République Algérienne Démocratique et Populaire Ministère de l'enseignement supérieur et de la recherche scientifique "ECOLE SUPERIEURE DE COMMERCE"

THIS DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF MAGISTER IN COMMERCIAL AND FINANCIAL SCIENCES

Option: Marketing

TOPIC: THE FACTORS INFLUENCING THE CUSTOMER RELATIONSHIP MANAGEMENT "ALGERIAN COMPANIES"

SUBMITTED by the student: **Sofiane BOUGUERRA**

SUPERVISED BY **Doctor. Amor LALAOUI**

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Dedication

I dedicate this memory to my family: to mom, dad my two sisters, Yaniss, K. And also my grand mother I dedicate also this memory to all my friends.

Thank you for your loving support over the months of labor during (2009/2010). I couldn't have dedicated the time and energy To writing this memory without your understanding and teamwork on the home front.

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General introduction

General introduction

The Objective

The aim of our research is to determine the main factors that lead to the success of customer relationship management "CRM "approach which have been taken by some Algerian companies. And, we try to evaluate the influence of each factor on economic companies' performances .As we are the first students that propose this subject in Algeria, there is no empirical research which illustrate the main factors to assure the success of "CRM" projects. So, we choose in purpose the western studies in order to compare our result with theirs by keeping the same factors.

The Importance

This study allows us to identify the most important factors that the Algerian companies should invest in **CRM** projects in order to achieve their goals, and how could they gain time and money by stressing their efforts on the crucial points. The understanding of how to manage customer relationships effectively has become an important topic in recent years.

The companies admitted that customers have different economic values. Subsequently they are adapting their customers' offerings and communication strategies accordingly. As the result, they are moving away from product- or brand-centric marketing toward a customercentric approach.

Previous Studies

Many studies have tried to answer to this question, particularly when we notice that the failure rate of the system is very high. Shackleton (2003, p190) reports indicate a 60-70

per cent failure rate in CRM implementation. Although those companies have invested huge amount of money, but they didn't reach the objectives. Werner Reinartz has conducted a survey in Austria, Germany, and Switzerland and found out many important results. Unfortunately, we can't generalize these results, because the circumstances relative to every nation.

According to researchers (Reinartz ET la.2004), **CRM** should focus on a systematically lifecycle-congruent management of activities in order to develop a customer relationship across the customer lifecycle with the most profitable customers. The customer lifecycle is divided to three (3) stages; each stage is characterised by its own behaviours and orientations. These three (3) stages are: "initiation", "maintenance" and" termination",

The Problematic

In order to accomplish the project, this study is articulated around this problematic:

What are the most significant factors that influence the Customers Relationship Management's success on Algerian companies?

From which we have formulated the following questions:

- 1) Is the implementation of **CRM** processes, at the stage of relationship initiation, maintenance, and termination strongly linked with the economic performance?
- 2) Is the technology used in **CRM** processes, at the stage of relationship initiation, maintenance, and termination strongly linked with the economic performance?
- 3) Does **CRM**-Compatible Organizational Alignment at the stage, of relationship initiation, maintenance, and termination strongly link with the economic performance?
 - 4) What is the point of view of the Algerian companies on **CRM** project?

The hypotheses

To answer these problems, we choose the following hypotheses:

H1: Higher economic performance is associated with greater implementation of **CRM** processes at the stages of relationship initiation, maintenance, and termination.

H2: The stronger is the positive link between economic performance and relationship initiation, maintenance, and termination if the level of the CRM technology is greater.

H3: The higher is the level of **CRM**-compatible organisational alignment, the stronger is the positive link with economic performance and relationship initiation, maintenance, and termination.

The methodology of the study

The methodology of the study consists of five major steps namely: review of the literature; construction of hypothesis or theory or model; data collection; estimation and testing; and interpretation of findings to drew conclusions and relate them to the literature and theory.

As it can be noticed, the methodology respects the chronological order of events, we stared with the literature review to expand our knowledge about Customer relationship management and the main factors that lead to its success, therefore, it lead us to ask many questions about the processes inside the system by which we formulate the problematic and put the hypotheses.

To confirm the validity of the hypotheses, an empirical study will be conducted. Our study consists of, first, the data collection using a questionnaire. Second, we will estimate and test the hypotheses by using a linear regression. At last, suggest a model of the main factors that improve the economic performance.

Research Plan

The thesis consists of three chapters, including empirical research. After the introduction, the first chapter attempts to review the existing literature on the "CRM" with an emphasis on recent documentation.

The second chapter consists of a theoretical study of the factors that we think they are the keys elements of success of any **CRM** project, by showing the recent theories and studies that support each factor.

At lasts the empirical study where we set up a questionnaire and send it to the marketing executives that we could reach. Subsequent to that, we will estimate the variables that consist our linear model.

Chapter 01:

General concepts about Customer Relationship Management

Chapter introduction

The Ultimate objective in this first chapter is the introduction the concept "Customer relationship Management" (CRM). We divide the chapter into three sections:

In the first section, we will try to give some definitions about CRM for better illustration of the concept, pursue by the key roles of CRM according to many researchers. We put forward some models and concept to get inside the CRM core by dividing it into many parts to facilitate the analysis. In the second section, we present the concept of CRM implementation and the strategies that lead to its success, which related directly to CRM success or failure. The third section, is committed to customer concept, we illustrate many concepts about customer such as Customer value, customer satisfaction, customer loyalty and customer centricity.

SECTION 1: CUSTOMER RELATIONSHIP MANAGEMENT

1. Customer Relationship Management Definition:

CRM definition and interpretation vary among academics and authors, across industries, even between across departments with the same organization such as Marketing and IT department. We tried to break down and segment the CRM into three categories as follows:

- 1. CRM philosophy, 2.CRM strategy and 3. Operational CRM
- **1.1 CRM philosophy**: some of the most recent definitions relate to this category presented by various authors:
 - CRM looks at way to treat customers more as individuals and to exercise their choice
 positively toward an organization while embracing many current marketing and
 management methods, such as customer loyalty and marketing database management
 (Roberts-Phelps, 2001).
 - CRM is process of predicting customer behavior and selecting actions to influence that behaviors to benefit that organization ,typically leveraging on IT and database related tools (Chye&Gerry, 2002,p2)
 - CRM is a process that involves identifying customer wants and expectations, managing them, closely monitoring the customers experience, anticipation problems and taking appropriate actions to foster and nurture relationships(Nancarrow,Rees,Stone,2003,p27)
 - CRM is a great opportunity to increase customer value and provides a way to systemically attract, acquire and retain customers (Lin&Su,2003)
 - CRM is the process that builds on the relationship marketing idea that lifetime relationships with customers are more profitable that short-term transactional relationships (Ryals,2003)

According to the definitions above we can conclude that, CRM philosophy definitions focuses on the centricity of the customers in the organization; identifying the customers

behaviors, customer value and expectation and how to attract and maintain them over relationships. The definitions above show the role of marketing relationships oriented toward the customers, it's mean that the customers are the core of organizations' existence.

1.2 CRM strategy: The second of the three categories relates to CRM strategy.

- CRM is a comprehensive strategy and process of acquiring, retaining, and partnering with selective customers to create superior value for organization and the customer.(paravatiyar&sheth,2001,p3)
- CRM is a business strategy that maximizes profitability, revenue and customer satisfaction by organizing around customers segment, fostering behaviors that satisfies customers and implementing customers-centric processes.(Nelson,2004,p3)
- CRM is the strategy use of information, processes, technology and people to manage the customer's relationship with an organization (marketing, sales, services and support) across the whole customer life cycle. (Kincaid, 2002,p41)
- CRM strategy aims to achieve growth by building and nurturing high-value relationships with carefully selected groups of customers; through these relationships, both the organization and its customers can enjoy lifetime benefits, the strategy considers all the elements that go into a relationship and how they fit together.(Crosby& Johnson, 2002,p10)
- CRM is a customer-centric business that requires alignment among people, processes and technologies to achieve growth and profitability(Lochridge,2001,p42)

From those definitions we found out that CRM strategy is business strategy aimed to maximize profits by building and managing relationship with customers. Using processes and methods to facilitate the interaction and make the relation more smoothly.

1.3 **CRM operational:** The final category of definitions is the operational CRM

• Operational CRM is process of acquiring, retaining and growing the profitable customers, requiring a clear focus of the service attributes that represent value to customer and that create loyalty. (Brown, 2000.p8)

- Operational CRM is the system of how the organization works with its customers, solve problems for them, encourage them to purchase products and services, and deals with the financial transactions that includes all aspects of an organizations interactions with clients.(Cunningham, 2002,p6)
- Operational CRM is the cycle of activities by which an organization analyses its
 customers, targets potential customers, makes them aware of its offering, acquires those
 customers, managing interactions with them, delivers value to them, develops a
 relationship with them over time and resoles their issues when things go
 wrong.(Woodcock,stone,&Foss,2003 P.163)
- Operational CRM is combination of business processes and technology that seeks to understand an organization's customers from multiple perspectives to competitively differentiate an organization's products and services.(Tiwana,2001,P.23)
- Operational CRM is the optimization of all customer contacts through the distribution and application of customers information.(Newell& Newell Lemon, 2001,P.3)

Operational CRM definitions focus on customers 'needs and expectation. How make customer loyal thereby increasing service quality, customizing the offer, solving problems quickly, etc.

According to the definitions above we can conclude that, CRM definitions focuses on the centricity of the customers in the organization; identifying the customers' behaviors, customer value, needs, expectation .etc. We also noticed that the interaction with the customers plays huge role on the CRM in order to initiate and maintain the relationships by using knowledge and technology for better understanding them and their needs.

2. The role of CRM

As the definition, the CRM role varies between authors themselves and practitioners, we tried to demonstrate some of the common explanations of what CRM does.

According to Zikmund (2003) said that the aims of a CRM system are to improve customer service, enhance satisfaction, and ensure retention by aligning business processes with technology integration. The CRM allows organizations to identify the values that customers want, once they know these values are selected they can improve their customer service on depends on, as the result the customers satisfaction will increase and lead to retention.

Chye & Gerry (2002) suggest that CRM usually try to achieve several objectives which include three large objectives as follows:

- 1 Getting closer to the customer by utilizing the data "hidden" in scattered enterprise databases.CRM try to discover the hidden information from databases, using different systems and methods. The most effective system is the "**Data mining**"; Data mining is process of information extraction, its aim is to discover hidden facts contained in databases.
- 2 Transforming the organization into a customer-centric with a greater focus on customer profitability as compared line profitability The CRM is the way of doing business that touched all areas of organization. All department collect information about customers for the CRM system.
- **3** Cross selling possibility, improved lead management, better customer response and improved customer loyalty.

Turban (2002, p3) states that CRM can help an organization to make its products and services around its customers' needs and expectations, an organization must continuously interact with customers to get more closer and tries to understand them individually .As the result it can create more values to customer and drive him to loyalty .And, as a part of the process, help the organization's profitability.

According to Newell (2001,p83) CRM is customer-centric; meaning that while its objective is still to an organization bottom line, it accomplishes that goal by concentrating on

customer benefits and values rather than on what organization wants to sell, thus strengthening the relationship between the customer and the organization.

Dyché (2001, p616) suggest that the real value of CRM is in its capability to track not only where customers are but also who they are in terms of their influence and decision and decision-making power.

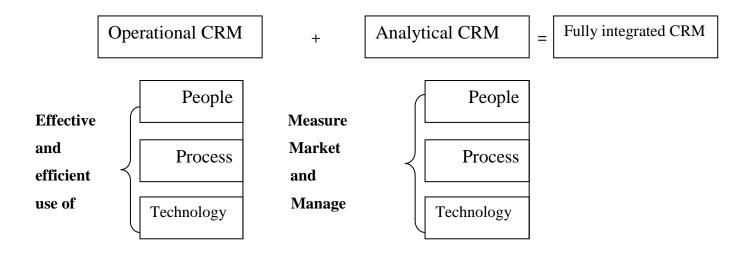
3: CRM models and concepts:

3.1 Anton (2002)

Anton (2002) puts forward the concept that CRM comprises of two components:

Operations CRM and Analytical CRM as presented in Figure 3-6 below:

Figure (1.1): Antons Total CRM System



(Anton & Petouhoff, 2002, p 4)

In Anton's (2002) Total CRM system, operational and analytical CRM combine to present and fully integrated CRM system. Anton (2002) states that when operational CRM is undertaken in conjunction with analytical CRM, that the total CRM system has a higher probability of

providing customers with the services they want thereby offering them a higher return on investment on their purchase and use.

- **3.1.1. Operational CRM:** this is the area that is concerned with the automation of business process involving front-office customer contact points. These areas include sales automation, marketing automation and customer service automation. Historically, operation CRM has been a major area of enterprise expenditure as companies develop call centers or adopt sales force automation system. CRM vendors focus on offering an increasingly wide range of operational CRM solutions.
- **3.1.2. Analytical CRM:** this involves the capture, storage, organization, analysis, interpretation and use of the data created from the operational side of the business. Integration of analytical CRM solution with operational CRM solution is an important consideration.

According to Adrian Payne (2005, p23), he suggests another component which is Collaboration CRM.

3.1.3. Collaboration CRM: this involves the use of collaborative services and infrastructure to make interaction between a company and multiple channels possible. This enables interaction between customers, the enterprise and its employees.

These three components of CRM, support and feed into each other, Successful CRM which result in superior customer experience requires integration of all three of these components part, Operational CRM facilitates the customers contact of their requirement while Analytical CRM enable the right customer to be targeted with appropriate offers and permits personalization and one to one –marketing to be undertaken thought superior customer knowledge. Traditionally operational and collaborative CRM had been greatest emphasis; enterprises are now more cognizant of the need for analytical CRM to enable better optimization of their customer-facing activities and creation of value for the customer and enterprise.

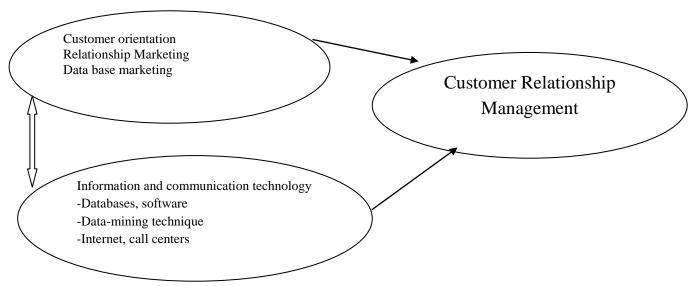
3.2 Verhoef and Langerak (2002)

Verhoef and Langerak say that the essence of CRM is comprised of three elements as presented in the Figure below.

Verhoef & Langerak state that CRM is based on three aspects of marketing management as follows:

- 1. Customer Orientation
- 2. Relationship Marketing
- 3. Database marketing.

Figure (1.2): Three Elements of CRM



Verhoef and Langerak (2002, p 72)

Verhoef & Langerak say that CRM is the managerial process that focuses on the development and maintenance with individual customers in such a way that value is created for both the customer and the organization using databases, statistical decision support tools and interactive communication techniques.

3.2.1 Relationship marketing :According to Harvard business School press (2004,P4) "Building long-term, mutually satisfying relations with key parties—such as

customers, suppliers, and distributors—to earn and retain their long-term business". Relationship marketing seeks to create new value for customers and then share it with them by designing align processes, communication technology and people in support of customer value".

- **3.2.2 Customer orientation:** A successful customer orientation strategy includes the following principles:
 - Customer-driven quality: company develops and uses customer orientation approaches and ideas that contribute to customer satisfaction.
 - Leadership: leaders and managers in company need to play an active role in fostering
 customer oriented persons among employees. Executives should take care of running and
 supporting customer oriented processes that contribute to strengthening quality values.
 - Continuous improvement: customer oriented company needs to commit to ongoing improvement by optimizing employee performance and providing enhanced quality through new and improved customer oriented services and goods.
 - Immediate response: customer oriented business needs to support a rapid-response-time improvement internally by reducing product/service introduction cycles and giving faster replies to customers.
 - Full participation: company should have an effective reward and recognition system
 which encourages full employee participation in total customer management, including
 customer oriented selling wholesale and customer orientation in retail.

Using facts only: customer oriented account managers and executives in your company should use only facts and actual data to illustrate current status of customer satisfaction and performance goals (www.todolistsoft.com)

3.2.3 Database Marketing: In an effort to more effectively target potential customers, many enterprises use database marketing to build models of their target demographic group, track down these groups and focus their advertising budgets on them in the hope that it will result in an improved return on investment (ROI) from their advertising spend. Once the raw data has been analyzed and a mailing list produced there is simply the matter of contacting the potential

customers with targeted advertising. Traditionally, database marketing results in the mailing of advertisements or junk mail. The development of technology, however, has enabled enterprises to contact potential customers much more quickly than through the mail. While a great many companies still use the postal service to generate leads, modern marketing methods also involve the use of e-mail and SMS messages to potential customers. As well as being less expensive than traditional mail shots, electronic messages come with the additional benefit that recipients can respond instantly

3.2.4 Data mining is set of processes related to analyzing and discovering useful. Actionable knowledge buried beneath large volumes of data stores or data sets. This knowledge discovery involves finding patterns or behaviors within the data that lead to some profitable business action or to new discoveries in science .obtained key variables can used to build predictive models for decision making.

3.3 Anderson & Narus (2003)

Anderson & Narus (2003, P42) present a four step CRM process to assist organizations selectively pursue more of their customers as follows in Figure below:

Figure (1.3): Four Step CRM Process

Estimation

Share of customer needs by market offering and by location(s) supplied

Value of each offering supplied relative to customer's next best alternative

Cost to serve by market offering and by location(s) supplied

Select

Share-growth prospects on the basis of

Availability of significant incremental share of the offering

Superior projected growth in customer's need

Significant potential to add value/reduce cost by gaining incremental share

Customer willingness to equitably share gains from added value/reduced costs

Pursue

these share-growth initiatives through

Focused share building

Broadening the scope of market offering

Broadening collaborative relationships

Developing multiple, single-sourcing opportunities

Document

Attained versus targeted gain in share of offering

Added value and reduced cost

Enhanced customer profitability of company

(J. C. Anderson & Narus, 2003, p42)

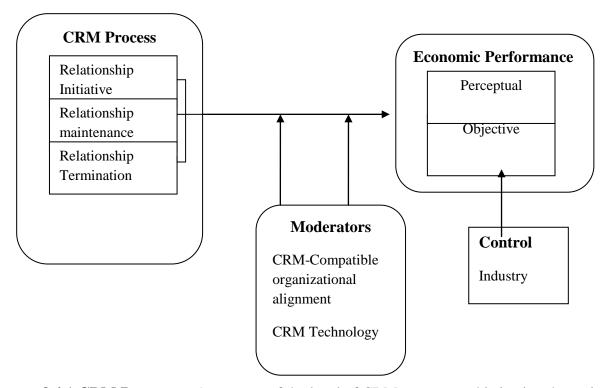
- **3.3.1. Estimating Share**: For any given customer, a supplier's share of business is its percentage of the customer's total purchase requirements for all market offerings that the supplier would be able to supply. In short, of the potential business that a supplier and customer could potentially do together, how much are they doing?
- **3.3.2.** Selecting and Pursuing Share: When suppliers know how much of each of their customers' business they are getting, they can then better understand the array of growth prospects possible with each customer. Further, when suppliers know which offerings customers value most and the cost of providing those offerings, they can accurately target those growth prospects that will be most profitable.
- **3.3.3. Focused share building:** This relies on account profitability analysis to guide efforts in building its share of a customer's business. The process avoids pursuing business that builds revenue but is only marginally profitable. Instead it seeks to become a focused single-source provider of a customer's purchase requirements. That is, it attempts to attain 100% of a customer's business in targeted offering categories while not pursuing others.
- **3.3.4. Documenting the Profitability of Greater Share**: Best-practice suppliers have the discipline to accurately assess their total cost to serve each customer, including the costs of providing supplementary services, programs and systems. To guide these decisions, an organization can perform a customer-contribution analysis including acquisition costs per product group, the cost of sales calls on the customer, the logistics cost, the handling cost, the credit cost and the year-end bonus paid to the customer. Thus, the net result and true profit margin for each customer are known.
- **3.3.5. Profiting From Finer-Grained Knowledge of Customers:** Beneath the veneer of the often heard rhetoric about being "market-oriented" and "customer-focused", most companies in business markets still have difficulty being anything more than sales-oriented. Building the scope of the market offering, broadening collaboration and multiple single sourcing each represents a way to grow share of business selectively with a customer and, at the same time, improve the profitability of doing business together for both the supplier and customer.

3.4 Reinartz Three Primary CRM Dimensions Model

(Reinartz, et al., 2004, p295)

As presented in Figure below, Reinartz (2004) three primary CRM dimensions consist of the following:

Figure (1.4) Three Primary CRM Dimensions Model



- **3.4.1 CRM Processes:** A measure of the level of CRM process sophistication that exist in an organization in relation to the initiation, maintenance and termination of customer relationships. Reinartz suggests the CRM process should recognize that relationship evolves with the three distinct phases, and organization should act differently in each phase. The process of relationship evolution can be subject to termination at any point through customer causes (ceasing of category consumption), competitive causes, or internally unintended (attrition through service problems) or internally intended (customer firing) causes.
- **3.4.2 Moderation:** The degree to which organizations are compatibly aligned to deliver these CRM processes.
- **3.4.2.1**) **CRM compatible organizational alignment**: if companies stress to employees that CRM activities are important, structure their organizations to facilitate these activities, and

reward employees for engaging in CRM-related activities, the companies are more likely to stress these activities in their interactions with customers.

- **3.4.2.2) CRM Technology**: The key point is that CRM technology plays a critical role in the context of leveraging CRM-related activities and thus contributes to improved organizational performance in the market. But market research reports that investments in CRM related technology may be associated with lower economic performance, additionally, there is subjective evidence that a large proportion of CRM technology deployments do not perform to expectations.
- **3.4.3 Economic Performance:** A measure of both perceptual and objective performance outcomes as a result of the level of CRM processes employed and the level of moderation experienced. Also measured is whether industry type impact on the three dimensions. The first key outcome

3.5 Buttle (2003)

Buttle suggests that there are three different perspectives on CRM presented in table:

Table (1.1): CRM levels

Level of CRM	Dominant characteristic
Strategic	A top perspective on CRM which views CRM as a core customer-centric business
	strategy that aims at winning and keeping profitable customers.
Operational	A perspective on CRM which focuses on major automation projects such as service
	automation, sales force automation or marketing automation.
Analytical	A bottom -up perspective on CRM which focuses on the intelligent mining of
	customer data for strategic or tactical purposes.

Source: Buttle, F. (2003).

4 CRM failure

According to the surveys mad by many researchers, we can summaries the main reasons of the CRM failures as following:

Shackleton (2003,p190) reports indicate a 60-70 per cent failure rate in CRM implementation, stating it is possibly due to unreasonable expectations being set. In the major cases, the managers set goals that are difficult to achieve in the short term at least. They think that

CRM is "a magic stick" to increase their sales, and get profits. CRM is complicated System needs a strong internal ship around it.

Taylor (2002,p9), says that more than 50 per cent of all CRM implementations completely fail to live up to expectations, the most of failures could easily have been prevented if more attention had been paid at the start of the campaign. Lot of managers think that CRM is just and IT solution to their current problems with customers, they forget that CRM is cross functional systems, before the start of the campaign , a steer committee should be set (Honsotia , 2002) to avoid the conflicts between the department and put all department aware about their responsibilities and duties .

From banking perspective Rootman, Tait, and Bosch (2008,p52) state that to survive in a competitive business environment banks need to focus on building and maintaining client relationships and identify how their employees influence these relationships. Rootman et al. investigates the influence of variables, with regard to bank employees, on the CRM systems of banks. Findings revealed that» knowledge ability" and "attitude of bank employees" variables have a statistically significant impact on the effectiveness of the CRM strategies. The human element plays a central role to the nature of CRM's success or failure.

Kale (2003,p7).says that Implementing CRM before creating a customer strategy, rolling out CRM before making the requisite organizational transformation, assuming that more CRM technology is better and stalking instead of get closer to the customers.

Other reasons of the failure:

- CRM being driven by information technologists rather than marketers
- Corporate data warehouses and associated interface often failing to meet users' expectations
- Lack of executive sponsorship, relying on technology to fix bad business practices, and poor systems design
- Bad data, politics, information system and business users can not work together, lack of a plan, CRM is done for the organization, not the customer, a flawed process is automated; training is ignored.

- Lack of skill, inadequate investment, and poor date quality, failure to understand the benefits, functional boundaries and inadequate measurement systems.
- Note integration or aligning the underlying business processes and information systems.

SECTION 2: The CRM implementation

1) Strategies for implementing CRM: according to Ramsey (2003)¹, he suggests the important points that the companies should take on consideration before deciding on sitting up CRM programs:

1.1) Customer

Before any implementing decision, the companies must identify the target customers, their different behaviours and mindsets. And also, analysing the abilities and capabilities of any type of interaction that should be undertaken with them, in order to better adapting its offers to the segment that will generate the greatest loyalty among customers and the most profit for the business.

One of best method to identifying the target customers is the use of models of customercentricity. Customer centricity is customer segment management, which is a process of segmenting groups of customers based on similar attributes and managing those segments in a way that maximizes both the benefits to customers and the long-term profit potential of the organization.

A classic customer-centricity model would consist of several stages called continuum. These stages include:

- Product-centric analysis
- Marketing segmentation

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- Customers management
- Customer segment advisor
- Customer segment owners
- Customer-centric profit and loss
- Customer experience

The companies should choose the most appropriate and effective channels to fit with its capability.

1.2) Channel

The companies should pay intention to the channel, using the appropriate Channel helps them to recognize the opportunities for implementation, this means that they can identify where they should put their CRM to collect information about customers for example, the company can put cellule in transaction phase to gather the information from the buyer or in the service phase where the CRM can analyse and manage the customers complaining.

They should also determinate market power and channel value in order to avoid conflict channel strategies among organizations: backward market (Supplier), forward market (Channels).

1.3) Brand

The brand is the encapsulation of all customers' interaction with the company and its products or services. The strong brand must be characterised and different from competitors. And also, it must be consistence; this means that the promises made to customers should be executed precisely, and with effective communication.

To fulfil this later (strong brand) the companies need to find out what their customers' needs, obtain feedback to improve services, provide adequate training to their employees about their brands, and sufficiently equip their businesses to live up to their brands. CRM plays huge role in this branding process by defining the brand and what are its strength and weaknesses after being analysing the data collected from customers.

1.4) CRM application choices

In this step, the companies must choose the adequate technology. The new technology allows companies to achieve the difficult goals. But, to find suitable CRM vendor is often hard because CRM vendors always emphasize the aspects that are involved in their products and forgetting the companies' needs.

2-The Honsotia's flow Model

This model is considered as the reference model; in this model, Honsotia has identified three (3) major steps for effective implementation and each step includes series of sad-step. They are: (1) CRM strategy design and organizational readiness; (2) Planning and analysing for CRM execution; (3) CRM execution.

2.1) CRM strategy design and organizational readiness: the step is pre-implementation of the CRM project; it shows the fundamentals that companies should take it in their minds before starting the implementation.

2.1.1) Creating Organisational Readiness:

In this first sub-step the necessity for the company to develop understanding and knowledge about CRM is essential. Studies show that the main reasons of the failure of the implementation of the CRM are the miss information and communication on the company. The most departments in company complain that CRM project is under Information Technology department responsibility, unfortunately they forget that IT department is only tool used to give better explanation and analysing the data coming from other departments. The company must breakdown its CRM project into manageable pieces and make sure the involvement of all employees and executives from the entire concerned departments (Marketing, sales, accounting, customers service, etc).

CRM cannot successfully be implemented without executives' and employees' readiness to invest time and resource to make CRM a reality. The support of the top management is important that help creating the motivation and encourage the initiatives solution to potential problems.

2.1.2) Setting up Steering Committee:

To manage CRM project and avoid the conflicts between the departments, a steer committee should be set up. Steer committee need to be cross-functional that means, it must include at least one member from each department directly concerned with CRM (Buttle 2004) Such as (IT, Sales, Production, Finance, Marketing) the members should have the authority and the ability to make decisions and adjusting their departments with the CRM orientation. A top manager should be elected to manage this Committee, his tasks are supervising the whole project and he would be the instrumental in showing continuous Support.

2.1.3) Business Needs Analysis:

The steer committee must now select the appropriate data to resolve the current or the potential problems. Selecting appropriate data allows companies to gain money and time. These later need determine key of success: customers' segmentation; customers' life value and customers' profitability matrix. Companies oriented to customers-centric business model suffer from the quantity and quality of the information. To achieve the success companies need four (4) categories of information:

- Descriptive information
- Behavior information
- Emotional information
- Other useful information

2.1.4) Information Analysis:

In this stage each department should identify additional information that could be useful for other department, for example marketing department transforms its customers' desire and expectation to production department. The IT department plays mediator role, it receives the

information and data from department and supplies the other department who requested for information.

2.2) Planning and analysing for CRM execution

2.2.1) Processes Evaluation and Re-engineering:

The companies need to evaluate the processes and improve them if it is necessary. They should examine the current processes and identify what can be done in order to perform them. Evaluation and re-engineering allow companies:

- Increasing the value perceived by the customers.
- Identify the point contact and information that should be collected,

The companies should make balance between value of the information collected with burden on customers and employees. Sometimes is useful and economic to use other channels to collect information such as, Marketing research and Client laboratories. Only the steering committee is in charge of selecting what data should be collected.

• Provide information to departments.

2.2.2) Selecting Software & Technology:

This step is very crucial for many companies; they are looking for sophisticated technology which is expensive and usually fail to solve real life business problems. Determining the effective CRM software should be based on the following criteria:

a. The ability to serve the need:

The companies should ask many questions before selecting the CRM Software, Could the CRM software request the need of information and if it could how this information is valuable

and not risky to take any decisions, And the most important question is Could they customize the software and be more suitable to their organizations.

b. A cost/benefit analysis

Comparative study should take place, balancing between the software and technology costs; they should take on consideration the time that takes to sitting up and when the project start to generate the profit, the employees' training cost, etc. And the benefits that system will provide.

c. The ease of use and Compatibility

The software should be compatible with other software in the companies and should be easy to use.

2.3) Implementation and monitoring

While the System is implemented and ready to be utilized, other problems will emerge which we are going to discus after Thus, the need to monitor and maintain it at the beginning so as to maximize the CRM Solution.

2.3.1) Monitoring and Maintaining the CRM System

While the system took place, the companies may set up CRM department or simply put the marketing department in charge of, which it's depend on their size and human resources. Some member of the steering committee will be selected in order to monitoring and maintaining the System and make periodic reports to the top management showing the measuring and diagnosing results.

To avoid the failure and ensure the users' acceptance the companies should use the pilot so that the project can be tested in live environment over period of several months.

2.3.2) Operating CRM: Making the most IT

Data mining allows companies to transform stored transactional data to insight on customer needs and help them to create homogenous customer groups from heterogeneous mass and concentrate their marketing efforts on groups which it can serve most profitably. Hence, through converting CRM information into knowledge, CRM provides organizations with knowledge that will enable them to better positions themselves with regard to their targets

customers. Some of the major that organizations should have as their goals to attain through a CRM system include:

- Reducing the customers defections
- Keeping and increasing the longevity of customer relationship
- Enhancing the growth potential of each customer (increasing the wallet share, cross selling, etc.)
- Reacquiring lost customers

3) The difficulties and Barriers that hold back the CRM implementation

3.1) Barriers to CRM (pre-CRM)

The first and for the most important step in setting up CRM project is the implementation, where the most companies failed to set. According to (Joseph S. Sherif and Michael, Newby, 2007), Ramsey (2003) states the reasons of the failure as following:

3.1.1) Lack of definition

One of the most common mistakes is that the organizations often become a victim of management that is to follow the trend of the current market to get "the last technology" or to "approve" name of certain department or services. For the first mistake, studies show that low tech solution that works for the people who actually use it is more effective than a high tech solution that is complex and takes time to use to with it. For the second, the most companies refer to its customer service as "Customer Relationship» although no major changes took place. The same stuff doing the same work every day.

3.1.2) Poor leadership

Like other projects, most successful CRM implementation have a leader who can make things happen .but , because the leaders are often functional heads who of often do not have enough strategic plan or perspective experience of CRM.

3.1.3) Insufficient help from CRM vendors

Often CRM vendors highlight the CRM aspects that are involved in their products rather than addressing the important factors of CRM in many areas of the business.

3.2) Difficulties after implementation CRM (Post-CRM)

According to (Zimmer, 2006) more than half of companies who have implanted CRM have difficulties after implementation, in his survey he finds out two major reasons that lead to failure.

3.2.1) The Disconnection of CRM vision and execution

Many companies often do the same mistakes either before the implementation or after implementation, most of the failed CRM projects focus on the technical rather than business strategy that is to increase the value of the customer relationship. In addition, we can add the no flexibility of the system; not enough commitment and support from top management; lack of senior management support; poor management, or insufficient skills to complete the project.

3.2.2) The raising standard for CRM excellence

Caused by its tremendous impact, technology has rapidly changed the market, and has transformed it to a very competitive place for the businesses, customers are becoming more demanding and requesting for more services. To get success companies rush into the implementing the CRM programs, without putting on their mind these difficulties (instability of the market and the customer's request) and/or overlooking the critical factors that lie behind a CRM project, they are doomed with the failure.

Some of these factors according to (Kovacs, J, 2006) are:

- Failure to obtain and maintain executive support for the project.
- Failure to align the key internal functions or business units on goals and mission of the project.
- Lack of an integrated plan for project implementation.

• Inability to accurately link the CRM project to higher-level business strategies.

SECTION 3: Notion about customer

1: Customer value

Defining value

(Philip kotler, 2003, p183) defined Value as the satisfaction of customer requirements at the lowest possible cost of acquisition, ownership, and use.

1.1) Defining customer value

(Harvard business school, 1997, p2) defined the Customer value as the total "goodness" or utility that a customer perceives in the purchase of a product or service. Some parts of the value are tangible and some are intangible; there are five sources of customer value:

- 1. Availability having a product or service capacity when competitors don't.
- 2. Convenience allowing the customer to quickly and easily acquire the product or service.
- 3. Functionality product and service features that are unique, as well as valued by the customer.
- 4. Relationship vendor features that create trust and satisfaction in the customer.
- **5. Price** the appeal of parity products and services at a lower price.

It is the customer who determines, in the end, the amount of customer value. The vendor, however, typically tries both to provide real value and to influence the customer's

perception of value. The creation of customer value is the first sub goal, therefore, because it provides the potential for profit generation.

1.2) Customer Value Delivery System

In its search for competitive advantage, the firm needs to look beyond its own value chain, into the value chains of its suppliers, distributors and, ultimately, customers. More companies today are 'partnering' with the other members of the supply chain to improve the performance of the customer value delivery system.

1.3) Creating Value for Customers

What is the fundamental role of marketing? Many theorists argue that it is to create customer value. The search for value often begins with market research, seeking to identify the benefits sought by customers or prospects for a given product category and the costs that they are willing to incur to obtain these benefits. Perceived value is highly personal and may vary widely from one customer to another. In fact, variations in desired benefits often form the basis for segmentation. Productivity and quality were historically seen as issues for operations managers.

Thus, companies focused internally on making process "improvements" that were not necessarily linked to customers' service priorities. However, continuing efforts to understand and improve quality led back to the customer and to the recognition that quality should be customer defined. Quality enhancements that add no value for customers are a poor allocation of corporate resources.

2.4) Customer life value

According to (Adrian Payne, 2005.p155) Richard Lowrie has defined the Customer lifetime value (CLV) is defined as the net present value of the future profit flows over the lifetime of the customer relationship. This represents the entire expected profit flow, adjusted by an appropriate discount rate, over a customer's lifetime including the elements outlined above including cross-selling, up-selling, advocacy and, where relevant, reference effects.

Customer lifetime value is difficult to measure because of the difficulties in putting quantification on future events. However, although there are a number of different ways of calculating lifetime value and difficulties in measurement this does not mean the concept should be rejected.

Researchers and practitioners have used many different approaches for modelling and estimating customers life value (CLV). Colombia's Don Lehman and Harvard's Sunil Gupta recommend the following formula to estimate the CVL for not yet acquired customer:

$$CVL = \sum_{0}^{T} \frac{(Pt - Ct)rt}{(1+i)^{t}} - AC$$

Where,

Pt=price of servicing the customer at time t.

Ct=direct cost of servicing the customer at time t.

i =discount rate or cost of capital for the firm.

rt=probability of customer repeat buying or being "alive "at time t.

Ac=acquisition cost.

A key decision is what time horizon to use for estimating CVL. Typically, three to five years is reasonable. With this information and estimates of other variables, we calculate CLV using spreadsheet analysis.

2) Customer satisfaction

Relationship marketing theory suggests that profitability is enhanced when customer retention is high; retention in competitive markets is generally believed to be a product of customer satisfaction.

In addition, customer satisfaction has been shown to be positively with return on investment and market value, although these are sometimes regarded as poor measures of actual company performance in the long term.

Satisfaction can be perceived from a number of different viewpoints.

2.1) Defining satisfaction

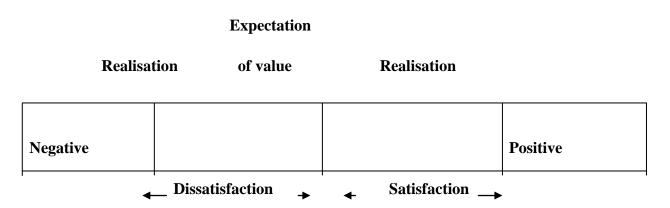
- An evaluation of emotion.
- Favourability of the individual's subjective evaluation.
- Summary psychological state resulting when the emotions surrounding disconfirmed expectations, is coupled with the consumers' prior feelings about the consumption experience.
- A positive outcome from the outlay of scarce resources.
- Satisfaction is the consumer's fulfilment Reponses, it is the judgement that a product or service itself, provided (or is providing) a pleasurable level of consumption related fulfilment, including levels of under or over fulfilment.

Satisfaction is related to a subjective evaluation of emotions, the emotion occurs as a function of disconfirmation and relative output to input. The end result is a positive or negative feeling of fulfilment.

Most researchers agree that satisfaction is a psychological process of evaluating perceived performance outcomes based on predetermined expectation. Customer are, therefore, satisfied when their "expectations of values" are positively disconfirmed. In contrast the greater the (negative) gap between the level of expectation and the matching of such expectations, the greater the level of dissatisfaction experienced by the customer, (figure

2-1) illustrates these concepts.

Figure (1.5): expectation and realisation of service.



Source: marketing relationship, JOHN EGAN, 2004, p108

2.2) The customer satisfaction process

According to (John Egan, 2004, P112) Jones and Sesser suggest that at the heart of any successful. Strategy to 'manage' customer satisfaction is the ability to 'listen to the customer' they suggest five categories of approach to this process:

- Customer satisfactions indices.
- Feedback.
- Market research.
- Front-live personnel.
- -Strategic activities.

2.3) Benefits of Customer Satisfaction

Although every successful marketer wants to provide a service that satisfies customers, this isn't the only goal. Companies can't lose sight of other basic business goals such as achieving a competitive advantage or making a profit. As Figure 2.2 shows

Figure (1-6): benefits of customer satisfaction



Source: principles of service (LOVELOCK and WRIGHT), 2002, P274

Customer satisfaction provides many benefits for a firm, and higher levels of customer satisfaction lead to greater customer loyalty. In the long run, it is more profitable to keep good customers than to constantly attract and develop new customers to replace the ones who leave. Highly satisfied customers spread positive word of mouth and in effect become a walking, talking advertisement for a firm, which lowers the cost of attracting new customers.

This is particularly important for professional service providers, because reputation and word of mouth are key information sources for new clients.

High levels of customer satisfaction are an insurance policy against something going wrong. Long-term customers tend to be more forgiving in these situations, because an occasional bad experience will be offset by previous positive ones, and satisfied customers are less susceptible to competitors' offerings. It's no wonder that many companies place so much emphasis on customer satisfaction, given its positive relationship to customer retention, market share, and profits.

2.4) Link between customers' satisfaction and employees' satisfaction

There are many possible ways to disappoint customers through service quality failures. A major source of disappointment, especially in high-contact situations, is poor performance by service employees. Researchers believe that there is an explicit link between customers' satisfaction with service and employees' satisfaction with their jobs.

To the extent that service workers are capable, enjoy their jobs, and perceive themselves as well treated by their employer, they will be motivated to remain loyal to that firm for an extended period of time rather than constantly switching jobs. Competent and loyal workers tend to be more productive than new hires, to know their customers well, and to be better able to deliver high quality service. In short, employee loyalty can contribute to customer loyalty through a series of links referred to as the "service profit chain".

3) Customer loyalty

3.1) Defining loyalty:

- A customer's voluntary decision to continue patronizing a specific firm over an extended period of time. (C.Lovelock,2002,p104)
- loyalty as "A deeply held commitment to re-buy or re-patronize a preferred product or service in the future despite situational influences and marketing efforts having the potential to cause switching. (Philip Kotler, 2006, p14)
- A definition of loyalty in behavioural terms usually based on the number of purchases and measured by monitoring the frequency of such purchases and any brand switching. (John Egan, 2004, p40)
- A definition of loyalty in attitudinal terms, incorporating consumer preferences and disposition towards brands to determine levels of loyalty. (John Egan, 2004, p40)

At a very general level, loyalty is something that consumers may exhibit to brands, services, stores, product categories, and activities. Here we use the term customer loyalty as opposed to

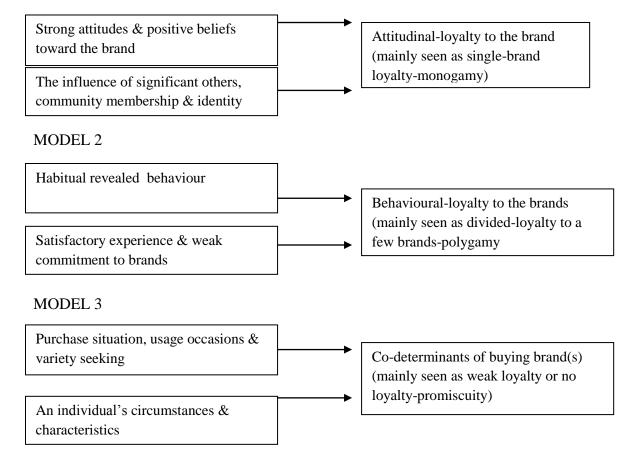
brand loyalty; this is to emphasize that loyalty is a feature of people, rather than something inherent in brands.

Unfortunately, there is no universally agreed definition (Jacoby and Chestnut, 1978; Dick and Basu, 1994; Oliver, 1999). Instead, there are three popular conceptualizations:

- ➤ loyalty as primarily an attitude that sometimes leads to a relationship with the brand (Model 1);
- ➤ loyalty mainly expressed in terms of revealed behaviour (i.e. the pattern of past purchases) (Model 2);
- > Buying moderated by the individual's characteristics, circumstances, and/or the purchase situation (Model 3)

MODEL 1

Figure (1.7): Conceptualizations of loyalty



Source: journal of consumer marketing, vol.20 No. 4 2003, P294

Model 1: Loyalty as primarily an attitude that sometimes leads to a relationship with the brand, many researchers and consultants argue that there must be strong attitudinal commitment' to a brand for true loyalty to exist. Model 2: Loyalty mainly expressed in terms of revealed behaviour. Paradoxically, is arguably the most controversial but the best supported by data. The controversy comes about because loyalty in this model is defined mainly with reference to the pattern of past purchases with only secondary regard to underlying consumer motivations or commitment to the brand.

Model 3: Buying moderated by the individual's characteristics, circumstances, and/or the purchase situation Proponents of this Model, the contingency approach, argue that the best conceptualization of loyalty is to allow the relationship between attitude and behaviour to be moderated by contingency variables such as the individual's current circumstances, their characteristics, and/or the purchase situation faced.

3.2) Building Loyalty

How much should a company invest in building loyalty so that the costs do not exceed the gains? We need to distinguish five different levels of investment in customer relationship building:

- 1. Basic marketing. The company simply sells the product.
- 2. Reactive marketing. The company sells the product and encourages the customer to call if he or she has questions, comments, or complaints.
- 3. Accountable marketing. The company phones the customer to check whether the product is meeting expectations. The salesperson also asks the customer for any product or service improvement suggestions and any specific disappointments.
- 4. Proactive marketing. The company contacts the customer from time to time with suggestions about improved product uses or new products.
- 5. Partnership marketing. The company works continuously with its large customers to help improve their performance. (General Electric, for example, has stationed engineers' at large utilities to help them produce more power.)

4) Customer Centricity

4.1) what is the customer centricity

In general, businesses are launched because of a unique product or service. Initially, the focus is on building that product or developing that service and informing the marketplace of its availability and desirability. But, nowadays the customer is becoming more demanding (competition become more server, no real differentiation product, shifting cost is very low to the customer), as the result it is very difficult to keep customer.

Customer relationship then becomes more important than simply building a good product or delivering good service. Building good products is often easier than building good customer relationships, and although product quality is still important, it is no longer the key to sustainable competitive advantage, where the competition's products are just as good. In the long term, the organization with the best customer relationship strategy will win.

Becoming customer-centric it is mean shifting from marketing products to building long-term customer relationships, is an evolutionary process. It cannot be done at once and usually requires a major change in corporate culture.

A fundamental feature of a fully customer-centric organization is the capability to successfully manage customer knowledge. Product-focused organizations use sales data primarily to report against financial targets. On the other hand, a customer-centric organization stores, analyzes, and uses sales, billing, service, support, and other data in an ongoing relationship with customers to accomplish the following objectives:

• Forge : personal relationships

• Increase: staff awareness of customer importance

• Improve: the product development process

• Deliver: value-added service better than competitors

4.2) Product centric VS Customer centric

The difference between the customer centric and product centric are summarized in the following table:

Table (1.2): product centric vs. Customer centric

Strategy	Product-centric company	Customer-centric company
Goal	*Best product for customer	*Best solution for customer
Main offer	*New product	*Personalized packages of products,
		services ,support ,education and
		consulting
Value creating route	*Cutting-edge products, useful	
	features, new application	*Customizing for best total solution
Most important	*Most advanced customer	
customer		*Most profitable ,loyal customer
	*Deuts-1: - of our loads	
Priority setting basis	*Portfolio of products	
Filotity setting basis	*Price to market	*Portfolio of customers, customer
Pricing	Tire to market	profitability
Thoms		*Price to value, risk
Structure		,
Organization concept	Product profit centers, product	Customer segments, customer teams,
	reviews ,product teams	customer P&Ls (Profit and loss)
Processes		
Most important	New product development	Customer relationship management and
processes		solution development

Rewards		
Measures	*Number of new products	*Customer share of most valuable
	*Percent of revenue from product	customers
	less than two years old	*Customer satisfaction
	*Market share	*Lifetime value of customer
		*Customer retention
People		
Approach to personnel	*Power to people who develop	*Power people with in-depth knowledge
	products	of customer's experience
	*highest reward is working on	*Highest rewards to relationship
	next most challenging product	managers who save the customer's
	*Manage creative people through	business
	challenges with a deadline	*Manage creative people with
		challenges of systems integration, search
	*Transaction –oriented	for customer solution
Mental process	*Divergent thinking: How many	*Relationship-oriented
	possible uses of this product?	*Convergent thinking: what combination
Sales bias	*On the side of the seller in a	of products is best for this customer?
	transaction	*on the side of the buyer in a transaction
Culture	*New product culture : open to	
	new ideas, experimentation	*Relationship management culture
		:searching for more customer needs to
		satisfy

Source: Designing the customer centric organization, Jay R.Galbraith, Jossey-bass, 2005, p10.

Chapter conclusion

The Customer Relationship Management is a strategy adopted by organizations that believe in customer centricity. They put the customer in the core of their business, knowing the values that customers expect from the organizations lead to better servicing which make them satisfied in order to build loyalty.

To achieve this process successfully, CRM should be implemented; implementation is crucial stage because the success of CRM relies on the successful implementation. Organizations should pay attention in this phase; they need to follow some steps and practices such as Honsotia's flow model.

Among the various CRM models that we have studied, we chose one model that will be the essence of the third chapter (empirical research) which is "Reinartz three primary CRM model dimensions". The model explores the relation between: CRM processes, CRM technology, and CRM compatible-organizational alignment on one hand economic performance on the other hand.

Chapter 02:

The Customer
Relationship
Management and
Company organization

Chapter introduction

The second chapter is committed to answer the impacts of organization and technology on customer relationship management's success. The chapter will be divided into this chapter into two sections; the first section illustrates the concept of company's organization. Organization structure, organization alignment, training are some of the most important notions of organization that interact with CRM.

In second section, we represent the concept of CRM technology or information technology (IT) dedicated to CRM. The role of technology in CRM is huge and essential for its success, but selecting the right technology and its appropriate use are more important. Many companies fail in the selection process. We will try to demonstrate the relation between technology and CRM and how can this later perform it.

Selecting the right technology also takes a part this section, showing some of the famous CRM vendors. We conclude the chapter by presenting the of Datamining and data warehouse notions and their characteristics.

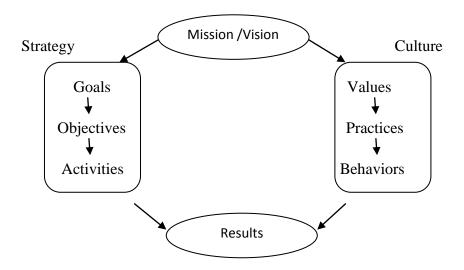
SECTION1: Customer Relationship Management and Organization

1) What is an organization?

The organization: organizations are dynamic systems, non-random arrangement of components or parts interconnected in a manner as to constitute a system identifiable as units. Any change we introduce to an organization, then, we must modify the system to accept the change, or it must be aligned to fit the existing system.

The model below allows us to better understanding the relationships between organizational components.

Figure (2-1): the relationships between organizational components.



Source: DonaldT.Tosti and Stephanie F.Jackson, Organizational alignment, Ichangeworld consulting, 2003

The model describes the two interdependent paths coming down for the top management where we define the mission and vision to specific organizational results:

1.1) Strategic: the strategic paths stresses on what needs to be done and what means should be invest for to achieves the goals : the strategic goals the organization will

work toward; the objectives that must be accomplish in order to carry out those strategies; the activities that must be performed to meet goals and objectives.

1.2) Culture: the culture path emphasizes how the thing should be work and done, is the manner of running organization: the values that will guide people in carrying out the mission and vision; the practices which reflects those values; the specifics, day to day behaviors which will represent the values and practices. These values reflect how an organization intends to conducts its business.

2) Organization structure

2.1) Definition of organization structure

According to Edward R.Maguire (2003, p11), (Scott, 1992) has defined organizational structure as the formal apparatus through which organizations accomplish two core activities: the division of labor and the coordination of work.

2.2) The main part of organization structure:

Mintzberg (1978, p41-48) describes five main parts of the organization:

- **2.2.1) Strategic Apex**: full time top managers, the function of strategic apex is to make sure the organization fulfill its mission effectively, and better serving the needs of those who control the organization (the shareholders, the administration, stakeholders).
- **2.2.2) Operating Core**: the basis of the organization, where people do the basic work, the core business: making the products or delivering services (shop floor), the operators accomplish four tasks:
 - 1. Supply all that is necessary to the production.
 - 2. Assuring the manufacturing.
 - 3. Assuring the distribution of products and services.
 - 4. Assuring the direct support for example maintenance.
- **2.2.3) Middle Line**: a hierarchy of authorities between apex and core (middle management);

- **2.2.4) Techno-structure**: outside the line, often directed towards standardization of the work. The techno-structure is in charge of:
 - Strategic planning
 - Accounting control
 - Training
 - Fine new methods
 - Operational research
 - production scheduling
 - **2.2.5) Support function and logistic**: indirect support of the operating core, of the standardized work.

2.3) structure configurations

Upon this base Mintzberg (1978,p274)describes five structure configurations, characterized by the way in which one of the five parts of the organization is having a key role and in which one of the five coordinating mechanisms is central.

- Simple structure.
- Machine bureaucracy
- Professional organization
- Division organization:
- Ad-hocracy
- **2.3.1**) **Simple structure:** based on direct supervision, the strategic apex has the key position. It is often a beginning organization, young, small, no sophisticated techno structure, in a simple and dynamic context. The manager has a Strong power position
- **2.3.2) Machine bureaucracy:** based on standardization of working processes. Techno structure has the Key position. Machine bureaucracy is characterized by
 - a clearly defined hierarchy;

- procedures, rules for all think able situations concerning the work that has to be done
- exactly defined areas of competence
- selection and promotion on the base of technical competence;
- Trained incapacity, insufficient use of available knowledge and skills.
- There is a risk that the means become the objectives in themselves. Rules and regulations become a goal, without remembrance to their original service.
- a risk of formalism, ritualism or exaggerated punctuality (negative connotation of the concept bureaucracy);
- Depersonalizing the relationships by emphasizing the formal relationships.

2.3.3) Professional organization (also called professional bureaucracy:

Emphasis on standardization of skills, directed to standardized delivery of services to clients. Highly educated personnel with a lot of influence and authority, respect to their own work, few middle management, and a lot of support for the professionals.

A complex and stable context, a not regulating, not very sophisticated but manageable techno structure.

2.3.4) Division organization:

Division organization is based on standardization of output. Key role for the middle line

- Standardization of output.
- Diversified markets (products and services).

The duplicates function as quasi autonomous units, without the necessity to coordinate with the other units. It is exactly prescribed what has to be delegated to the divisions. The coordinating mechanism is the output and this output will be thoroughly controlled. The units will have the tendency to become a machine bureaucracy themselves.

- **2.3.5**) **Ad-hocracy:** based on mutual adjustment. Key role for the support structure, sometimes together with operating core.
 - Temporary collaborations, project organization, creative solutions for only-once unique problems.

- Sometimes placed outside the line, in order to prevent troubles in the ongoing production.
- The ad-hocracy functions as ad hoc teams in a throw away organization. It demands a high ability to adjust of its workers..
- Horizontal job specialization. Complex and dynamic context, young, sophisticated and often digitalized technical system. Modern.

Sometimes it demands a high tolerance for ambiguity. People who cannot stand that will have the tendency to fix things again in new rules and regulation.

3) Organizational alignment:

Organization alignment requires compatibility between the strategic and cultural paths and consistency within them. The alignment approach emphasizes organization structure and environment. Theorists assert that successful performance is the result of proper alignment of endogenous design variables (such as organizational structure or degree of planning formality) with exogenous context variables (such as environmental uncertainty, technology, or organizational size).

Deploying any big change requires first readying the organization for transformation, a function of the culture of the organization. Such as the values, beliefs, norms and policies that characterize the culture must conform to the new way of doing things. Readiness for the implementation of an alignment framework means solid top-down management support, and constitutes a change that to be effectively brought about requires a sense of urgency, a strong vision, genuine empowerment to act and an institutionalization of the new approaches contained in the changed work processes.

3.1) The sustainable change

For change to be sustainable, management support must be complemented with appropriate attention to training and infrastructure.

- **3.1.1) Management support**: The criticality of support from the top cannot be overemphasized. As a principal source of validation, top-down management support is a requirement prior to the launch of any major change initiative.
- **3.1.2) Training:** Training is the method used to institutionalize the new work processes. In addition to teaching new tools and methods, "institutionalization requires the establishment of formal policies, systems and structures.
- **3.1.3) Infrastructure** Sharing of information and applications across teams is an important element of effective change management. The deployment of a distributed information sharing or knowledge management system greatly assists team members by providing a common repository of "lessons learned" to be applied in subsequent improvement efforts.

3.2) The achievement of the alignment

Achieving alignment is one of the most elusive dimensions of business success; the first step is deciding which direction we want to go, or a **compelling vision**. The second step is to prepare **Uniform work processes** that should be adopted and applied to create efficiency, reduce role confusion. And at last an **effective reward system** must be created to tie work processes with strategy to maintain focus.

3.2.1) A compelling vision: Must be developed and communicated to support a strategy focus, what can make a vision compelling? What business purpose could possibly move people to action? How leader can best communicated in a way that drives people to action?

As a foundation for organizational change, the best source of renewed dynamism is "a clear and value-based vision created by an appropriate mix of rational analysis, intuition and emotional involvement" that inspires all to work not just for themselves but for the good of the organization in a way that advances some commitment to broader social goals. The simple way to create vision is that all members ask themselves collectively, "Why are we here ".

A compelling vision consists of three distinct aspects. The core value, the core purpose, and, finally the envisioned future.

3.2.2) Discovering the core value: a brief employee survey allows us to discover the core values, by asking them what each consider to be their most important values. In general the common values that may be uncovered during each survey are: Professionalism and open communication, integrity, honesty creative expression.

The values that should be embraced by an organization are those that mentioned in the survey, these values must be promoted throughout the organization as an important foundation to the company vision.

3.2.3) Discovering the core purpose: To better understand the meaning of core purpose, the organization should answer the following questions: What exactly does the organization stand for? Why does it exist? What is its motivation?

By answering these questions, the effective leader understands the unique and specific motivation assigned to each individual, and speaks to the sense of purpose derived from that motivation.

3.2.4) Envisioning the future: The truly compelling part of an effective organization vision is a view of the future, embraced by all, toward which they are collectively moving.

The first and the most critical element in the aligned organization is a compelling vision that speaks to common values and imbues all involved with the organization's functioning with a strong sense of purpose that goes beyond personal gain.

3.2.5) **CRM vision**: creating a picture of what the customer-centric enterprise will look like, in order to build a competitive market position based on value propositions that are defined, communicated and personified by the enterprise brand.

3.2.6) Creating the CRM Vision

- 1. Creating an effective organization CRM vision requires that enterprise leaders:
 - Define what CRM means to the organization
 - Set objectives
 - Draw a picture of what the organization wants to be for its target customers

- 2. The next step is to create a set of competitively differentiated brand values that are important to the customer. They should be determined from the customer's viewpoint, not the company's perspective.
- 3. The final step is to outline what the customer experience should be for different situations and customer segments.

3.3) Uniform work processes

While the organization's leadership may have been diligent in their assessment of customers preferences, competitions ,target markets and the voids of their products and services , they often forget or neglecting the breaking down those strategies in a way that translates into the day to day work of employees which leads generally to the failures.

Uniform work processes provides a bridge between strategy and operations, building proper bridge, strong, capable and proven in order to instill confidence in the workforce. The organization that succeeds in developing a uniform set of work processes develops an ability to be adaptable to change.

3.4) Effective reward systems

The reward system is the final component of a properly aligned organization. The leadership has to develop and create the desire and motivation with in employee to perform the task to his greatest ability based on that individual's own initiative by supporting the strength of company visions with meaningful compensation ,this means ensuring that adequate incentives are in place to motivate the workforce.

To achieve the purpose, the leadership must first translate the company vision into a set of strategic criteria, those criteria become tangible pursuit that indicate that all in the organization are working effectively toward the fulfillment of its adjectives. The new reward systems will reinforce actions that are congruent with the new set of beliefs and values.

3.5) Benefits of Alignment

The alignment can help the organization to succeed by:

3.5.1) Empowerment:

Empowerment is facilitated when an organization is in alignment, as the properly aligned organization makes easier the task of management by providing employees with a definite purpose, clear direction and an appropriate reward system. The ability to involve employees in critical decisions enabled by proper alignment (since they are held accountable for their actions through an aligned reward system) instills trust – a critical ingredient in a culture of empowerment, while regularly disseminated performance information keeps employees aware of their standing in the organization, and the alignment of organizational interests and rewards provides tangible proof to employees that they're doing the right thing.

3.5.2) Efficiency

Efficiency is doing things right. The adoption and support of uniform work processes provides for all in the organization the means to do things the right way. Absent uniformity in the way things are done, efficiency will always suffer. The adoption of proven best practices installs a comprehensive set of tools and methods to attack the work of the organization in a manner that (a) is consistent with its larger goals and (b) provides a means for continuous improvement.

3.5.3) Effectiveness

Effectiveness is doing the right things. When a dedicated workforce is rewarded for performing their daily work in a manner consistent with the larger goals of the organization, the right things get done, and the organization is as a result more effective at consistently achieving the goals it sets for itself.

Consistent goal attainment is a strong motivator, as the confidence of a unified group of employees who regularly accomplish difficult objectives are filled with the benefits of effective team development, including pride, friendship, mutual support and self-esteem and develop the confidence and willingness to attack new challenges as they emerge.

4) Training

4.1) Training and CRM

Implementing a new system in any organization requires a big change in the way the things work, practices and methods will change or perform to achieve the new goals. Implementing CRM system is one of the most complicate and difficult setting system in the organization .CRM System is characterized by:

- A cross functional: it's mean all departments in the organization must been involve or take a part is the system.
- Culture: CRM is attempting to be more customer-centric rather than product-centric, so to the change this culture inside the organization is very difficult.
- New software: Mostly CRM is IT perception, the use of technology is fundamental.

To overcome those obstacles organization has to train and teaching their employees to better adapt to the new ways. CRM initiatives should usually include employee training. CRM training starts with a needs analysis. This will involve a thorough review to identify the requisite knowledge, skills or attitudes that need to be developed for effective CRM to take place.

It should be based on interviews with appropriate executives and employees within the firm and needs to be undertaken by someone with a good understanding of the organization and the particular training requirements of any CRM technology being adopted.

4.2) Training definition:

According to (Helen Baker,2007)Training is activity when expert and leaner work together to effectively transfer information from the expert to the learner (to enhance a leaner's knowledge, attitudes or skills) so the leaner can better perform a current task or job

4.3) Training categories

(Robert L, John, 2008, p260) believe that training categories can be designed to meet a number of objectives and can be classified as following:

- **1. Required and regular training:** Complies with various mandated legal requirements and is given to all employees.
- **2. Job/technical training:** Enable employees to perform their jobs well (e.g., product knowledge, technical processes and procedures, and customer relations)
- **3. Interpersonal and problem-solving training:** Addressed both operational and interpersonal problems and seeks to improve organizational working relationships (e.g., interpersonal communication, managerial/supervisory skills, and conflict resolution).
- **4. Developmental and career training**: Provides longer-term focus to enhance individual and organizational capabilities for the future (e.g., business practices, executive, development, organizational change, leadership).

The figure above illustrates more these categories

2.2) Figure: Training categories

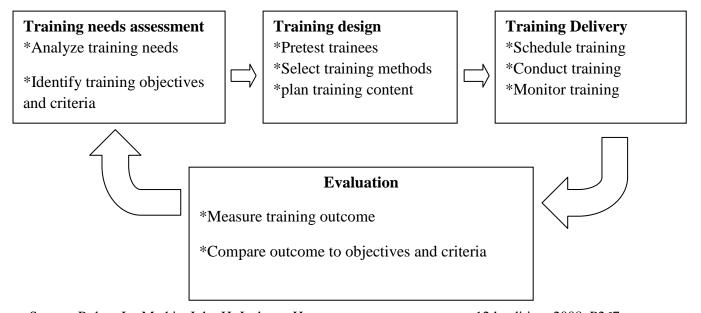
Required and regular Job and Technical Customer service Safety compliance Equipment operation Record-**Driving provisions** keeping needs Wage and hour rule Telecommunication Employee orientation IT systems Benefit enrollment product details **Training Interpersonal and problem** Developmental and career solving Business trends Communication Strategic thinking Team relationships Leadership coaching skills change management Problem analyses Career planning Conflict resolution performance management

Source: Robert L...Mathis, John H, Jackson, Human resource management, 12th edition, 2008, P261

4.4) The training Process

Training process is the way that organizations organize and structure their training affects the way employees experience the training. Effective training requires the use of systematic training process.

Figure(2.3) The four phases of training process



Source: Robert L...Mathis, John H, Jackson, Human resource management, 12th edition, 2008, P267

SECTION 2: Customer Relationship Management and Technology

Exploitation of information technology (IT) that will facilitate the use and management of information is regarded as one of the key contributors to future marketing success, both for large and small firm. IT plays an important role in CRM, enabling the assembly of customer information and the creation of customer knowledge, which is critical for maintaining customer relationships. Ryals and Payne (2005) stress that CRM seeks to provide a strategic bridge between IT strategies and marketing strategies in building long-term relationships and profitability.

1) Operational IT CRM definitions

CRM IT is a process by which an organization maximizes customer information in an effort to increase loyalty and retain customers' business over their lifetimes; combining a progressive approach to gathering data with advanced database and decision support technologies that help transform that data into business knowledge

CRM IT is a system that brings together information about customers, customer characteristics, sales transactions, marketing effectiveness, responsiveness, and market trends (Zikmund, McLeod, & Gilbert, 2003 p.3).

CRM IT is performed across all customer contact channels throughout the extended enterprise; Technology, including pervasive computing devices such as mobile phones and web sites, is often used to enable effective CRM. The Internet is an enabling infrastructure that allows CRM performance improvements across all customer management channels (Woodcock, et al. 2003 p.163).

CRM IT packages facilitate the interaction between the customer and the organization enabling the organization to coordinate all the points of communication to present the customer with the desired image, message and information (Shoemaker, 2001 p 177).

CRM IT requires the intelligent application of technology; it is about how customer information is used to create an ongoing relationship with the customer. (Ragins & Greco, 2003).

CRM IT promises to provide personalization to every customer and prospect. Database marketing identifies unique segments in the database reacting to specific stimulus such as promotions (McKim, 2002)

Throughout the definitions above we can summarize that CRM technology is process or system of gathering data and information about customers by using many technological supports such as mobile phone, internet and email in order to get closer with them and understand them to better serve them, as the result the customers became loyal as the result secure the organization profit.

2) How technology perform the customer relationship management

CRM technological initiatives most commonly are implemented in functional areas such as customer support and service, sales and marketing, so as to optimize profitability and revenue. The software and hardware applications for CRM are focused upon automating primarily three areas: (1) business operation processes (operational CRM), such as order management, customer service, marketing automation and field service; (2) business performance processes (analytical CRM), such as datamining and data warehousing; and (3) communication and coordination processes (collaborative CRM) such as voice mail, e-mail and the Web.

These three components of CRM, support and feed into each other, Successful CRM which result in superior customer experience requires integration of all three of these components part, Operational CRM facilitates the customers contact of their requirement while Analytical CRM enable the right customer to be targeted with appropriate offers and permits personalization and one to one –marketing to be undertaken thought superior customer knowledge.

Historically operational and collaborative CRM had been greatest emphasis. Enterprises are now more aware of the need for analytical CRM to enable better optimization of their customer-facing activities and creation of value for the customer and enterprise.

2.1) Business operational processes (Operational CRM)

This is the area that is concerned with the automation of business process involving front-office customer contact points. These areas include sales automation, marketing automation and customer service automation. Historically, operation CRM has been a major area of enterprise expenditure as companies develop call centers or adopt sales force automation system. CRM vendors focus on offering an increasingly wide range of operational CRM solutions.

- **2.1.1)** Sales automation (www.whatis.techtarget.com,): Sales force automation (SFA) software is a type of program that automates business tasks such as inventory control, sales processing, and tracking of customer interactions, as well as analyzing sales forecasts and performance.(

 www.whatis.techtarget.com)
- **2.1.2) Marketing automation**: The name given to software platforms designed for marketing departments and organizations to simplify processes by automating repetitive tasks is Marketing Automation(www.Wikipedia.com)
- **2.1.3) Customer service automation**: is the name given to software platforms designed for technical support and service organizations to address problems and to achieve lower mean time to repair by automating problem prevention and resolution processes. (www.Wikipedia.com)

2.2Business performance processes (analytical CRM)

This involves the capture, storage, organization, analysis, interpretation and use of the data created from the operational side of the business. Integration of analytical CRM solution with operational CRM solution is an important consideration.

2.2.1) Datamining: Refers to the sorting and exploration of data with a view to discovering and analyzing meaningful patterns and rules found therein. A variety of tools and techniques is used, some of which have been developed explicitly for this purpose, others which have been borrowed from statistics, computer science and other disciplines. These include clustering, classification, time series analysis, and OLAP (Online Analytical Processing). (Duane E.shape, 2003, p230)

- **2.2.2) Data warehouse**: Data warehouse is the technology that enables organizations to gather and store large volumes of customer transaction data in a format that enables the data to be analyzed and manipulated to provide valuable business information on the customer database. (Duane E.shape, 2003, p58)
- **2.2.3**) Data Mart: A departmental data warehouse or summary data store, usually storing only one specific element of a corporation's customer data, at a summary level. (Duane E.shape, 2003, p230)

2.3) Business communication and coordination (Collaboration CRM)

This involves the use of collaborative services and infrastructure to make interaction between a company and multiple channels possible. This enables interaction between customers, the enterprise and its employees.

3) Selecting technology

Experience has shown that technology is not the key success, and the most successful are the organizations that focus on the three following areas: Technology, processes, and customers' needs Some organizations that have focused on technology as the key route to CRM were unable to produce a successful CRM because they (the people, supporting systems, the processes, as well as the corporate culture) were not ready to manage the new technology and to apply proven principles of CRM to their day-to-day operations.

The right technology is that solve the organization's business problems.

Some of the solutions that technology can bring are:

- Deploying or enhancing data warehouse or data mining to collect and analyze customer and market data
- Web-enabling customer contact center
- Improving call center telephony infrastructure
- Improving customer relationships through customer-facing E-business

Selecting the best enabling technologies for CRM solutions must be based on solid business practices and readiness to implement. Goals must be established to measure these technology tools where selection is a critical process and decisions need to be made on vendors in several areas of technology.

3.1) Selecting CRM Vendor:

Technology choices should be based on a structured and detailed comparison between a reasonable numbers of qualified vendors, by following these basic steps:

- Identify internal IT issues first.
- Assess requirements of technology with all departments.
- Prepare invitation to tender with details on functionality, capacity, and scalability.
- Based on responses received, prepare an initial short-list of suppliers.
- From this list, select two or three to develop a prototype to demonstrate operational functionality.

3.2) CRM Vendor list:

We represent in the table below the most important CRM vendor

Table (2.1): CRM vendor

CRM Vendor	Area of CRM Specialization
Seibel system (www.seibel.com)	Multichannel E-business applications and services that
	enable organizations to create a single source of
	customer information that facilitates selling to,
	marketing to, and servicing customers across multiple
	channels-Web, call centers, resellers, retail, and dealer
	networks.
SAP(<u>www.sapag.de</u>)	Products for E-business, including E-CRM, that
	support databases, applications, operating systems, and
	hardware from almost every major vendor.
	Decision-making software tools for CRM and ERP
SAS(<u>www.sas.com</u>)	applications, and E-intelligence software and services,
	to assist organizations in transforming data into
	information to support decision-making processes.

Kana communication	Software solutions to businesses to assist them to
(www.kana.com)	understand their customer to better manage customer
	and partner relationships.
	Hardware platform for data warehousing and database
IBM(www.ibm.com)	management systems; consulting services in CRM
	solutions.
EpiphanyInc.	A provider of intelligent customer interaction software
(www.epiphany.com)	for the customer economy; special experience in E-
	commerce and CRM applications for financial
	services, communications, consumer-packaged goods,
	and technology sectors.
Evoke Software (<u>www.evoke.com</u>)	Specializes in data profiling software that restructures
	and data cleansing software that automates the process
	of cleansing and transforming data prior to inputting it
	into a data warehouse.
	A range of IT services, consulting, systems integration,
CGI (www.cgi.ca)	and management of IT and business functions,
	including CRM; specialized experience in these
	sectors: financial services, telecommunications,
	manufacturing, government, healthcare, and public

• Source: Customer relationship management systems handbook, Duane E.Sharpe, 2003, p 134.

utilities.

4) Dataminig

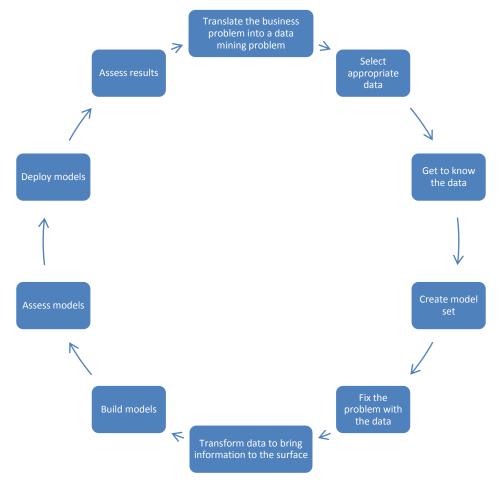
Data mining is the exploration and analysis for large quantities of data in order to discover meaningful patterns and rules, the goal of data mining is to allow companies to improve its marketing, sales, and customer support operations through a better understanding of its customers. Data mining is largely concerned with building models.

4.1) Datamining definition:

- ✓ **Datamining** is set of processes related to analyzing and discovering useful. Actionable knowledge buried beneath large volumes of data stores or data sets. This knowledge discovery involves finding patterns or behaviors within the data that lead to some profitable business action or to new discoveries in science .obtained key variables can used to build predictive models for decision making(www.estard.c (11/02/2008-11:30).
- ✓ **Datamining**: Refers to the sorting and exploration of data with a view to discovering and analyzing meaningful patterns and rules found therein. A variety of tools and techniques is used, some of which have been developed explicitly for this purpose, others which have been borrowed from statistics, computer science and other disciplines. These include clustering, classification, time series analysis, and OLAP (Online Analytical Processing). (Duane E.shape, 2003, p230)

4.2) The datamining methodology:

Figure (2.4): Datamining is not linear process



Source: dataminig techniques, second edition, Micheal J.A Berry, Gardom S Linoff, p 55

As shown in figure, the data mining process is best thought of as a set of nested loops rather than a straight line. The steps do have a natural order, but it is not necessary or even desirable to completely finish with one before moving on to the next. And things will cause earlier ones to revisit.

4.3) The tasks can be performed with data mining

Data mining can perform:

- 1. Classification
- 2. Estimation
- 3. Prediction
- 4. Affinity grouping
- 5. Clustering
- 6. Profiling

4.3.1) Classification:

Classification consists of examining the features of a newly presented object and assigning it to one of a predefined set of classes. The objects to be classified are generally represented by records in a database table or a file.

4.3.2) Estimation:

Estimation deals with continuously valued outcomes. Given same input data, estimation comes up with a value for same unknown continuous variable estimation is often used to perform a classification task.

4.3.3) Prediction:

Prediction is the same as classification or estimation, except that the records are classified according to some prediction future behavior or estimation future value.

4.3.4) Affinity grouping:

The task of affinity grouping is to determine which things go together, and can also used identify Cross-selling opportunities and to design attractive packages or grouping of product and service. Affinity grouping is one simple approach to generating rules from data.

4.3.5) Clustering:

Clustering is the task of segmenting heterogeneous population into a number of more homogeneous subgroup or clusters. For example clusters of customer attributes might indicate different market segment.

4.3.6) Profiling:

The purpose of profiling is simply to describe what is going on in complicated database in the way that increases the understanding of the people, product, or the processes that produced the data in the first place.

4.4) The Datamining for CRM

According to (Michel j. A berry &Gordon s.Linoff, 2004, p110-115), Customer relationship management naturally focuses on established customer. Happily, established customers are the richest source of data for mining. Best of all, the data generated by established customer reflects their actual individual behavior.

- Does the customer pay bill on time?
- When was the last purchase?
- What product was purchased?
- How many times the customer called customer service?
- What shipping method does the customer use most often?

- How many times has the customer returned a purchase?

This kind of behavioral data can be used to evaluate customer's potential value. Assess the risk that they will end the relationship, assess the risk that they will stop paying their bills, and anticipate their future needs.

Datamining can perform CRM by:

4.4.1) Matching campaigns to customers:

Marketing does not stop once customers have been acquired. There are cross-sell campaigns, up-sell campaigns, usage stimulation campaigns, loyalty program etc. these campaigns can be thought of as competing for access to customers.

4.4.2) Segmenting the customer base:

The purpose of segmentation is to tailor products, services, and marketing messages to each segment. Customer segments have traditionally been based on market research and demographic. The problem with market research is that it is hard to know how to apply them to all customers who were not part of the survey. The datamining approach is to identify behavior segments.

- Finding behavioral segments.
- Tying market research segments to behavioral data.

4.4.3) Reducing exposure to credit risk:

Learning to avoid bad customers (and noticing when good customers are about to turn bad) is as important as holding on to good customers, most companies whose business exposes them to customer credit risk do credit screening of customers as part of the acquisition process. But risk modeling does not end once the customer has been acquired.

4.4.3.1) Predicting who will default

Assessing the credit risk on existing customers is a problem for any business that provides a service that customers pay for in arrears. There is always the chance that same customers will receive the service and then fail to pay for it.

4.4.3.2) Improving collections

Once customers have stopped paying data mining can aid in collections. Models are used to forecast the amount that can be collected and, in same cases, to help choose the collection strategy. Collection is basically a type of sales.

4.4.4) Determining customer value:

A seemingly simple statement of customer value is the total revenue due to the customer minus the total cost of maintaining the customer.

4.4.5) cross-selling, up-selling, and making recommendations:

With existing customer, a major focus of CRM is increasing customer profitability through cross-selling and up-selling. Datamining is used for figuring out what offer to whom and when offer it.

- Finding the right time for an offer.
- Making recommendation

4.5) Data warehouse

4.5.1) Data warehouse definition:

- ✓ According to (Duane E.shape,2003,p58) Data warehouse is the technology that enables organizations to gather and store large volumes of customer transaction data in a format that enables the data to be analyzed and manipulated to provide valuable business information on the customer database.
- ✓ (Adrian Payne, 2005.p255) said about data warehouse that is a collection of related databases that have been brought together so that the maximum value can be extracted from them. A data warehouse is a single data store containing a complete and consistent set of data about an organization's customer and business activities.

4.5.2) The objectives of data warehousing are:

- To produce an information infrastructure that provides the right information to the right people at the right time and at the right cost
- To provide architecture that yields a single, current version of customer data

 To enable the incremental deployment of subject-oriented data marts that are developed according to well-identified business needs

4.5.3) Characteristics of the Data Warehouse

According to (Duane E.shape, 2003, p60) a data warehouse has four characteristics that differentiate it from other major operational systems:

4.5.3.1) Subject-orientation: Data organized by subject, the subject-oriented database characteristic of the data warehouse organizes data according to subject. The alignment around subject areas affects the design and implementation of the data found in the data warehouse.

4.5.3.2) Integration: consistency of defining parameters, an operational data warehouse is integrated in that data is moved into it from many different applications. This integration is perceptible in several ways:

- The implementation of consistent naming conventions
- The consistent measurement of variable
- Consistent encoding structures
- Consistent physical attributes of data

4.5.3.3)Time-variance a timeliness of data and access, time-variance presents the key structure of a data warehouse. Every key structure contains implicitly or explicitly, an element of time, such as day, week, or month. And data in a traditional data storage facility is never updated, while operational data in a data warehouse is updated as the need arises.

4.5.3.4) **No volatility** a stable data-storage medium

Chapter conclusion

We have illustrated in this chapter tow moderators that have strong reliance with whether success or failure of CRM project. The first moderator is the organization, after have been divided into in three parts we conclude: In Organization there are many structures that facilitate the interchange of information and the selection on the authorities, for the CRM system the most adequate structure is professional organization, characterizing by higher educated personnel and lot of support for the professionals.

To introduce new way or method of doing thing (system, vision, culture) we need to align it to fit the existing one. Culture, believes, behaviors should be taken in consideration before introducing any big change. To better adaptation to the new method, organizations must teach and train their employees by selection the right training categories and following predefined steps and processes.

The second moderator which is CRM technology, we found out that: technology facilitates the CRM process in two ways the soft and the hardware, using many technological tools help to gather information easily and analyze it quickly. Dataminig and data warehouse are the most important method used by company to store and analyze the data, datamining can perform many tasks for the CRM, such as, matching campaigns to customers, segmenting the customer base, determining customer value. To select the right technology the company needs to follow some specific stages in order to better select the right CRM vendor.

Chapter 03:

The study of the most significant factors that influence CRM's success

Section 1: presentation of the investigation

Any scientific study relies on a precise methodology. Our study is to fine the relationship between the economic performance and some of the most important factors relies on the CRM and which is summarised in the following methodology:

1.1: Sampling

Choice and sample size:

The use of certain statistic methods will be necessary to build up a representative sample of the population studied. Science has shown that size of the sample plays huge role on the result; larger the sample is more the reliable results are. We tried to target all companies around the capital Algiers.

We limited our investigation to consumer markets because business-to-business relationships are characterized by small numbers of customers and a strong reliance on salespeople as major means of communication between company and clients. A questionnaire was sent to a sample of 50 companies, we have recovered 30 copies, which mean a rate of 69 %, and we consider this rate satisfactory to our survey.

We can separate those companies into 3 industries, each one has its characteristics and specify. The table below shows the number of each industry

Table (3.1): Part of each industry in the sample

Industry	Finance service	Service companies	Commercial companies
Number	12	8	10

Source: prepared by student

A. Finance Service Company:

This group gathers many finance institutions, the finance industry encompasses a broad range of organizations that deal with the management of money. Among these organizations are banks, insurance companies.

1) Banks in Algeria:

At 80s, the national economy had been subjected to plan management. Banks (BEA, BNA, BADR, CPA), in Algeria are public banks operating under the government decisions with no competitor or competition, consequently, banks were only means of paying salaries to employees. At the end of the 80s, problems had arisen (fall of oil prices, devaluation of the dinar and inflation) demanded a speedy review of this economy characterized by restructuring the system.

However; it was necessary to use the role of the government in order to facilitate the passage of a managed economy to a market economy by publication of Law 98-06 (concerning open market and allowing investments in private sector). As a consequence many foreign banks have opened their brunches in Algeria such as (Société General, BNP Paribas, Trust Bank, Al Salem .etc) which led to the creation of a competitive financial market.

2) Insurance companies in Algeria:

Just like banks, insurance market was controlled and managed by the government. The insurance market has been released at the beginning of the 90s due to Law 98-06 (concerning open market and allowing investments in private sector). What we should point out that insurance in Algeria is obligatory.

B. Service Companies:

This group gathers tow kind of service companies, the first is Air transportation and the second is communication.

1) The Air transportation:

Before the opining to market economy, the only air company in Algeria was Air Algerie which was protected by the government. At beginning of the 90s, the air transportation market was released to private sector. As the result, many foreign companies have invested in Algeria such as

(Aigle Azur, Qatar airways, Air France, Tunis Air, Royal Air Maroc etc.). The companies offer huge advantages and promotions to increase their market

shares and profits which make competition very hard and severe between the companies. Many of those companies are using now what we call FFP (Frequent Flyer Program) or loyalty program, airline customers enrolled in the program accumulate frequent flyer miles (kilometers, points, segments) corresponding to the distance flown on that airline or its partners.

A loyalty program is the result of use CRM approach, enrolling in the program helps company to understand and get knowledge about customers and then creates strong and mutual relationships.

2. Communication:

Characterized by three competitors the public operator Mobilis, Djezzy, nadjma and, the competition in this market is very hard. Each operator tries to attract the customers and put them away from the competition (Free calls, price discount, and gifts). We found out that in this sector the use of the concept of CRM is more deep and more understandable from the managers, for example the only company that have technology dedicated CRM is Nadjma with a CRM department. Djezzy have loyalty program (IMETIYAZE).

C. Commercial companies:

We gather in this group companies that sell goods to customers, we have chosen large companies specialized in distribution, the sales process begins by prospection and ends by delivering.

1.2) Determination of the variables:

There are two kinds of the variables: the endogenous variables and exogenous variables.

1.2.1) the endogenous variables:

In our study the endogenous variable is the Economic performance (EP), we asked the marketing managers to compare their economic performance with their competitors, the unique problem with this method of information collection is that the respond is subjected to objective judgment

1.2.2) The exogenous variable:

We introduced in our study many exogenous variables that turn around many concepts of CRM; we asked questions using five-point Likert scale of each concept .these variables are listed as follow:

- 1- Relationship phase initiation: we asked many questions about the identification of the potential customers, interaction and acquisition.
- 2- Relationship phase maintenance: in this second variable the questions were about the maintaining of the current customers and if they enhance profit by using the cross and the up selling.
- 3- Relationship phase termination: we asked the managers about the identification of the low value customer and how they end the relationship with them.
- 4- Organization: the variable was about the organizational structure, employees training and reward process mixed with CRM.
- 5- Technology: we asked them questions about technology ,such as the CRM technology.
- 6- Relationship phase initiation interacted with organization: the impact of organization on the customer relationship in initiation phase.
- 7- Relationship phase maintenance interacted with organization: the impact of organization on the customer relationship in maintenance phase.
- 8- Relationship phase termination interacted with organization: the impact of organization on the customer relationship in termination phase.
- 9- Relationship phase initiation interacted with technology: the impact of technology on the customer relationship in initiation phase.
- 10-Relationship phase maintenance interacted with technology: the impact of technology on the customer relationship in maintenance phase.
- 11-Relationship phase termination interacted with technology: the impact of technology on the customer relationship in termination phase.
- 12-Commercial companies
- 13-Service companies
- 14- Finance service

1.2.3) Questionnaire:

The questionnaire was designed for senior executives such as marketing or sales executives to fill it. A pretest of the questionnaire was given to a small sample of marketing teacher and managers to identify any miss understanding of any question had been asked.

We have followed a certain logic and objectivity when we have prepared the questionnaires, by using technical words, terminology and language that are understood among Marketer managers and sales executives in the sample. We divided the questionnaire into four big blocks .the first block of questions was aimed to answer the CRM process (iterative, maintain, termination), where the second was designed for the CRM technology, the third block designed to the CRM compatible-organizational alignment. And, at last the fourth block is designed for Economic performance.

The block of question is divided into many questions concerning the subject, rated on a 5 point Likert scale, ranged from 1 "strongly disagree" ,2 "disagree = ", 3 "neutral" ,4 "agree" to 5 "strongly agree"

Section 2: Model Specification and Estimation

The complete model specification is given in Equation 1. Variables are grouped into main effects (β), interaction effects (λ), and control variables (δ). The control variables in our system of equations are industries of: (Finance service, Service companies, and Commercial companies)

2.1) The estimated model:

Economic Performance = $\beta 0$ + $\beta 1$ CRM-initiation + $\beta 2$ CRM-maintenance + $\beta 3$ CRM-termination + $\beta 4$ CRM-compatible organizational alignment + $\beta 5$ CRM technology + $\delta 1$ (CRM-compatible organizational alignment x CRM-initiation) + $\delta 1$ (CRM-compatible organizational alignment x CRM-maintenance) + $\delta 1$ (CRM-compatible organizational alignment x CRM-termination) + $\delta 1$ (CRM technology x CRM-initiation) + $\delta 1$ Service companies + $\delta 1$ Commercial companies + $\delta 1$ CRM technology x CRM-termination) + $\delta 1$ Service companies + $\delta 1$ Commercial companies + $\delta 1$

To identify the relationship between the economic performance and other factors we chose multiple linear regressions, MLS (method of least squares), the most important application is in data fitting. The best fit in the least-squares sense minimizes the sum of squared residuals, a residual being the difference between an observed value and the fitted value provided by a model.

2.2) Assumptions of linear regression:

- 1) The expected value Random error = 0, $E(\xi_i) = 0$
- 2) Linearity of the relationship between dependent and independent variables
- 3) Independence of the errors (autocorrelation)
- 4) Homoscedasticity (constant variance) of the errors $E(\xi_i 0)^2 = E(\xi_i)^2 = \sigma_{ii}^2$
- 5) Normality of the error distribution.

2.2.1) Testing the model:

Any linear regression model needs to be tested to accept the final results; these tests are important.

a) **Fisher Test:** To accept or reject the whole model we use Fisher test (F) under the following hypotheses:

$$\mathbf{F} \quad \begin{cases} H_0: & b_1 = b_2 = \dots = b_k = 0 \\ H_1: & \textit{ifno} \end{cases}$$

If the level of significance F-test is less than 5%, the hypothesis H_0 is rejected, this means the acceptance of the model.

b) Student Test:

The test is used (t) to accept or reject each variable separately, under the following hypotheses:

$$\begin{cases} H_0: & b_j = 0 \\ H_0: & b_j \neq 0 \end{cases}$$
 $j = 1, 2, ..., k$

Such as the Fisher test, if the level of significance (t-test) is less than 5% we accept the independent variable to explain the relationship.

2.2.2) Problems related to the linear regression

2.2.2.1) Multicollinearity:

Is a statistical phenomenon in which two or more predictor variables in a multiple regression model are highly correlated. In this situation the coefficient estimates may change randomly in response to small changes in the model.

The problem is not with the linear correlation between the variables in itself, but rather in the degree or level of this correlation, if the correlation is weak, it is possible to accept this Multicollinearity, in cases and where the degree of linear correlation is high we either increase the number of observations (the size of statistical sample), add other independent variables, delete or change the regression equation, or the use of a method for choosing the variables.

2.2.2.2) Autocolleration:

Statistical phenomenon in which the random errors aren't independent ($cov(\xi_i, \xi_s) \neq 0$), among the assumptions of the least squares method we fine the independence of the random errors from each other, and if we don't check this hypothesis, this indicates that the random errors arise through a specific mechanism, and thus, the credibility of the model will be weak.

There are several ways to detect autocorrelation of the random errors, including graphical methods and statistical methods, in the statistical methods we use usually Durbin-Watson test, and for graphical methods we use Sequence test or Wald–Wolfowitz runs test.

In this survey, the used the sequence test (Wolfowitz Wald-Wolfowitz) to detect autocorrelation, and its aim is to test the following hypothesis:

Ho: the random errors are not collerated H1: the random errors are colleration

This test depends on a number of positive values of the random errors and the number of negative values, under the hypothesis H0 (the random errors are not collected) the Statistical test is:

$$z = \frac{r - \mu_r}{\sigma_r}$$

Where:

- Z: Follow the standard normal distribution $z \longrightarrow N(0,1)$
- r: Represent the number of sections, whether positive or negative, it can be calculated by finding the number of signal changes in random errors

•
$$\mu_r = \frac{2n_+ n_-}{n} + 1$$
, $n = n_+ + n_-$

$$\bullet \quad \sigma_r = \sqrt{\frac{(\mu_r - 1)(\mu_r - 2)}{n - 1}}$$

The decision rule is as following:

$$d(z): \begin{cases} a_0: z \le u_{1-\alpha/2} \\ a_1: z \succ u_{1-\alpha/2} \end{cases}$$

We can extract value $u_{1-\alpha/2}$ from the table of the standard normal distribution

2.2.2.3) Homoscedasticity (constant variance) of the errors:

Homoscedasticity requires that the standard deviation and variance of the errors are constant for all the observations $E(\xi_i - 0)^2 = E(\xi_i)^2 = \sigma_{ii}^2$. There are several different tests to

detect errors random variation, including the Breusch-Pagan test, Kulaisjr Glesjer test, Cold Wald test Kandt Goldfeld-Quandt test and White. In this survey we use the test of White.

According to the following stages we can apply the test of White (Halbert White -1980):

 Find a linear regression equation with the assumption that homogeneity of contrast Random errors, presumably, there are three variables explained the model, the linear regression model formulated as follows:

$$\hat{y} = b_0 + b_1 x_{1i} + b_2 x_{2i} + b_3 x_{3i}$$

• Fine a linear regression equation, and can calculate the random errors as follow:

$$e_i = y_i - \hat{y}_i$$

Where:

 y_i : Is the real observation. \hat{y}_i : Is the estimated value of y_i by using the linear regression method.

• Estimate the next model:

$$e_i^2 = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \beta_3 x_{3i} + \beta_4 x_{1i}^2 + \beta_5 x_{2i}^2 + \beta_6 x_{3i}^2 + \beta_7 x_{1i} x_{2i} + \beta_8 x_{1i} x_{3i} + \beta_9 x_{2i} x_{3i}$$

• The hypotheses are:

$$\begin{cases} H_0: & \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = \beta_7 = \beta_8 = \beta_9 = 0 \\ H_1: & \exists i/\beta_i \neq 0 & i = \{1, 2, ..., 9\} \end{cases}$$

To test the hypotheses, we use Fischer statistic, if the hypothesis is accepted, it means the homogeneousity of the random errors (Homoscedasticity), and if the alternative hypothesis is accepted, it means that the random errors are heterogeneous (Heteroscedasticy)

2.2.2.4) Normality of the error distribution:

In this hypothesis the random errors have to follow a normal distribution, because many tests (Fisher, students) follow this distribution, as the result we have to make sure that the random errors in our survey are normal distribution.

To confirm, there are many tests, such as Shapiro Wilk, Lilliefors, Agostino, and Jarque-Bera.

Jarque-Bera test:

The test of Jarque-Bera is applied under the following hypotheses:

Ho: the random erros follow a normal disribution H1: If NO

Jarque-Bera statistic is:

$$JB = \frac{n}{6} \left(S^2 + \frac{\left(K - 3\right)^2}{4} \right)$$

Where:

•
$$K = \frac{\hat{\mu}_4}{\hat{\mu}_2^2}$$
, $S = \frac{\hat{\mu}_3}{\hat{\mu}_2^{3/2}}$

•
$$\hat{\mu}_j = \frac{1}{n} \sum_{i=1}^n (x_i - \bar{x})^j \dots j = 2,3,4$$

Jarque-Bara statistic follows the Chi-squared distribution, where degree of freedom equal to 2 and the decision rule of the test is as follows:

$$\begin{cases} a_0 : JB \le \chi^2_{2,1-\alpha} \\ a_1 : JB \succ \chi^2_{2,1-\alpha} \end{cases}$$

We can extract value $\chi^2_{2,l-\alpha}$ from the table of Chi-Square table.

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Section 3: Interpretation of results

Stripping and placing on software SPSS and EXCEL:

In order to process information and having trimmed validated questionnaires, we found that all was valid to be analysed. We conducted addressing issues with software "SPSS", in order to give more credibility to our results in a very short time

After data treatments by using the software "SPSS", the result are divided into two sections the first section aimed to confirm the assumptions of linear regression, where the second is aimed to answer the relationship between endogenous variables (economic performance) with exogenous variables

Interpretation of results:

3.1) Identify and the test of models

We try in this section to fine a regression equation between endogenous variable which is economic performance and exogenous or independents variables. After that, we test the assumptions of the least squares method and model. Determine model allows as knowing the level of significance of whole regressed model by using the fisher test and explanatory variables by using student test.

Note that the determined model is as following:

Economic Performance = $\beta 0 + \beta 1$ CRM-initiation + $\beta 2$ CRM-maintenance + $\beta 3$ CRM-termination + $\beta 4$ CRM-compatible organizational alignment + $\beta 5$ CRM technology + $\lambda 1$ (CRM-compatible organizational alignment x CRM-initiation) + $\lambda 2$ (CRM-compatible organizational alignment x CRM-maintenance) + $\lambda 3$ (CRM-compatible organizational alignment x CRM-termination) + $\lambda 4$ (CRM technology x CRM-initiation) + $\lambda 5$ (CRM technology x CRM-maintenance) + $\lambda 6$ CRM technology x CRM-termination) + $\lambda 6$ Service companies + $\delta 2$ Commercial companies + $\delta 6$

3.1.1) Fisher test

Table (3.2): The table of variance analysis (Anova) of the linear regression model

		Sum of				
Model		Squares	df	Mean Square	F	Sig.
1	Regression	4,005	1	4,005	8,552	,007(a)
	Residual	13,112	28	,468		
	Total	17,117	29			

a Predictors: (Constant), CRM-initiation x CRM-technology b Dependent Variable: Economic performance Source: Table was prepared according to the results of statistical processing of the program SPSS by student

As we noticed the fisher statistic is equal to 8.552, and level of significance F-test (0.7%) is less than 5% which make the model statistically very significant. The hypothesis H_0 ($\beta 1=\beta 2=\beta 3=\ldots=\beta k=0$) is rejected, that means that the whole model is accepted.

3.1.2) Student test

To determine the explanatory variables of the economic performance in Algerian companies, the table below shows that the only variable (CRM-Initiations interacted with CRM-Technology) have been accepted within the model by a statistically significant less than 1%, while the rest of the variables were rejected because the statistical significance are superior than 5%.

Table (3.3): Coefficients of the linear regression model

				Standardized		
Model		Coefficients		Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	2,816	,286		9,863	,000
	CRM-Initiation x CRM- Technology	,087	,030	,484	2,924	,007

a Dependent Variable: Economic performance

Source: Table was prepared according to the results of statistical processing of the program SPSS by student

With the presumption of validity of hypotheses, linear regression model can be formulated as follows:

As the result the only variable that leads to economic performance is the use of technology in the initiation phase of relationship with customers.

3.2) Test of the assumptions and the model

3.2.1) Autocorrelation test (sequence test)

After obtaining the random errors, we can find the number of negative values (n-) and the number of positive (n+) values and the number of sections (r), and therefore can be calculated statistically (z).

Table (3.4) the results of sequence test are as follow:

negative values (n-)	19
positive values (n+)	11
number of sections (r)	16
μ_r	13,93
σ_r	2,65
Z	0,78

Source: Table was prepared according to the sequence test

Considering that ($\alpha = 5\%$) so $u_{1-\alpha/2} = u_{0,975} = 2,04$, the decision rule is as following

$$d(z): \begin{cases} a_0: z \le 2,04 \\ a_1: z > 2,04 \end{cases}$$

As we noticed z=0, 78 < 2.04, we accept Ho which means the random errors are not correlated.

3.2.2) The test of Homoscedasticity (constant variance of the errors) (White test)

The model has only one explanatory variable so the white test relies of the estimation the following model:

$$e_i^2 = \beta_0 + \beta_1 ("CRM - initxCRM - Tech) + \beta_2 ("CRM - init"x"CRM - tech")^2$$

And test the following hypotheses:

$$\begin{cases} H_0: \beta_1 = \beta_2 = 0 \\ H_1: \exists i / \beta_i \neq 0, i = \{1, 2\} \end{cases}$$

Using SPSS has allowed us variance analysis of White model; the result is summarized in the table:

Table (3.5): The table of variance analysis (Anova) of White test

		Sum of				
Model		Squares	df	Mean Square	F	Sig.
1	Regression	,291	2	,146	,436	,651(a)
	Residual	9,012	27	,334		
	Total	9,303	29			

a Predictors: (Constant), (CRM-Init x CRM-Tech), (CRM-Init x CRM-Techc), b Dependent Variable: e^2 Source: Table was prepared according to the results of statistical processing of the program SPSS by student

According to the table the level of signification (65, 1%) is higher than 5%, it means accepted H0: $\beta1=\beta2=0$ and reject H1. The standard deviation and variance of the errors are constant for all the observations that mean Homoscedasticity of the errors.

3.2.3) The normal distribution of random errors (test of Jarque-Bera)

Hypothesis of the normal distribution of random errors is the most important test, the fact that the normal distribution of random errors helps to determine the validity of the model and explanatory variables.

3.6) the result of Jarque-Bera test

$\hat{\mu}_2$	0.437
$\hat{\mu}_3$	0.057
$\hat{\mu}_{\scriptscriptstyle 4}$	0.501
S	0.197
k	2.636
JB	2.085

Source: Table was prepared according to the sequence test

The decision rule is as following:

$$d(JB): \begin{cases} a_0 : JB \le \chi^2_{1.0,95} \\ a_1 : JB \succ \chi^2_{1.0,95} \end{cases}$$

According to Chi-square table $\chi^2_{1.0,95} = 18,49 > \text{JB} = 2,085$, which means a_0 or accept H_0 and reject H_1 . The random errors follow a normal distribution.

3.3) The result:

3.3.3) The result:

After the estimation of the model, we found out that the only variable that effect positively the economic performance is the use of technology in initiation phase ($\lambda 4=0$, 087; p =, 007) as we can see p=0.007 which make a strong support of the relation.

In other side we didn't find any reliance between other variables and the economic performance positively or negatively, but we have to reminder the hypothesizes and compare it with the Werner Reinartz results, we have used the same questions that Reinartz asked in his study to give more credibility and ratability to our comparison. Although, there are so many differences between the two studies that we will discuss after.

1) The first hypothesis is:

"Higher economic performance is associated with greater implementation of **CRM** processes at the stage of relationship initiation, maintenance, and termination."

Our finding is:

"We hypothesized that the degree of CRM process implementation is positively associated with economic performance (H1) at the three stages of initiation, maintenance, and termination but our finding does not either confirm or disconfirm the positive association, because there is no significant reliance between them."

Reinartz (Reinartz, et al., 2004, p 299) finding is:

"We hypothesized that the degree of CRM process implementation is positively associated with economic performance (H1) at the three stages of initiation, maintenance, and termination. All three coefficients are marginally significant (131= 9.04, p < .1; (32= 8.16, p < .05; 133= 6.97, p < .05). Thus, it seems that the more firms engage in implementing CRM processes, especially at the initiation and maintenance stage, the better they perform."

1) The second hypothesis is:

"The stronger is the positive link between economic performance and relationship initiation, maintenance, and termination if the level of the CRM technology and usage of CRM technology are greater."

Our finding is:

"We hypothesized that the use of Technology in many different levels or phases has a strong reliance with the Economic performance, our result support that the use of technology in initiation phase has strong reliance with the economic performance. However, no reliance between the use of technology in the maintenance and termination phase with economic performance.

It seems that more companies invest in technology to accrue new customers and neglecting other phases particularly the maintenance phase where studies have shown that keeping existing customer is more profitable than accruing new one".

Reinartz (Reinartz et al., 2004, p 301) is:

"We hypothesized that CRM technology has a positive, moderating effect on the CRM processes-economic performance link at each stage of the relationship (H2). All three interaction effects were not significant. The findings are somewhat contrary to our expectations. Thus, the sophistication of the CRM technology used is not necessarily linked to a company's ability to improve economic performance through CRM processes.

2) The third hypothesis is:

The higher is the level of CRM-compatible organisational alignment, the stronger is the positive link with economic performance and relationship initiation, maintenance, and termination

Our finding is:

"We hypothesized that CRM-compatible alignment has a positive reliance with the economic performance in the tree phases of CRM process (H3). The moderating effect of organizational alignment has no significant effect on the economic performance for the three phases.

Reinartz (Reinartz et al., 2004, p 301) is:

"We hypothesized that a CRM-compatible organizational alignment has a positive, moderating effect on the CRM processes-economic performance link at each stage of CRM (H2). H2 was marginally supported for the initiation stage ($\lambda 1 = .17$, p < .05) and fully supported for the termination stage ($\lambda 3 = .18$, p < .01).

H2 was not supported at the maintenance stage, but the association at least was in the hypothesized direction (positive)."

Industry:

Our finding:

"We do not capture any effect due to industry membership; there is no significant reliance between industries and the economic performance."

Reinartz (Reinartz et al., 2004, p 301) finding is:

"Our control variables capture effects due to industry membership. The hospitality industry had marginally higher average performance compared with the base case."

3.3.2) Differences between Reinartz study and our study:

As we notice there is huge difference between the two studies, we didn't find any common result. Differences could be caused by research circumstances.

The table below summarizes the differences:

Table (3.7): Differences between Reinartz study and our study

Research condition	Our research	Reinartz research
Time	January, 2011	2001
Place	Algiers	Austria, Germany, Switzerland
Sample (number)	30 companies	306 companies

Data collection	Direct contact	Mailing + phone
Skill measure	5 point Likert scale	7 point Likert scale

Source: prepared by the student

3.3.3) the Recommendation:

After the empirical study we can synthesize the following suggestions:

- The Algerian companies stress their efforts only in the initiation stage of the relationship, they often neglecting the maintenance stage which is the most important and more profitable to the companies. We suggest Algerian companies to not only stress their efforts to accrue a new customers but also convincing them to do business by offering many services, promotions and establishing a strong relationships. As the result, put those customers away from competition.
- We found out the evidence that the CRM does not generate information that helps the
 decision maker to act in many different situations. CRM has to produce periodic
 reports about customer's values and customers' orientation. Those reports are used by
 other departments to perform their tasks .For example, developing a new product of
 service.
- The technology helps companies to interact with their customers, especially in the initiation stage and responsd of any request of information from the new customers in the real time. Although there are no technology dedicated CRM. We suggest Algerian companies to invest in technology dedicated CRM for the operational solutions that can carry with it such as SEIBEL, SAP, SAS, and IBM. Those systems provide huge solutions to the companies' challenges, starting by the automation of the business operational processes, such as sales automation, marketing automation, customer services. Ending by the manage and treatment of the colossal data within the companies.

• There is big difference between the Algerians and foreign managers' view toward the CRM. The foreign managers pay attention in the all customer lifetime cycle of the relationship and adapt their offers according to any stage. However, the Algerians managers try to attract new customers and after neglecting them. This way of thinking has to be changed if the manager or the leadership wants to increase the economic performance within its company. They must also get rid of the elderly attitude of the product-centric and believe on the customer-centric approach. Becoming customer-centric it is mean shifting away from marketing products to building long-term customer relationships.

The conclusion

The conclusion

The objective of our research was the determination of the main factors that lead to the success of customer relationship management "CRM "strategy which have been taken by Algerian companies. We tried to evaluate the influence of each factor on economic companies" performances.

This study allows us to identify the most important factors that the Algerian companies should invest in **CRM** projects in order to achieve their goals, and how could they gain time and money by stressing their efforts on the crucial points. The understanding of how to manage customer relationships effectively has become an important topic in recent years. The companies admitted that customers have different economic values. Subsequently they are adapting their customers' offerings and communication strategies accordingly. As the result, they are moving away from product- or brand-centric marketing toward a customer-centric approach

In order to accomplish the project, this study is articulated around this problematic:

What are the most significant factors that influence the Customers Relationship Management's success on Algerian companies?

To answer this problematic, the thesis consists of three chapters, including empirical research. After the introduction, the first chapter attempts to review the existing literature on the "CRM" with an emphasis on recent documentation. The second chapter consists of a theoretical study of the factors that we think they are the keys elements of success of any CRM project, by showing the recent theories and studies that support each factor. At lasts the empirical study where we set up a questionnaire and send it to the marketing executives that we could reach. Subsequent to that, we will estimate the variables that consists our linear model.

We introduced the concept of Customer relationship Management (CRM) and the concept of customers in the first chapter. We tried to give some definitions about CRM and we deduced the key roles of CRM. We putted forward some models and concepts to get inside the CRM. We illustrated also many concepts about customer, such as Customer value, customer satisfaction, customer loyalty and customer centricity.

As the result of these literatures review we noticed that Customer Relationship Management is strategy adopted by organizations that believe in the customer centricity, they put the customer in the core of their business, knowing the values that customers expect from the organizations lead to better servicing and make them satisfied, all that in order to build loyalty.

The second chapter is committed to answer the impacts of organization and technology on customer relationship management's success. We represented the concept of CRM technology or information technology (IT) dedicated CRM by showing essential role of technology. Technology facilitates CRM process in two ways the soft and the hard ware, using many technological tools help to gather information easily and analyze it quickly.

We have also illustrated the concept of company's organization; Organization structure, organization alignment, training, that interact directly with CRM and considered as some the most important notions of organization. In Organization there are many structures that facilitate the interchange of information and the selection of the authority, for the CRM system the most adequate structure is professional organization, characterized by educated personnel and lot of support for the professionals.

To introduce new way or method of doing thing (system, vision, culture) organization need to align it to fit the existing one. Culture, believes, behaviors should be taken in consideration before introducing any big change. To better adaptation to the new method, organizations must teach and train their employees by selection the right training categories and following predefined steps and processes.

In the third chapter, we have conducted an empirical research. After presenting sample and choosing variables, we have set up questionnaire and send it to marketers and sales executives. Once we have collected data from many companies, we started our study by showing the relationship between variables using linear regression more specifically method

of least squares. After that, we have verified the assumptions of any linear regression that is decisive of the reliability of the results. At last we made a brief comparison between our results and other study made in other countries. A market survey allowed us to verify the following:

- There is no significant reliance between the economic performance and the greater implementation of CRM processes at the stage of relationship initiation, maintenance, and termination. The result invalidates our first hypothesis (H1) which is: Higher economic performance is associated with greater implementation of CRM processes at the stage of relationship initiation, maintenance, and termination. The Algerian companies do not pay a great attention on the CRM implementation, we found out the evidence that the CRM did not generate information that helps the decision maker to act in many different situations. Many causes could the reasons of this disconnecting, such as poor leadership, lack of definition, not strong internal partnership around CRM, thinking that CRM is information technology issue.
- We found out that there is a strong reliance between the level of the CRM technology and the economic performance at the only initiation stage in the CRM process. The Algerians companies that invest in technology in order to initiate a relationship with customers have a big chance to increase their economic performance. The initiation stage is the first contact made by companies to attract customers, using some many methods, such as Junk mail, Spam, SMS, Advertising, inspection, call centers .etc . When companies combine those methods with technology the result will be more profitable because technology allows companies to be more personalizing (One to one marketing) and the targeted customers are easy to reach, furthermore the technology helps to solve problems or the treatment of any request of information from the new customers in the real time. The result partially validates the second hypothesis (H2) which is: The stronger is the positive link between economic performance and relationship initiation, maintenance, and termination if the level of the CRM technology is greater.
- Finely, at the third hypothesis (H3) which is: The higher is the level of CRM-compatible organizational alignment, the stronger is the positive link with economic performance and relationship initiation, maintenance, and termination, there is no significant reliance the economic performance and the CRM-compatible organizational alignment, the result invalidates the third hypothesis (H3). In Reinartz

research he found out that organizing around CRM and offer incentive reward system helps CRM system to produce valuable information because all employees are force to collect information and get involved in the system, as we said before CRM is across functional that touch all departments in company. But in our finding we did find any significant result that is due to many reasons. The most susceptive reason is the attitude of the managers in the Algeria; they hardly accept the concept of the marketing which mean look toward customer so to put the customer in the centre of organization is something that we have to wait long time to see it.

Although our study produced interesting and meaningful findings, there are some limitations that need to be discussed. First, the subjectivity of the response concerning the evaluation of the economic performance from managers, in our data collection we have asked managers to evaluate the economic performance of their companies on Likert scale. Secondly, our sample is very small (30 companies) which is just enough to build model, science has shown that size of the sample plays huge role on the result; larger the sample is more the reliable results are, so we can say that may be if the sample is larger than 30 companies the result will be different or will reinforce our results.

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Appendix

Je suis un étudiant en 2éme année magister à l'école supérieure de commerce, dans le cadre de la préparation de ma thèse de magistère : < THE INFLUENCING FACTORS ON THE CUSTOMER RELATIONSHIP MANAGEMENT>de fin d'étude, nous vous prions de remplir ce questionnaire qui sera d'une grande utilité pour mon travail.

Nous vous assurons une totale confidentialité et vous remercions d'avance de votre collaboration qui nous sera précieuse.

En ce qui concerne votre établissement, dans quelle mesure êtes-vous d'accord avec les affirmations suivantes?

Initiation d'une Relation	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fais d'accord
Nous avons un système formel pour l'identification des clients potentiels.					
Nous avons un système formel pour identifier, parmi les clients potentiels les plus rentables.					
Nous utilisons les données provenant des sources externes pour identifier les clients potentiels de grandes valeurs.					
Nous avons un système en place formel qui facilite l'évaluation continue des clients potentiels					
Nous avons un système en place pour déterminer les coûts du rétablissement des relations avec des clients perdus (inactifs)					
Nous avons un processus systématique d'évaluation des valeurs des clients perdus.					
Nous avons un système pour déterminer les coûts du rétablissement des relations avec les clients perdus (inactifs)					
Acquisition					
Nous avons essayé d'attirer des clients potentiels afin de se communiquer à travers les canaux médiatiques.					
Nous avons un système formel en place qui différencie le ciblage de					
nos communications basées sur les valeurs des clients					
Nous avons systématiquement présenté les différentes offres des clients potentiels basées sur la valeur économique des clients					
Nous différencions nos investissements pour l'acquisition basée sur la valeur client.					
Reconquérir les clients perdus					
Nous avons un processus systématique / approche du rétablissement des relations satisfaisantes avec les clients de grandes valeurs perdus suite à la concurrence.					
Nous avons un système qui nous facilite l'interaction avec les clients perdus.					
Nous avons un processus systématique pour rétablir une relation avec le client inactif évalués.					
Nous développons un système d'interaction avec les clients inactifs.					

Maintenir	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fais d'accord
Nous avons un système formel pour déterminer lequel de nos clients actuels est le rentable					
Nous collectons en permanence les informations sur nos clients afin d'estimer leurs valeurs économiques.					
Nous veuillons toujours à déterminer les coûts des clients retenues.					
Nous suivons la situation de notre relation avec le client au cours du cycle de sa vie (échéance relation)					
Retenir					
Nous maintenons une communication interactive bidirectionnelle avec nos clients.					
Nous veuillons de maintenir le programme de fidélité					
Nous intégrons les informations concernant les clients dans nos points de contact (par exemple, courrier, téléphone, Web, face-àface).					
Nous sommes structurés afin de répondre de manière optimale à des groupes de clients de différentes valeurs					
Nous essayons de personnaliser les produits et les services basés sur la valeur du client					
Nous essayons de gérer les attentes des clients de grande valeur.					
Nous essayons de bâtir des relations à long terme avec nos clients de grande valeur.					
Cross-selling, up-selling					
Nous avons formalisé les procédures de cross-selling aux clients précieux.					
Nous avons formalisé les procédures d'up-selling aux clients précieux					
Nous essayons d'élargir notre part de client avec ceux de grandes valeurs.					
Nous avons une approche systématique pour solidifier les relations avec les clients de grandes valeurs afin d'être en mesure d'appliquer le cross-selling et l'up-selling.					
Nous offrons des incitations individualisés pour les clients de grande valeur s'ils intensifient leurs Business avec nous.					

Cross-selling : vente additionnelle (proposer des produits ou des services complémentaire ou de même catégorie avec le produit ou le service de base)

Up-selling : (Il consiste à remplacer un produit par un autre similaire qui offre des performances plus élevées, un service plus important ou qui est de meilleure qualité)

Résiliation	Pas du	Pas	Neutre	D'accord	Tout à
	tout	d'accord			fais
	d'accord				d'accord
Nous avons un système formel d'identification des clients non					
rentables ou à faibles valeurs.					
Nous avons une procédure pour l'arrêt des relations avec les					
clients de faible valeur ou/et ayant des problèmes (par					
exemple : l'annulation de comptes clients).					
Nous essayons passivement de mettre fin à des relations avec					
les clients de faibles valeurs ou/et ayant des problèmes					
Nous posons des obstacles pour mettre fin la relation avec les					
clients de faibles valeurs (exemple : offrant une qualité de					
service pauvre).					

L'Organisation	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fais
					d'accord
Nous avons des procédures systématiques de formation pour aider					
les employés à traiter différemment les clients (forte et à faible					
valeur).					
Nous récompensons les employés pour la construction et					
l'approfondissement des relations avec les clients à grande valeur.					
Notre DAS est organisé de manière à répondre de façon optimale					
aux différents groupes de clients selon les niveaux de profitabilités					
Organisation de l'entreprise (par exemple, changer la structure					
organisationnelle) pour mieux traiter les différents segments de					
clientèle qui présente une force pour notre DAS.					

Technologie	Pas du	Pas	Neutre	D'accord	Tout à
	tout	d'accord			fais
	d'accord				d'accord
Nous investissons dans la technologie pour acquérir et gérer en temps					
réel les informations des clients et feedback.					
Nous avons une technologie dédiée CRM en place.					
Nous disposons de technologie qui permet les one-to-one					
communications avec des clients potentiels.					
Par rapport à nos concurrents la qualité de nos ressources					
(Technologies de l'Information) est plus sophistiquée					

Par rapport à vos concurrents, comment votre établissement s'effectue concernant les affirmations suivantes :

Performance	plus pire	pire	Même	mieux	Beaucou
La réalisation de la performance globale			nıveau		p mieux
La réalisation de la part de marché					
La réalisation de la croissance.					
Rentabilité actuelle.					

CRMi*techn	y chapeau	yi	ei=ycha-yie	eixei	U2	U3	u4
22,8	4,7996	5	-0,2004	-0,2004	0,04016016	-0,0080481	0,00161284
3,25	3,09875	2,5	0,59875	0,59875	0,35850156	0,21465281	
7,14	3,43718	3,5	-0,06282	-0,06282	0,00394635	-0,00024791	1,5574E-05
9,21	3,61727	4	-0,38273	-0,38273	0,14648225	-0,05606315	0,02145705
5,54	3,29798	3	0,29798	0,29798	0,08879208	0,02645826	
7,23	3,44501	2,25	1,19501	1,19501	1,4280489	1,70653272	2,03932366
6,86	3,41282	2,75	0,66282	0,66282	0,43933035	0,29119694	0,19301116
1,83	2,97521	3,75	-0,77479	-0,77479	0,60029954	-0,46510608	0,36035954
9,82	3,67034	3,75	-0,07966	-0,07966	0,00634572	-0,0005055	4,0268E-05
12,08	3,86696	4	-0,13304	-0,13304	0,01769964	-0,00235476	0,00031328
6,9	3,4163	3,25	0,1663	0,1663	0,02765569	0,00459914	0,00076484
8,43	3,54941	3,75	-0,20059	-0,20059	0,04023635	-0,00807101	0,00161896
17,68	4,35416	4	0,35416	0,35416	0,12542931	0,04442204	0,01573251
9,52	3,64424	4	-0,35576	-0,35576	0,12656518	-0,04502683	0,01601874
4,21	3,18227	2,75	0,43227	0,43227	0,18685735	0,08077283	0,03491567
12,55	3,90785	4	-0,09215	-0,09215	0,00849162	-0,0007825	7,2108E-05
9,05	3,60335	2,75	0,85335	0,85335	0,72820622	0,62141478	0,5302843
8,89	3,58943	2,25	1,33943	1,33943	1,79407272	2,40303483	3,21869694
14,86	4,10882	5	-0,89118	-0,89118	0,79420179	-0,70777675	0,63075649
4,21	3,18227	4	-0,81773	-0,81773	0,66868235	-0,54680162	0,44713609
7,79	3,49373	4	-0,50627	-0,50627	0,25630931	-0,12976172	0,06569446
3,62	3,13094	3,25	-0,11906	-0,11906	0,01417528	-0,00168771	0,00020094
8,93	3,59291	3,75	-0,15709	-0,15709	0,02467727	-0,00387655	0,00060897
6,79	3,40673	4	-0,59327	-0,59327	0,35196929	-0,20881282	0,12388238
5,98	3,33626	4	-0,66374	-0,66374	0,44055079	-0,29241118	0,194085
9,05	3,60335	2,75	0,85335	0,85335	0,72820622	0,62141478	0,5302843
8,05	3,51635	5	-1,48365	-1,48365	2,20121732	-3,26583608	4,8453577
9,26	3,62162	2,5	1,12162	1,12162	1,25803142	1,41103321	1,58264306
7,62	3,47894	3,5	-0,02106	-0,02106	0,00044352	-9,3406E-06	1,9671E-07
8,39	3,54593	4	-0,45407	-0,45407	0,20617956	-0,09361996	0,04251001

CRMi*techn= crm iniation interct with technology

Yi=economic performance

ei =stander error

eixei= ei^2

Sequence test

