the organization from different aspects including financial, customer, processes and staff. In all these items there are some themes defined as existing in the organization. There were few themes relative to the whole model in our organization because some of them are does not exist in this bank. For example Customer Satisfaction item didn't exist in the bank but in the model. So they had to first measure it then they could use it in BSC. Marketing is supposed to work on other customer related items. BSC is not an intelligent system. It only shows numbers and percentage and stuff. These should be further analyzed. Access level of the managers will be defined also.

They have some regulated annual programs according to which they go on. Results of these projects are evident in this program. Managers see the results as some
Customer loyalty is measured based on some weighted questions. These are asked and then according to some calculations, customer loyalty is measured. Statistical stock (sample) was the population of citizens of Tehran who have short term or long term saving accounts or Jam Card or Mellat Card. Questionnaire forms were handed to customers at the kiosks. Customer satisfaction was measured the same way.

About Customer segmentation, customers benefit is not calculated to be used as an index but customer’s history was used instead. Finally the complementary questionnaire is designed according to age and history item by item and then distributed. After data gathering, information is inputted to the software.

Prime office of banking information registers the details of customer transactions into an application designed to search customers resume. Considering the goal is to be able to view all the information, it is going toward web technology. In place of the old Internet service they used to offer, another Internet service is offered in order to replace the so called old one but this takes time to complete. There is another web-bases management application for the managers. Using it chief supervisor or heads of the branches may see their work like financial information, balance and other indices. They can also control them. Application is capable of generating management reports.

In future programs it is intended to build for provinces their own protocol in the main website so they may put stuff and advertisings on it. But in this stage, informing the audiences is the main goal and then they are going to continue with doing the same thing via the web specially regarding inter organizational issues.
A unit called Public Opinion and Control does the polling and analysis which should be found on the website. They trace the customer finding out the path she has trodden from this page to that page along with how much she has spent on each page. Right there is no special work which is done upon this information but it is important that they do this. First, they prepare the tool and then use it. They are the first public bank offering the capability to buy and sell via Internet.

Customer expect different treatment according to their history with the bank hence the apparent need for segmentation. There is a pyramid of customers which follows the CRM approach. First step is the Contact Management which is done at Contact Center. Customers contact bank via this center using different ways. In the complaints supervision section there is a process which should be controlled by a work-flow management, defining some processes in the system. For example when a service is defined, some relevant process should also be defined. This should be executed in future projects. Marketing, support and other services are also available for the customer as extras. In order to design a good system, they have to study the available process and fix them then designing new ones but there are some cultural infrastructural issues about this. “We have to deal with them.” Transition from paper-based to paper-less work flow is undergoing but some organization resistance is encountered. Another issue is about the software vendors; they don't have the required information about banking.

Their own staffs are considered as customers somehow and should be served in a way. In the so called contact center this information are logged but just having them is not enough. They are supposed to be used. Backup and management system do the required investigations along with special trouble shootings and diagnostics. There is a project called NOC trouble shooting the network. It is possible to plan the bank's strategies and follow them using this information and analyzing them.

In order to serving credited customers, electronic banking proves important. In the traditional sense it was done in this way that customer comes to the branch and fills the forms and submits the required documents then empowerment steps are taken. Thus using the electronic banking, customer scans the required documents like his
identification, his company's legal documents and such, send fin them to the bank via the bank's website. This way an electronic file is created for the customer, saving energy and time. Special customers can use such services. This customers are identified using their transactions, their deposit and alike. Other customer like those involving with national big industries (car manufacturing specially) are very important also. Customer segmentation is done in Facilities Office which segments them into individuals and legal entities. It is there decided whether a customer is a special one or not. The office provides authentication for its special customers.

There are some users in the site: (1) Technical and IT manager (2) Specialists from the Facilities Office working on the customer's files and (3) Reporting users not doing the modification or deletion or addition. The rest constitute the customers accessing their own pages to their messages and stuff. Suggestions and reviews from the site are also the responsibilities of the so called office. It is considered to send messages at the large events to big customer doing some marketing and alike using this website.

It is intended to provide some services to the customers using maps. For example a customer wants to know the nearest branch according to his position or the route to get there. Another may want to know the ATM devices in a range and whether they are active or not. This software is called a GIS which is run in Windows having a map with different layers. They have to acquire information for various maps from different sources. This software analyzes the distances and informs the users. GPS devices should be installed on ATMs so they could be traced. First phase is the Web GIS part. Analysis and study is done in the R&D unit regarding the location of the new branches and ATM devices. Management reports are ready. Mobile ATM services are under run in a few months. Their location is determined by the public affairs division.

Big public organizations buy agricultural products by cash using Mellat bank. It is due to the ease and rapidity of the bank's transactions with farmers. It has gathered lots of resources for the bank. Because of the IT capabilities, this bank is able to do this kind of service all over the country, providing the customers with the required information online. Due to the suitable platform, they have succeeded to attract this kind of customers
who have business with the special bank of agriculture. Before the era of networks and stuff, it was done using diskettes. Diskettes were being sent to the supervision and then sent it to the center and being displayed on the web site using a modem. Then parallel with the expansion of the network, work is being done more easily. All the transactions are done using a centralized Jam account which is controllable also. Ideals for attracting customer and requirements gathering of the market is done via an office of directors and advisors. Role of the management regarding the new ideas for improvements of the tools and IT capabilities is much highlighted.

5.6. Summery of the chapter

The objective of this chapter was to present the data collected through interviews from the four selected cases. The answers were organized according to the research questions and then assigned to the related research question. In the next chapter, chapter 6, data analysis relevant to each research questions will be presented and discussed.
Chapter 6: Analysis

6.1. Introduction

Considering the previously mentioned analysis methods in chapter four, what has been stated according to the research question available in chapter three and the model selected in chapter three, first information gathered is studied for each case; Second cases are segmented according to them being public and private then banks found in each of either segments are compared against each other; Finally a comparison is done between the banks in two segments.

6.2. ENBank Model description and research questions

As stated before, according to the model (figure 3-1), data gathered in interviews with EN Bank, figures 6-2 concludes that gathered data from the customer are based on various touch points.

<table>
<thead>
<tr>
<th>ENBank</th>
<th>Tejarat Bank</th>
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<tr>
<td>Parsian Bank</td>
<td>Mellat Bank</td>
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Figure 6-1: ENBank in the matrix.

RQ1: How can the definition of CRM in ENBank described?

In order to make good decisions and strategies, they require controlling their relationship with their customers in order to mitigate and manage the risks. Currently, integrated CRM, MIS and risk management systems are being implemented.

RQ2: How can the benefits of CRM in ENBank described?

EN Bank started its carrier with a limited and special set of customers requiring few branches and no need for CRM system to deal with customers. But when the so called paradigm shift occurred it required attracting customers and offering competitive
benefits. Actually marketing and customer relation management office slowly formed from there. Then they defined sub sets of this valuing the customers meaning customers are duly and appropriately served which leads them to regular contact with the bank like offering them all their needs in a basket full of supplies. This was they tried to establish a creative relation with customers leading to added value for them. Also, they realized that all valuable data can be extracted from CRM so they could create reports upon them regularly. Since this banks advocates outsourcing, they consider it a benefit of CRM to control their subsidiary companies and supply their information this way by measuring their performance.

RQ3: How ENBank view CRM?

At the beginning this was very raw and premature but slowly it took the shape of this new CRM with some cultural efforts inside the organization. This bank has built serving upon e-banking so they are after communicating with customer this way. Another approach is to increase the branches along with ATM and POS devices. Thus serving the customers in the branches and via these devices demands CRM too.

This is private bank which is a member of stock exchange not all other private banks are like this. Their big customers have considerable turnovers and bank activities influence the EPS and stocks. So, it is apparent that they need to be well involved with their customers.

RQ4: How ENBank can manage the analytical CRM?

As it shown in figure 6-2, the bank in its CRM analytical section, via the information gathered from website, call center and branches, branches provide customer satisfaction and core banking data, extracted form various databases and then combining them with the events occurring in the society makes decisions in line with system integration, product innovation and redundant competency. Customer profile generation is not done uniformly yet here, nor is customer behavioral patterns detected. Marketing application development promotion is not done clearly from the knowledge.
Figure 6-2: The emerged Investigation of CRM activities in ENBank.
RQ5: How ENBank can manage the operational CRM?

In operational CRM, bank has managed to serve its customer and trace their requests using call center. Via credit services which are currently in pilot state, meaning internal; staff serve customers. Valuable customers are detected by the traditional way in the branches or following a request from the database.

RQ6: How ENBank is managing their communicational CRM?

An essential part of the information is gathered from the customers through different channels. It is important for these channels to be integrated and gathered in a single database. In order to communicate with the customer bank has increased the number of branches and the serving hours. In the branches they establish special relationships with their customers in a traditional sense and again the call center is open all days and all hours (24 hours a day/ 7 days a week/ 365 days of year).

6.3. Tejarat Bank Model description and research questions

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<thead>
<tr>
<th>ENBank</th>
<th>Tejarat Bank</th>
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</thead>
<tbody>
<tr>
<td>Parsian Bank</td>
<td>Mellat Bank</td>
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</table>

Figure 6-3: Tejarat Bank in the matrix.

RQ1: How can the definition of CRM in Tejarat Bank described?

Tejarat Bank’s ultimate goal is to meet their shareholders expectations. Considering their only shareholder is the state, they should do as to satisfy state's expectations. State wants them to receive people payments for public services and such, although it incurs loss. Public banks are supposed to create job opportunities, invest in new services like highways, metro or public civil and construction projects. Providing public companies with facilities is regarded as the last in benefit making.

RQ2: How can the benefits of CRM in Tejarat Bank described?
Figure 6-4: The emerged Investigation of CRM activities in Tejarat Bank.
Complementary services like cards or ATM is important in this bank because it attracts customers. Otherwise it has lost the competition to others. Customers are now well aware of what they want and who can give it to them. So, due to the fact they have to serve their customers first and also make mutual relationship with them to make some core competencies.

RQ3: How Tejarat Bank view CRM?

They believe they should walk towards customer relation management in order to compete in the field. This necessitates identifying a customer in branches and have access to her history and transactions thus they are after informing and integrating data which is only possible via the suitable infrastructure. Regarding other touch points like Internet, they have to pursue managers.

RQ4: How Tejarat Bank can manage the analytical CRM?

In Analytical CRM, the data depicted in figure 6-4 is analyzed by the decision making unit but information like customer feedbacks from the branches or contact center are not used in the way of strategy planning. Due to some infrastructural issues, data are not available online and live. Database is designed in a way capable of providing some specific statistics and data but it is not possible to identify a unique customer in different branches. Results of focus groups and exit interviews are used to take better strategies. Risk management is precisely done here using the gathered data from the database. As stated in section 5.3.6 this bank buys some Secondary Data of Society from data seller companies. They actually use this for market analyzing which is done traditionally but managers are very experienced along this way. This bank controls the Shetab transactions of their ATMs in order to compare it with the competitors and planning strategies in this part.

RQ5: How Tejarat Bank can manage the operational CRM?
As mentioned before, due to the lack of information about customer’s behaviors and subsequently lack of segmentation, it is not possible to decide for advertising projects and even special services. They had a bad experience in this regard.

RQ6: How Tejarat Bank is managing their communicational CRM?

As regards with communicational CRM, they hold focus groups in which managers directly get feedback from customers, gathering their suggestions and views. The believe this improves their relation with customer and makes them feel a sense of loyalty and closeness to the bank

6.4. Parsian Bank Model description and research questions

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<thead>
<tr>
<th>ENBank</th>
<th>Tejarat Bank</th>
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<tbody>
<tr>
<td><strong>Parsian Bank</strong></td>
<td>Mellat Bank</td>
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</table>

Figure 6-5: Parsian Bank in the matrix.

RQ1: How can the definition of CRM in Parsian Bank described?

CRM is possible when accompanied by strategic management and planning. If the customer knows that the system is operating according to the current needs, he will keep his connection with the bank continuously (mutual relationship). The only way to see and keep the customer’s needs close is to store them uniformly in a database.

RQ2: How can the benefits of CRM in Parsian Bank described?

Parsian Bank tries to discover customer’s demands by studying their way of living and priorities in their requests, and then they design new services and tools. This is yet immature and is not performed amply. Anyway, they believe that, environmental and economical fluctuations have a huge impact on the bank.

RQ3: How Parsian Bank view CRM?
Figure 6-6: The emerged Investigation of CRM activities in Parsian Bank.
As it mentioned before Parsian Bank commenced its activities in the money market by rendering retail banking services. However, it intends to enter into investment banking and utilization of capital markets in order to facilitate development of economic sectors and to deliver value to project investors and also, because of their objectives which were accepting popular savings and investment deposits with the purpose of absorption of resources, and to granting credit facilities based on the provisions of the law ratified by the Monetary and Credit Council, and on the strength of the monetary and interest-free banking rules as well as other banking operations, they need to conduct relationship with their present customers and be ready to serve new ones.

CRM vision in Parsian bank is to manage service cycle by focusing on beneficent customers directing them towards up-selling, cross-selling. Keeping the customer is vital for them and they perform all these various customer related programs in order to raise the profit and decrease the costs. They try to offer high quality services, thus keeping the customer permanent and satisfied leading to more income.

Some strategies like CRM see major modifications when high ranking managers are changes. Some are under the influence of environmental and social effects. These should be adaptable and updated accordingly.

RQ4: How Parsian Bank can manage the analytical CRM?

In order to be capable of serving CRM demands, data uniformity and integrity are necessary all over the bank. Data mixing is done in Planning and Development unit. For example there is a plan to identify branch with many customers to install TV sets and banners. There is also a plan to have a trained employee explaining services to customers in a cozy environment.

RQ5: How Parsian Bank can manage the operational CRM?

In the operational CRM section, Parsian has initiated a call-center doing some help desk activities without any data output and analysis. As regards International Services (card), a service is implemented which is not leading to the result. As mentioned
in the chapter five regarding customer satisfaction, no study is done. But regarding SFA (Sales Force Automation) which is all about ability to tracking the customer’s account, a suitable service is available for forgive exchange department. This service is being promoted and upgraded. Personalized marketing is done by the human connections.

RQ6: How Parsian Bank is managing their communicational CRM?

Bank has performed many activities regarding e-banking and various services which is one of the improvements of the country banking system. But information acquired from these touch points are not gathered and analyzed properly so there is no feedback for advertising planning and marketing.

6.5. Mellat Bank model description and research questions

<table>
<thead>
<tr>
<th>ENBank</th>
<th>Tejarat Bank</th>
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<tr>
<td>Parsian Bank</td>
<td><strong>Mellat Bank</strong></td>
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</table>

Figure 6-7: Mellat Bank in the matrix.

RQ1: How can the definition of CRM in Mellat Bank described?

In past, heads of the branches used to know their customers in their minds but as customers increase in number, this approach proves useless. So they had to segment them and finally automate this process and add some mechanisms to it. So, they find themselves in the need of controlling and managing their relationship with their customers through their branches and other touch points.

RQ2: How can the benefits of CRM in Mellat Bank described?

There are different sections doing different jobs which are not integrated yet. They are in the contact management phase at the moment and haven't step into analysis yet. At the back of the CRM is the Core Banking project which is going to provide a complete information flow of the banking data.
Figure 6-8: The emerged Investigation of CRM activities in Mellat Bank.
Upon request data are fetched from database but back office should have the request of the front office to ask for such information. Complaints are gathered from the system and then being taken care of at the supervision division. This would be the most important benefit of managing customer relationship from their point of view.

RQ3: How Mellat Bank view CRM?

Right now none or the bankers offer any special kind of services to their special customers. They basically do what others do more quickly or with extra features to some owners of the current accounts they refer to as special customers. Bank’s viewpoint is that customer is customer, yet some special customers may have the same services in other ways. These services may vary according to head's knowledge about the customer.

As regards customer relation, focus should be shifted towards the Contact Center. This center should be capable of handling all the communications and gates to the customers like fax, email, telephone and other things. It should have a smart tracing system. Queue technique, timing for the operators, managing internal group and reporting are some of the other highlights.

RQ4: How Mellat Bank can manage the analytical CRM?

Customer information is registered in the system as transactions. Each part of customer information is gathered in new services. Researches then use this data. There is no such a system as to take customers data as input and then performs analysis and segmentation on them in order to do marketing or attract new customers. Older systems do the statistical things manually and somehow manually data mining. New systems ask for customer’s national code and a few more items but these are not entered into customer's account. Even if the do, there is no centralization and uniformity.

RQ5: How Mellat Bank can manage the operational CRM?

In the operational CRM section, a websites is design in order to serve valuable customers. In the primary steps sales force automation is done which leads to saving of
time and energy for both customer and bank. The goal is to serve the customers better. So the output of systems is analyzed and then new processes and products. Electronic banking is done very well here comparing to either public or private banks but it is not known due to the lack of adequate publicity.

RQ6: How Mellat Bank is managing their communicational CRM?

Different approaches and various ways are used to communicate with the customers but due to the large number of branches and the organization being big, branches require a long time in order to collect customer information in a data-warehouse and communicate with the customer. From their point of view, first special and customer services should be initiated and then steps should be taken towards integration.

6.6. Cross-case comparison analysis in private Iranian banks

In this comparison some public banks and some private banks will investigate with each other, some comparison between the banks and some within the banks. There are some expected contributions after the research. This research will reveal the Iranian banks positioning in the point of CRM activities view, definition of CRM, benefits of CRM, the way of managing the analytical CRM, operational CRM and their communicational CRM. Some comparison between Iranian banks CRM activities and also some conclusions for the practitioners.

As it mentioned in section (4.9.), all of the data was reduced through being displayed in order to have a cross-case comparison between cases in each section means private and public banks. Comparison of ENBank and Parsian Bank will be discussed.
CRM is done inside the banking system without any specialized sub system or anything. The only reason to do CRM is the competition to keep the customer there, satisfied and absorb new target because it is the customer who keeps the bank running. There is this competition between the banks and particularly between the banks in the private sector. Growing branches, lack of qualified personnel, the necessity for providing precise and whole services demands CRM systems. In private sector it is necessity to attract the customers because of their mandatory the reason is they don’t have any sponsor to count on. They believe in offering high quality, new e-banking services. Actually there are in the embryonic stage of their experience and they are focusing on expansion and they think at the next stage they are going to improve their quality of their services.

As it mentioned before ENBank have done some communicational activities through the call center (Salam E Mehr) which makes is more powerful in collecting information and managing customer relationship. They are both trying to cover the different e-banking services and support their systems with various facilities and have competition on this case with each other.

They both public banks are work with queue system from branches but Parsian has much more control on the information gathered from this service for proving the quality of the services in its branches and does some analysis through serving customers. Also, they have some problems with their core banking systems which is very important for having the customer’s transactional information for different purposes such as segmentation, customer life time value, customer churn, etc.

6.7. Cross-case comparison analysis in public Iranian banks

In spite of trend that discussed in section (4.9.) Tejarat Bank and Mellat Bank compared as two cases were known as public Iranian banks. Public Iranian Bank’s ultimate goal is to meet their shareholders expectations. Considering that their only shareholder is the state (government), and the State wants them to receive people payments for public services and such, although it incurs loss they should do as to satisfy state's expectations. As in mentioned before public banks are supposed to create job opportunities, invest in
new services like highways, metro or public civil and construction projects. Providing public companies with facilities is regarded as the last in benefit making. And customer satisfaction, in case of absorbing their mandatory supplements especially personal customers is not the priority goals of public banks. Anyway, government wants them to serve the public customers and do their job well.

In the Iranian public banks point of view, customer is customer, yet some special customers may have the same services in other ways. These services may vary according to head's knowledge about the customer. Customer tracking is generally difficult and especially in the public banks it is even more difficult due to the lack of a centralized banking system. A customer may have a short term account in a branch and it is not easy to track that. Anyhow, they extract customer's information in order to respond to them like his history or if he has been a good pay or not. They are after customer’s behavioral patterns and their loyalties.

The growth trend of Tejarat Bank, in contrast of Mellat Bank, goes at the slowly pace in case of electronic based services and infrastructures somehow because of their experience in the traditional customer relationship management through the years of serving the customers, they have such a valuable processes and knowledge but they don’t have the facilities to improve the waste operations through the market.

6.8. cross-case comparison analysis in public and private Iranian banks

As it mentioned in section (4.9.), and then in the third step it will have cross-case analysis between each section means comparison between private and public banks based of the research questions. Finally, conclusions will be drawn based on the each case and cross-
case analysis. So, the next step of the research will be some comparative studies between two major types of banks which are privet and public in Iran.

<table>
<thead>
<tr>
<th>Private</th>
<th>Public</th>
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<tbody>
<tr>
<td>ENBank</td>
<td>Tejarat Bank</td>
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<tr>
<td>Parsian Bank</td>
<td>Mellat Bank</td>
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</table>

Figure 6-11: Public and private Banks in the matrix.

Visions are different in public and private banking. Private Banks started their way by centralized banking systems; they have fewer branches and fewer customers. They could not be compared to public banks. Public banks are bigger, larger, and older and it takes a long time to uniform their system. Upon request data are fetched from database but back office should have the request of the front office to ask for such information. Complaints are gathered from the system and then being taken care of at the supervision division. Private bank are starting their work based on electronic banking and working on that for better serving and supplying customer needs but public banks are trying to convert their bases and formats from traditional banking to the next generation ob banking so, they will have different kinds of problem in this way and it will take much more time, energy and money.

In public banking, public banks have few big customer most of the also in public sector so it is not for them to work with some bank of their own choice. This means public banks have no special mechanism nor to attract neither to absorb them. Increase in the income and decrease in the costs are among the specific goals. Big customers are not very highlighted though. It is said that they serve all the customers; they pay a little more attention to big ones.

6.9. Summery of the chapter

In this chapter, first four cases were analyzed separately by comparing the collected data with the previous researches used in frame of reference and then the four cases were
compared to each other to distinguish the similarities and differences in two sections private and public which had presented. The last chapter, chapter 7, the results of six research questions will be reviewed more specifically in different tables, implications for management will be discussed, and finally some possible avenues for further research will be presented.
Chapter 7: Conclusion

7.1. Introduction

In this final chapter, the results of six research questions will be reviewed more specifically in different tables in case of strength and weaknesses of CRM activities in each bank and conclusions drawn from the study will be presented. Subsequently, implications for management, and finally suggestions for further research will be discussed.

7.2. Strength and weakness of CRM activities in ENBank

In spite of considering the fact that implementing different CRM activities with different qualities will affect on the whole chain. Different strength and weakness of CRM activities in this bank means that they do not do any proper activity to make relationship with their customers. For example, as it mentioned before, very few practitioners are making optimum use of their client database, because they are failing to update, quantify and qualify the information collated about the clients (Dyer, 1998). The column that marked as weakness is contains items which this bank is not really pay attention to and is very important. On the other hand the strength column is about the options that they are good at.

In order to make good decisions and strategies, they require controlling their relationship with their customers in order to mitigate and manage the risks. Also, they realized that all valuable data can be extracted from CRM so they could create reports upon them regularly.

This bank in its CRM analytical section, via the information gathered from website, call center and branches, branches provide customer satisfaction and core banking data, extracted form various databases and then combining them with the events occurring in the society makes decisions in line with system integration, product innovation and redundant competency. Customer profile generation is not done uniformly yet here, nor is customer behavioral patterns detected. Marketing application
development promotion is not done clearly from the knowledge. Valuable customers are
detected by the traditional way in the branches or following a request from the database.

Table 7-1: Strength and weakness of CRM activities in ENBank

<table>
<thead>
<tr>
<th>weakness</th>
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<tbody>
<tr>
<td><em>Communicational CRM</em></td>
<td><em>Communicational CRM</em></td>
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<tr>
<td>Touch points</td>
<td>Touch points</td>
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<tr>
<td>• Branch (one-to-one experience, lack of</td>
<td>• Call center “Salam Mehr” (CRM Communication, financial advice)</td>
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<td>customer information)</td>
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<td><em>Operational CRM</em></td>
<td><em>Operational CRM</em></td>
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<tr>
<td>Sales force automation (SFA)</td>
<td>Sales force automation (SFA)</td>
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<tr>
<td>• Call center</td>
<td>• Internet banking (e-payment)</td>
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<tr>
<td><em>Enterprise marketing automation (EMA)</em></td>
<td>• Automated teller machine (ATM)</td>
</tr>
<tr>
<td>• Personalized marketing</td>
<td>• POS</td>
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<tr>
<td>• Advice, peripheral services</td>
<td>• Telephone banking</td>
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<tr>
<td>• Cross-selling</td>
<td>• Mobile banking (pilot)</td>
</tr>
<tr>
<td><em>Analytical CRM</em></td>
<td><em>Analytical CRM</em></td>
</tr>
<tr>
<td>Data collection</td>
<td>Data collection</td>
</tr>
<tr>
<td>• Call center</td>
<td>• Mass marketing (SMS, ads.)</td>
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<tr>
<td>• Website</td>
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<tr>
<td>• Branch</td>
<td></td>
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<tr>
<td><em>Knowledge management</em></td>
<td></td>
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<tr>
<td>• Customer segmentation</td>
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</tbody>
</table>

*Table 7-1: Strength and weakness of CRM activities in ENBank*
7.3. Strength and weakness of CRM activities in Tejarat Bank

Complementary services like cards or ATM is important in this bank because it attracts customers. Otherwise it has lost the competition to others. This necessitates identifying a customer in branches and have access to her history and transactions thus they are after informing and integrating data which is only possible via the suitable infrastructure. Due to that, data are not available online and live.

Database is designed in a way capable of providing some specific statistics and data but it is not possible to identify a unique customer in different branches. Results of focus groups and exit interviews are used to take better strategies. They actually use Secondary Data of Society for market analyzing which is done traditionally but managers are very experienced along this way.

As mentioned before, due to the lack of information about customer’s behaviors and subsequently lack of segmentation, it is not possible to decide for advertising projects and even special services. They had a bad experience in this regard. As regards with communicational CRM, they are strength in holding focus groups in which managers directly get feedback from customers, gathering their suggestions and views.

<table>
<thead>
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<td><strong>Communicational CRM</strong></td>
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<tr>
<td>Touch points</td>
<td>Touch points</td>
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<tr>
<td>• Branch (customer identification)</td>
<td>• Branch (service quality for staff)</td>
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<tr>
<td>• Call center (feedback)</td>
<td>• Automated teller machine (ATM)</td>
</tr>
<tr>
<td>• Internet banking</td>
<td>• POS</td>
</tr>
<tr>
<td>• Telephone banking (off-line/just for view)</td>
<td><strong>Analytical CRM</strong></td>
</tr>
<tr>
<td>• Mobile banking (off-line/just for view)</td>
<td>Data collection</td>
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<tr>
<td>• Email management</td>
<td>• Secondary data of socially</td>
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<tr>
<td></td>
<td>• Core banking (SGB)</td>
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</tbody>
</table>
### 7.4. Strength and weakness of CRM activities in Parsian Bank

Bank has performed many activities regarding e-banking and various services which is one of the improvements of the country banking system. But information acquired from these touch points are not gathered and analyzed properly so there is no feedback for advertising planning and marketing.

Parsian Bank tries to discover customer’s demands by studying their way of living and priorities in their requests, and then they design new services and tools. This is yet immature and is not performed amply. In order to be capable of serving CRM demands, data uniformity and integrity are necessary all over the bank.

In the operational CRM section, Parsian has initiated a call-center doing some help desk activities without any data output and analysis. As regards International Services (card), a service is implemented which is not leading to the result. As mentioned...
in the chapter five regarding customer satisfaction, no study is done. But regarding SFA (Sales Force Automation) which is all about ability to tracking the customer’s account, a suitable service is available for forgive exchange department. This service is being promoted and upgraded. Personalized marketing is done by the human connections.

Table 7-3: Strength and weakness of CRM activities in Parsian Bank

<table>
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<td>Touch points</td>
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<td>• Branch (Customer feedback)</td>
<td>• Automated teller machine (ATM)</td>
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<td>• Internet banking</td>
<td>• POS</td>
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<tr>
<td>• Help desk</td>
<td>• Telephone banking</td>
</tr>
<tr>
<td>• Email management (information and tracking)</td>
<td>• Pin pad</td>
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<tr>
<td><strong>Operational CRM</strong></td>
<td><strong>Operational CRM</strong></td>
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<tr>
<td>Customer service and support (CSS)</td>
<td>Customer service and support (CSS)</td>
</tr>
<tr>
<td>• Help desk</td>
<td>• Credit card</td>
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<tr>
<td>• International service (cards)</td>
<td>• Queue system from branches</td>
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<tr>
<td>Sales force automation (SFA)</td>
<td>• ATM monitoring with remote access</td>
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<td>• Personalized marketing</td>
<td>Enterprise marketing (traditionally)</td>
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<td>• Advice, peripheral services</td>
<td>• Personalized marketing (by human connections)</td>
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<td><strong>Analytical CRM</strong></td>
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<td>Data collection</td>
</tr>
<tr>
<td>Data collection</td>
<td>• ATM monitoring with remote access</td>
</tr>
<tr>
<td>• Branch (customer feedback, behavior)</td>
<td>• Queue system from branches</td>
</tr>
<tr>
<td>Separate data bases</td>
<td>Knowledge management</td>
</tr>
<tr>
<td>Knowledge management</td>
<td>• Customers behavior</td>
</tr>
<tr>
<td>• Customer segmentation (not integrated,</td>
<td></td>
</tr>
</tbody>
</table>
7.5. Strength and weakness of CRM activities in Mellat Bank

Upon request data are fetched from database but back office should have the request of the front office to ask for such information. There are different sections doing different jobs which are not integrated yet. They are in the contact management phase at the moment and haven't step into analysis yet. At the back of the CRM is the Core Banking project which is going to provide a complete information flow of the banking data. Each part of customer information is gathered in new services. Researches then use this data.

There is no such a system as to take customers data as input and then performs analysis and segmentation on them in order to do marketing or attract new customers. In the operational CRM section, a websites is design in order to serve valuable customers. In the primary steps sales force automation is done which leads to saving of time and energy for both customer and bank. Electronic banking is done very well here comparing to either public or private banks but it is not known due to the lack of adequate publicity. Different approaches and various ways are used to communicate with the customers but due to the large number of branches and the organization being big, branches require a long time in order to collect customer information in a data-warehouse and communicate with the customer.

<table>
<thead>
<tr>
<th>weakness</th>
<th>strength</th>
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<tbody>
<tr>
<td>Communicational CRM</td>
<td>Communicational CRM</td>
</tr>
<tr>
<td>Touch points</td>
<td>Touch points</td>
</tr>
<tr>
<td>• Branch</td>
<td>• Internet banking (check balance,</td>
</tr>
<tr>
<td>• Mobile banking</td>
<td>transferring funds, paying bills,</td>
</tr>
<tr>
<td><strong>Operational CRM</strong></td>
<td><strong>Analytical CRM</strong></td>
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<td>---------------------</td>
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</tr>
<tr>
<td>Enterprise marketing automation (EMA)</td>
<td>Data collection</td>
</tr>
<tr>
<td>• Personalized marketing</td>
<td>• Branch (customer information, feedback)</td>
</tr>
<tr>
<td>• Advice, peripheral services</td>
<td>• Different huge data bases</td>
</tr>
<tr>
<td>• Cross-selling</td>
<td>Knowledge management</td>
</tr>
<tr>
<td>Customer service and support (CSS)</td>
<td>• Customer segmentation</td>
</tr>
<tr>
<td>• Branch (traditionally)</td>
<td>• Customers churn</td>
</tr>
<tr>
<td>• Credit card</td>
<td>• Public affairs (feedback)</td>
</tr>
<tr>
<td><strong>Sales Force Automation (SFA)</strong></td>
<td>• Manually data mining</td>
</tr>
<tr>
<td>• Online documentation (special customers/facilities office) (in progress)</td>
<td><strong>Decision Making</strong></td>
</tr>
<tr>
<td>• Personalized marketing (special package customers)</td>
<td>• MIS system</td>
</tr>
<tr>
<td><strong>Operational CRM</strong></td>
<td>• Web-based management application</td>
</tr>
<tr>
<td>Customer service and support (CSS)</td>
<td>• Balance score card (BSC) (in progress)</td>
</tr>
<tr>
<td>• Contact management (smart customer communication)</td>
<td>• Master plan (in progress)</td>
</tr>
<tr>
<td><strong>Analytical CRM</strong></td>
<td><strong>Operational CRM</strong></td>
</tr>
<tr>
<td>Data collection</td>
<td>• Call center (1556/smart customer communication)-feedback information</td>
</tr>
<tr>
<td>• Branch (customer information, feedback)</td>
<td>• Special customer portals</td>
</tr>
<tr>
<td>Data warehousing (in progress)</td>
<td>• Email management</td>
</tr>
<tr>
<td>• Different huge data bases</td>
<td>• Automated teller machine (ATM)</td>
</tr>
<tr>
<td>Knowledge management</td>
<td>• POS</td>
</tr>
<tr>
<td>• Customer segmentation</td>
<td>• Telephone banking</td>
</tr>
<tr>
<td>• Customers churn</td>
<td><strong>Enterprise marketing</strong></td>
</tr>
<tr>
<td>• Public affairs (feedback)</td>
<td>• Personalized marketing (special package customers)</td>
</tr>
<tr>
<td>• Manually data mining</td>
<td><strong>Analytical CRM</strong></td>
</tr>
<tr>
<td><strong>Decision Making</strong></td>
<td>Data collection</td>
</tr>
<tr>
<td>• MIS system</td>
<td>• Website (tracing customer navigation and such)</td>
</tr>
<tr>
<td>• Web-based management application</td>
<td>• Call center (feed back of ads., Queue technique, timing)</td>
</tr>
<tr>
<td>• Balance score card (BSC) (in progress)</td>
<td>• Branch (customer satisfaction, customer loyalty behavior)</td>
</tr>
<tr>
<td>• Master plan (in progress)</td>
<td><strong>Decision Making</strong></td>
</tr>
</tbody>
</table>
7.6. Managerial implication

The more a marketing paradigm evolves, the more long-term relationship with customers gains its importance. CRM, a recent marketing paradigm, pursues long-term relationship with profitable customers. It can be a starting point of relationship management to understand and measure the true value of customers since marketing management as a whole is to be deployed toward the targeted customers and profitable ones, to foster customers’ full profit potential.

Corporate success depends on an organization’s ability to build and maintain loyal and valued customer relationships. Therefore, it is essential to build refined strategies for customers based on their value. Major consideration for companies in using CRM is to improve customer satisfaction level, to retain existing customers and to improve customer lifetime value. This shows that most managers accept the view that gaining a new customer is more costly than retaining an existing customer. Several authors highlight this advantage (Luck & Lancaster, 2003, Rowley, 2002).

The focus of CRM helped banks to understand the customers’ current needs, what they have done in the past, and what they plan to do in the future to meet their own goals (Xu & Walton, 2005). The intelligent use of information about customer needs will create long-term, two way relationship with customers. CRM enables banks to set up such strategies by managing individual customer relationships. From the service oriented industry perspective, customer satisfaction and retention is ensured by solving customer problems quickly. Customer satisfaction is made certain by allocating, scheduling and dispatching the right people, with right parts, at the right time (Xu & Walton, 2005).

In spite of the data which were gathered and analyzed based of frame of reference and research questions that presented in chapter five and six with different figures and tables, some managerial implications regarding using CRM strategy in Iranian banks can be presented as follows:

1) Creating a CRM unit: This unit should be connected to the highest decision making units in the organization and cooperates with the rest of the divisions (IT, public affairs,
human resources etc) in a matrix manner. Job description of this unit is in a way as to give it an important central role regarding thinking, programming, and strategy planning and monitoring customer activities. Needless to say customer activities like marketing and customer services are done by other units in the organization. Following components are recommended in this unit: CRM technology development unit and customer data analysis unit.

2) Continual training regarding CRM considering process, responsibilities and technologies: training high ranking managers in order to stimulate their sense of responsibility, training specialists and training users

3) Defining and preparing some projects due to the gaining customer relationship management such as: Strategic planning for CRM which is contains:

- Creating a vision based on customer, identifying customer based processes, recognizing available and required resources for extending CRM and prioritizing CRM development possibilities.
- Re-engineering of customer related processes (BPR) to confirm with CRM capabilities and strategies with following options: documenting customer related processes, describing current flow of processes (As Is), identifying weaknesses and powers of the processes and reasons they require BPR / process flaws, describing new processes, explaining benefits of the new processes regarding time, cost etc, proposing strategies to implement new processes, evaluating feasibleness of the new design, redesign of the process rules and describing relevant modifications.
- Identification of the required technologies such as: studying the current situation of the available technologies, identification and choosing of the mechanisms during the execution of the new strategy, defining and registering the new all purpose banking system, design and implementation of the new data warehouse and also Contact Center.
- Assembling Customer Satisfaction Measurement System (CSMS) with: identification of the customer satisfaction indicator by either interviewing them or forming hubs, assembling the customer satisfaction measurement questionnaire and validating it,
data analysis using structural models, interpreting the data in order to device practical plan targeted at increasing and customer satisfaction.

- Customer Segmentation in the way of: segmenting customer according to demographic and other properties (Commercial, industrial, import & export, manufacturing, services, public, private, permanent, temporary, big, foreign exchange or credit).
- Strategy planning for marketing and service providing for each segment of customers.
- Calculating of the Customer Lifetime Value (CLV), calculating the probability of either return or churn of the customer
- Extending financial services with financial counseling

4) Transforming the customer data into knowledge and then uses that knowledge to build relationship with their customers due to create customer retention and loyalty, higher customer profitability, creation value for the customer, customization of products and services, lower process, higher quality products and services, having integrated single view of customers, by using analytical tools, managing customer relationship in a single way regardless of the communicational channels, improving the effectiveness and efficiency of the processes involved in customer relationship, select and then manage the right client set, determine which service should be sold to which client, profitability and then help the bank implement this sales plan and also ability to coordinate the multi-product, multi-country relationship in real time.

7.7. Further research implication

Based on conclusions and a number of issues that rose during the research process, some topics can be considered as future opportunities to be explored by interested researchers. Due to the fact that, cases of this research study, more or less doing some CRM activities in their private and public banks and made some core competencies for themselves. Further investigation can be performed to explore how each of these banks CRM systems, and specifically their analytical CRM, operational CRM applications or communicational CRM can adopt the best possible actions in each branch or the other touch points with a survey and questioner as its instrument and expend measuring the
objectives. From this research some strength and weaknesses were extracted which are can be measure and rank for these banks.

Also, the focus of this thesis was just on investigating CRM activities in e-banking of these banks. Further investigation can be executed on less or unprofitable customers of each case to see what measures can provide different characteristics of CRM to the bank to make them profitable. This can be extended to the proactive approaches taken by analytical CRM activities to sense the customer who are at the risk of attrition or defecting to other competitors and what predictive measures can be recommended by analytical CRM to minimize and improve the rate of the customer churn.
**Reference:**


Appendix (A)

Interview guide:

General information

Name of the bank:

Number of employees:

Name of the respondent:

The respondent’s position:

The first year of deploying CRM:

1) What were the initial reasons to deploy CRM systems?

2) How does the CRM help you establishing long-term relationship with your customers?

3) Can you provide some information about your CRM systems?

4) What is the role of data and database in your CRM system?

5) Regarding customer data and information: Do you collect:
   - Personal and transactional information; if yes, How; if no, Why?
   - Product, service and organizational information; if yes, How; if no, Why?
   - Non-transactional customer feedback information; if yes, How; if no, Why?

6) How do you use the CRM? (E-commerce, e-service, self-service, multi channel customer management)

7) How do you reach your customers (CRM touch points)? (Marketing, service, advertising, sales, branches, telephone, e-commerce and m-commerce)
8) What applications do you use to analyze customers data? How do you manage customer data which in non-technological (e.g. face-to-face interaction)?

9) How do you strategically categorize your customers?

- High lifetime value customers
- Early adopters of new products
- Customer with new ideas who find ways to improve quality or reduce cost
- Customers with high volume of fixed costs which enable smaller customers to become profitable.

10) How do you group your customers on the basis of historical records and other related details (i.e. customer profitability, retention, satisfaction and loyalty)? How this grouping improves bank’s performance?

11) In what other ways do you categorize your customers?

- Revenue side (e.g. usage intensity and behavior)?
- Cost side (e.g. products purchased, channel used, and intensity of customer care usage and service levels)?

12) Do you regularly monitor and analyze customers’ behaviors and characteristics (i.e. customers’ details, historical records, demographics, preferences, life styles and personal habits)?

13) How do you use analytical CRM to identify and prevent your defecting customers to switch to competitors? What about your prospective customers?

14) How do you categorize your profitable customers? Do you consider relationship volume (sum of customers’ yearly average deposit and loan balances) and relationship profitability (relationship revenue minus relationship costs over a fiscal year) in categorizing your customers? If yes, how? How do you manage different categories? How does this affect the bank’s goals?
15) How does the internet banking empowering your bank to target, reach, and overall retain core customers?

16) Do you provide those core customers with additional personalized services and extra control over their interactions while you know they are ready to pay additional charges for those services? If yes, how? If no, why?

1) Do you explicitly recognize customer acquisition; retention; development and cost management in your marketing planning activity and use this to steer Customer Management planning?

2) Can you determine the worth of INDIVIDUAL customers; combining sales margin; sale and marketing cost; management cost; logistics and service etc.?

3) Does the way in which customers and prospects are segmented in planning activity match closely and usefully with the way in which the organization actually does business at customer interfaces?

4) Do formal contact strategies exist for each of your identified PROSPECT segments?

5) Is sufficient history of consistent customer transaction data available in a form which allows detailed analysis?

6) Do you regularly measure the retention rates of each segment and margin decile group?

7) Do plan your customer development activity clearly understanding those customers that you actively want to develop and those you positively do not want to or need to develop?

8) Do Key Account plans exist for your highest value customers reflecting your relationship/development objectives?

9) Do you understand what the main drivers of loyalty are for each of your customer
10) Does the organizational structure facilitate the smooth transition from the creation of new customer strategies and approaches to their implementation?

11) Do you have a comprehensive and accessible Customer Information Plan covering information value; acquisition priorities; information management and usage?

12) Is the customer database accessible to all staff whose role involves significant customer contact in a way that matches their needs?

13) Have you adopted a continuous improvement process for evolving your Customer Management activity?

14) Do you recognize the potential length of lifetime of new customers as well as their short term value when allocating marketing budget and priorities?

15) Do you have clearly communicated performance standards in place for enquiry handling?

16) Do you have a prioritized structure for capturing important customer information first which is supported by your customer management systems?

17) Do you apply formal key account management (KAM) principles for your most important accounts?

18) Do you actively use the information that you collect on customers to achieve ever improving management of them?

19) Do you have a no blame culture and appropriate targeting / reporting that encourages staff to record all complaints as a positive means of improving customer service?

20) Do you have clear targets for resolution time of complaints?

21) Do you have a clear top level set of measures that define Customer Management
performance for your organization in terms of the REAP (Retention, Efficiency, Acquisition, Profitability) areas?

22) Do you have formal Key Performance Indicators defined and used for all campaigns so that they can be compared?

23) Do you understand the relative costs of servicing customers through the various channels?

24) Do sales, service and marketing individuals have relevant Customer Management measures defined in terms of acquisition; retention and development (REAP)?

25) Does your customer research capture in-depth customer satisfaction information for each of the key elements of your product/service proposition?

1) How do you define CRM?

- The product life cycle management focusing on the profitable clients, on a good volume – client - product combination, and a good distribution approach
- Searching client value and loyalty
- Client retention
- Better knowledge of clients in order to cross-sell

2) What are the objectives of the bank’s CRM programmed?

- Increase revenue and master costs
- Focus on the right and best customers
- Increase the efficiency and the effectiveness of the sales
- Multi-channel approach

3) What are the activities in the bank’s CRM programmed?

- Better information on the clients thanks to a “single view” and profitable client identification
• Differentiation through a client approach and thus better client segmentation

4) How, if at all, does the CRM programmed influence the different channels and products that are at the client’s disposal?

• Better identification of the client’s preferences regarding the distribution channels
• Identification of the eventual incompatibility between the channels

5) How, if at all, does the CRM programmed influence the technological and organizational infrastructure of the bank business?

• Planning of CRM implementation
• The global group will choice the final software for the CRM data support
• Launching of a detailed programmed for change management

6) How would you characterize strong client – bank relationships?

• Client satisfaction

Measures for Customer Knowledge

• Collecting appropriate customer information
• Analyzing customer data
• Acquiring new customers
• Understanding customer needs
• Improving skills of employee
• Improving CRM techniques
• Secure service

Measures for Customer Interaction

• Appropriate response to customer request
• Integration of business processes
• Improving channel management
• Maximizing the effectiveness and efficiency of enterprise operations
• Customizing products and services

Measures for Customer Value

• Improving customer retention
• Profits increase
• Improving customer service and support
• Building attractive virtual community

Measures for Customer Satisfaction

• Improving service quality
• Establishing relationships with customers