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Pokyny pro vypracování:

- analyzing fundamentals of CRM and its technologies
- analyzing current state of the company for implementing a CRM system
- analysis of cost-benefit for implementing a CRM system to a company
- evaluation of the results

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Customer Relationship Management: Concept, Strategy, and Tools, V. Kumar, Werner Reinartz, 2012
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DECLARATION

I hereby declare that this master's thesis is the product of my own independent work and that I have clearly stated all information sources used in the thesis according to Methodological Instruction No. 1/2009 – "On maintaining ethical principles when working on a university final project, CTU in Prague".

Date

Signature

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ABSTRACT

Aim of this thesis is to create a basis for understanding the fundamentals of Customer Relationship Management, create a methodology for understanding concepts of Customer Relationship and prove the methodology usage on a selected real customer. The thesis is divided into three parts. In the first part, the detailed analysis of the CRM area is described. The second part contains the description of the created methodology that can help to evaluate a reasonability of the CRM usage in any company and the application of this methodology in one real company. Conclusion of the thesis describes general evaluation of the CRM area.

ABSTRAKT

Cílem této práce je analyzovat problematiku CRM, vytvořit metodiku pro pochopení základů řízení vztahů se zákazníky a tuto metodiku ověřit na vybraném zákazníkovi. Práce je rozdělena na 3 části. V první je detailně analyzována a popsána problematika CRM, ve druhé je vytvořena metodika hodnocení smysluplnosti nasazení systému CRM a ve třetí je provedeno její praktické ověření. V závěru je provedeno obecné hodnocení problematiky.

KEYWORDS

CRM, Customer, Relationship, Management, Analysis.

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1. INTRODUCTION

Throughout the history, keeping a good relationships with your customers were important to all people who are doing business of any kind. This fact has not changed but the technology and the ways of reaching out to the customer did. Now all types of consumers and customers are using internet, giving opinions on social media, searching other people's comments on internet to see if they will receive a good service or product even before the buying process.

At that point comes the "Customer Relationship Management" handy and in many cases, necessary. CRM aims to help business entities understand new dynamics of the customer concept, helps them to manage their interactions with the customer and gives a wider perspective of customer in both financial and customer value area.

In this thesis, Customer Relationship Management has been observed in both theory and in practical use. First part conducts the theoretical understanding and the concept of CRM, then gives an insight to why CRM implementations are successful or not. At the end of the theory, a typical CRM implementation process is explained.

During the case study, the main idea was to evaluate a CRM implementation of a company by using the theoretical information. A company from the medical devices and service industry has agreed to participate in the work. Series of interviews has been made to understand and evaluate the state of the Company X's CRM implementation status.

After receiving the information which are necessary for conducting analysis, an evaluation guided by theoretical information of thesis were conduct and final evaluation took place.

1.1. Restrictions

Due to the request of the respected company for business reasons, name and any kinds of direct financial information which can expose their financial status of the entity were not allowed to be used.

1.2. Purpose of the study

The main goal of this thesis is understanding the use of CRM and evaluating the performance of a CRM solution in actual business environment through set of case studies.

2. THEORY

2.1. Fundamentals of CRM

2.1.1. Definition of CRM

In today's World, there has been drastic changes in social and economic areas. One of these changes has been happening in the classical marketing. Now, instead of classic marketing and sales approaches, companies have started to use internet and other technologies to reach customers and hold onto them for further transactions. It is common that companies trying to establish individual relationships with customers and internet and other communication technologies have made this relationship go further and deeper relatively easier than before.

For many companies CRM is still nothing but a software that keeps track of their customers. Many companies are buying services from experts of CRM systems or even hire some developers to have their own software. Unfortunately, demoting such systems to levels such as just buying a system and using only main functions like keeping data of customers may lead them to miss many opportunities.

Customer Relationship Management is creating a basis for how to create, maintain and sustain a relationship between customers and companies. Company management aims to target fundamental customer and customer groups and then managing them as a part of the company mission. Purpose of doing such activity is dividing the customers into groups according to their value to the company so that the company can offer differentiated products and services which may lead to customer satisfaction [1].

CRM is an approach for companies which enables to offer specific services to each individual customer so that customer satisfaction can be achieved. To give a simple example; creating a dynamic web page which offers special discounts or campaigns according to customer location and condition can be an example to CRM. On the other hand, CRM can be used for gathering all customer history and from that companies may create an opportunity to research for new markets [2]. As it can be seen, there may be hundreds of definitions for the CRM, yet each company should create their own definition of CRM according to their vision.

To understand what it CRM means, three words of CRM should be also defined. Those are customer, relationship and management:

- **Customer**

Customer is a person or an entity which is doing transactions with the companies. They are the main resource of profit and income [3]. It is always difficult to differentiate which customer is more profitable. At such situations technologies such as CRM systems may help to manage and differentiate the customers.

- **Relationship**

It consists of all communications and actions between companies and customers. It can be short or long term, continuous or intermittent, repetitive or one time. Relationship between companies and customers may develop according to circumstances or communications between them. Even though customers may seek a positive attitude towards the companies, generally their relationship depends on the conditions which are specified on the contract. CRM comes into act to manage and develop this relationship into more profitable state.

- **Management**

Management can be defined as using necessary techniques for handling the relationship with the customer in the best and most sufficient way possible. In CRM processes these techniques can be obtaining customer info, researching market opportunities, using the advantage of the information and etc.

According to all information CRM can be defined as offering “right” product, at the “right” time, to “right” customer, at the “right” place [4].

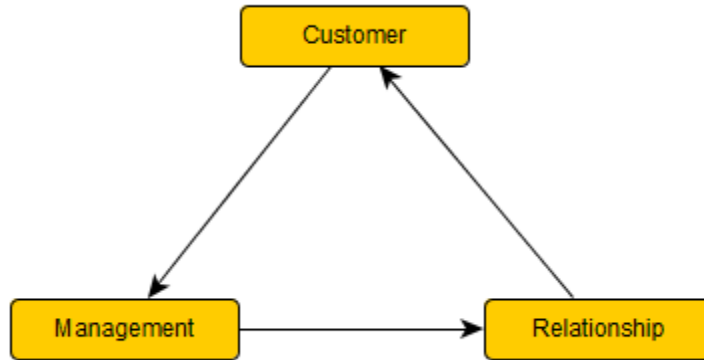


Figure 1: Customer Relationship Management [1]

2.1.2. Evolution of CRM

As the industry evolve, the idea of marketing has evolved and passed through stages. The concept of customer relationship management of past and today has passed through a very long time lapse to take its shape in today's world. During the first stages of marketing and production, while demand was more than the supply, the main purpose was only producing more and selling it. As the marketing has changed its main focus over sales, the main purpose of marketing has moved towards to increase the product quality and attract the more customers. Later on marketing has moved through a stage of identifying the needs and demands and predicting what customer needs [5].

As the technology advances and competition increases rapidly nowadays, customer relationship management has become more customer oriented. The main reason for this shift is increasing demands and needs of customers in the market. As companies in the market increase, customers have many more option to choose among them which suits their demands. [6] Nowadays, the production quality and technologies are advancing rapidly that the main competition factors for companies are narrowed with either price or customer relationship. Since the price is a mutual competition factor among all competitors, understanding customer needs and demands then satisfying those become a very important competition factor.

In our global world, customers can change their decision and demands very fast and ask for more very easily. At this point CRM is a very important tool for keeping track of customer's needs, demands and other related information.

To understand the concept CRM and CRM's current condition, customer relationship management can be divided into five main stages [7]:

- **The Production Era**

During that time only the production and product were the main concern. Consumer were looking for the most available and lowest cost product. High production efficiency and distribution range were the main concern for the companies.

- **The Product Era**

During that time marketing idea has shifted through the concept of "product which has the best quality, performance and newest features will attract the customer". Although creating the best quality or other features during the production can be a good marketing strategy, not focusing on customer need or inputs can create difficulties in selling. Since quality or new features are not always the first choice for the customer, only focusing on your product can cause problems in selling it to the customer. This situation is called as the marketing myopia.

- **The Sales/Selling Era**

During this era companies believed that customers should be driven to buy more products so companies have spent more of their resources on promotions and selling. Yet in this approach the main action is to sell what you have rather than consider what market wants. In order to achieve most sales, companies are using all the resources and options of marketing such as: ads, commercials, telemarketing, sales calls or printed advertisement like flyers. This approach can lead to result of customer dissatisfaction as customer needs are mainly not taken into consideration.

- **The Marketing Era**

Starting from the late 1950s and early 1960s, companies started to focus on rather than only production but more on customer needs and demands. During these times, there were a big competition within the product markets. Companies were more focused on customer satisfaction levels and producing goods and services that would address customer needs. Also the general concept of sales volume was somewhat abandoned and focus on profits were increased [8].

- **The Social Marketing Era**

After mid-1990s, usage of internet has increased very rapidly. Especially after early and mid-2000s, usage of social media tools such as Facebook, Twitter, blogs and other websites and platforms has shifted marketing into the online web area. Now customers and even employees can write down about their products or services via tweets or blogs. Companies can advertise their products to customers who may have an interest into their products, thanks to the advantage of data mining processes. Having this much of inputs and data about customers requires a system to diversify it. Hence, such need of CRM systems are much more needed, starting with the Social Marketing Era [9].

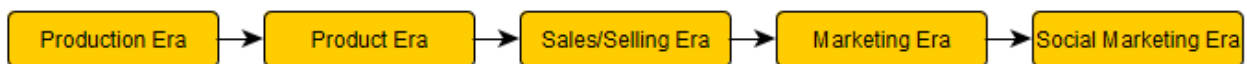


Figure 2: Evolution of CRM [10]

2.1.3. Reasons of Why CRM Is Needed?

- High costs of mass marketing
- Increased competition in market
- Importance of customer penetration in market, rather than market penetration
- Increased importance in customer satisfaction and loyalty
- Spending time and effort to keep current customers and their value
- Necessity of giving importance to one on one marketing and being able to answer customer needs
- Rapid changes in technology and increased usage of social media

2.1.4. Differences Between Traditional Marketing and CRM

In traditional marketing, focus were mainly on product features, customer services were not valued that much, quality was main issue among the production department and its workers and mainly all customers were hold equal in terms of customer value. On contrast with the CRM idea, customer services gained importance, focus were more on customer needs, quality became main issue among all the company and customers whom companies can have more profit were hold more valuable [10].

- Traditional marketing aims to find more customers for their product whereas in CRM idea aims to find more product or services for their customers.
- Traditional marketing has short term relationships with the customers. It doesn't include long term relationship after sales. In contrast, within CRM all the transactions with customers are processes and processes will continue after the sales.
- In some markets, customer identity is not revealed or unknown. In this condition traditional marketing aims to get its product sold more among its competitors whereas CRM needs to cooperate with the customer to increase satisfaction and fulfill customer needs.

- Traditional marketing aims to manage the product of the company. In this concept sale numbers of the products were expected to increase. In CRM concept, main idea is to lead the customers and maximized the expectations of company from them.
- Traditional marketing promotes products via advertising or promoting events. On contrary, CRM keeps tracks of customer purchasing history and tries to create a unique promoting services with the customers.

2.1.5. Types of CRM

As CRM aims to use customer focused approach, CRM itself needs to be segmented. Generally CRM systems are segmented in three main classes: operational, analytic and collaborative [11]. Since 1990s these segments are widely used to gain better understanding and differentiate all the customers according to their expectations and needs.

- **Operational CRM**

The operational application of CRM enables effective interaction with customers. For this purpose various tools are used. These contact management tools aim to reduce costs by improved process efficiency and use of media based communication channels. These are also aimed to provide customers with a consistent interface across all communication channels. To achieve this, relevant customer data is collected and also displayed at all customer touch points. This is the customer master data. Another set of data, where employees' contact with customers is also logged. This has information like topics discussed, customer requirements, soft customer data like hobbies, preferences, interests, details about children and other minor stuffs [12].

- **Analytical CRM**

Analytical CRM is about capturing, storing, extracting, integrating, processing, interpreting, distributing, using and reporting customer-related data to enhance both customer and company value [13].

- **Collaborative CRM**

Collaborative CRM is the term used to describe the strategic and tactical alignment of normally separate enterprises in the supply chain for the more profitable identification, attraction, retention and development of customers. 16 For example, manufacturers of consumer goods and retailers can align their people, processes and technologies to serve shoppers more efficiently and effectively. They employ practices such as co-marketing, category management, collaborative forecasting, joint new product development and joint market research [14].

- **Strategic CRM**

Strategic CRM involves in answering questions such as:

- Getting to know the customer
- Eliminating the non-profiting customers
- Increasing the added value of the company
- Customer interaction and differentiation of it depending of the customer

Strategic CRM fundamentals can be observed from the basic neighborhood markets, in Turkey around 80s and 90s these shop owner were keeping a ledger book which has the family surnames and their shopping lists which they haven't paid yet. According to the amount of the debts which hasn't paid on due time, shop owner could easily identify good and bad customers and take preventive actions. Such applications can also be seen in CRM systems. All customer details and transactions are kept within the database so that managers can easily use them for decision making tasks. They can look for the customer portfolio and try to eliminate the non-profiting customers and make some attracting campaign to the profitable ones.

2.1.6. Objectives of CRM

- **Customer Satisfaction**

All companies expects to satisfy their customer's needs. Whenever a customer is satisfied with services or the product which are offered by the company, they are more

likely to return and do more business. CRM aims to increase and maintain the customer satisfaction at optimal levels to retain and obtain customers.

- **Business Efficiency**

Implementing the CRM concept into your company can lead to increase in response of customer needs and questions. Besides to have a better response timing to your customers, companies can add value to their customer satisfaction levels with efficient services to their customers.

- **More Effective Marketing Campaigns**

CRM enables to differentiate and gather customer profiles. As a result of this, companies may have much more detailed information that can be used in marketing campaigns.

- **Increasing Sales**

By doing more diverse campaigns, responding and solving your customer needs and queries, increasing customer satisfaction and return companies expects to have increased sales and profit.

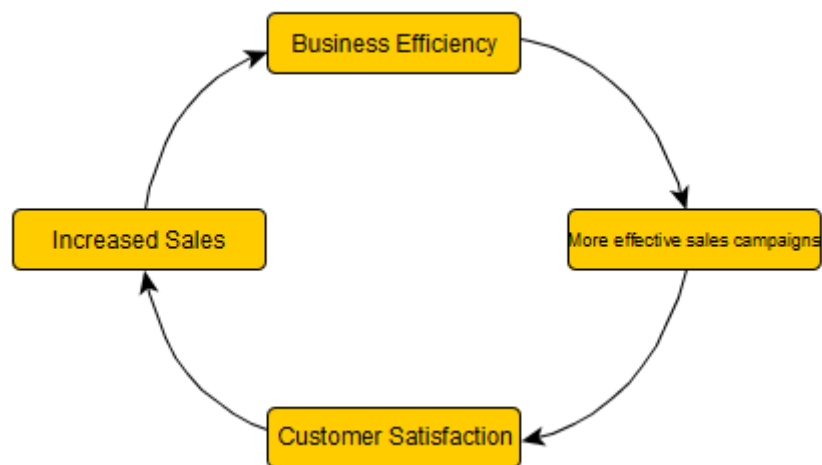


Figure 3: Objectives of CRM [10]

2.2. CRM Software

2.2.1. What is CRM Software?

In CRM (customer relationship management), CRM software is a phrase used to describe a category of enterprise software that covers a broad set of applications and software to help businesses manage customer data and customer interaction, access business information, automate sales, marketing and customer support and also manage employee, vendor and partner relationships [15].

2.2.2. CRM Software Functions

From beginning of the customer acquisition, sales and after services. CRM software is used in many areas for obtaining, analysis and development of customer relationship. In this sub topic some main functions of such systems will be listed and explained.



Figure 4: CRM Software Functions [35]

- **Analysis**

Analysis is used in processes such as predicting the customer behavior, investigating customer data, estimating work load with a customer.

- **Data Gathering and Storage**

All the information gathered from all touch points with the customer are stored in CRM software. These touch points can be e-mail and mails, phone calls of customer services and other information provided by customer requirements.

- **Back-end Integration**

Back-end integration includes data about a customer which is obtained by phone calls, mails, direct customer services and other related data points. The reason why it is called as back-end is all the relevant information of customer is stored and provided by the main frame servers or computers.

- **Personalization**

In order to increase customer satisfaction levels, customer data are used to offer differentiated products and services according to their requirements. With CRM software, all customer data can be stored individually for better personalization.

- **Measurement**

With the CRM software, customer service performance can be classified and automatized. This factor is mainly used on call center services. For measurement some factors like, time spent with a customer transaction and time spent to pass onto a next customer, customer on hold time can be used.

- **Reporting**

After gathering data from the processes that has been done with customers, reports of these actions are created. Customer specialized reports can be created from the database storage of the CRM software and these reports can be about customer satisfaction, complaints and success rates of problem solving about customer needs and problems.

2.2.3. CRM Software Solutions

In this sub-chapter, main business solutions that CRM offers will be discussed and explained. CRM software solutions are widely used in business area. Sometimes it can help companies to manage their relationships with customers, sometimes it is used to store all customer data and its management.

- **Database Management**

Database management is one of the critical functions of CRM software. All the information about customers and related data is stored here. If the database is well organized and kept out of repetitive information about customers, this will help to decrease customer service time and improve CRM efficiency.

- **Data Warehousing**

A data warehouse is a subject-oriented, integrated, time-variant and non-volatile collection of data in support of management's decision making process [16]. In data warehousing processes such as data faults, repetitive data and differentiating data according to customer are made.

- **Data Mining**

Data mining is the exploration and analysis of large quantities of data in order to discover valid, novel, potentially useful, and ultimately understandable patterns in data [17]. The results of data mining is used in areas like customer preferences, customer age difference and in other demographic information within the marketing processes.

- **Decision Support Processes**

Decision support feature are used mainly in call center, customer support and some other companies. This feature helps manager on decision making, investigation and processing data about the customers and projects. Decision support tools helps decision makers to visualize all the changes and its effects in CRM system after changing process within the system.

- **Communications (E-mail)**

While usage of e-mail increases still rapidly, evaluation of data and potential customer through e-mail traffic is an essential part of the CRM logic. Besides, e-mail services are used for marketing the new product or services to the customers.

Using some web technologies, customers can be reached via e-mail and offered some services or products depending on the web pages that they have reached. Such marketing techniques can help customer differentiation and individual marketing to the customers.

2.2.4. Cloud CRM

Cloud CRM (or CRM cloud) means any customer relationship management (CRM) technology where the CRM software, CRM tools and the organization's customer data resides in the cloud and delivered to end-users via the Internet.

Cloud CRM typically offers access to the application via Web-based tools (or Web browser) logins where the CRM system administrator has previously defined access levels across the organization. Employees can log in to the CRM system, simultaneously, from any Internet-enabled computer or device. Often, cloud CRM provide users with mobile apps to make it easier to use the CRM on smartphones and tablets [18].

2.3. CRM Strategy

This chapter is mainly based on reference no: 19.

The most important thing for a company is the customer and its loyalty. Companies are looking for every bit of information about customers and trying to keep all the records of interactions with them. To do so CRM has set four main processes which are all together called as CRM strategy. These are [19]:

- Customer identification
- Customer acquisition
- Customer preservation
- Customer differentiating

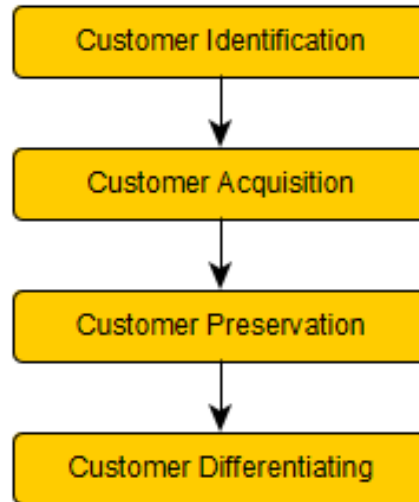


Figure 5: CRM Strategy [10]

2.3.1. Customer Identification

This is the first step of the CRM strategy. During this stage the main purpose is to find an answer for “Who is the most profitable customer?” question. Product definitions, marketing and market research are being done all in this stage. To sum up the activities this list can be given:

- Determine target customer
- Segmentation
- Campaign plans, new product launching
- Branding and introducing it to the customer

2.3.2. Customer Acquisition

The second step of the CRM strategy is called as “customer acquisition”. All the product sales effort that has been done for selected customer is located in this step. Therefore, we can tell the main purpose is to make the sales and asking the question “How we can make the most effective sales to a customer?” is the key in this stage. Needs analysis and creation of proposals can be given as example steps.

2.3.3. Customer Preservation

The third stage is called as “customer preservation”. This stage is about customer loyalty and satisfaction. Here, the main purpose is holding the customer in business with our company as long as possible and keep the transactions between entities continuous.

Keeping a customer is satisfied with the offered services or products is a very long and time consuming effort. Therefore, understanding a customer needs and wants, then reacting according to these info and keep the customer is having a critical importance for every other company.

2.3.4. Customer Differentiating

This is the last and the fourth stage of the CRM strategy. Instead of penetrating the bigger market share, penetrating the loyal customer’s budget share is the main focus of this stage. This stage includes necessary activities such as keeping the already earned loyalty and increasing the customers’ expenses towards to our company.

2.4. Failure And Success Factors of CRM Systems

As it can be understood from the previous chapters, CRM is not just a basic integrated system that can be only dependent on one main factor for success or failure. There are many influential points about why such system is working efficiently or not making any contribution even causing problems within the company. To understand the mentality of these success and failure factors, they should be also divided into numerous sub-criteria within themselves.

2.4.1. Failure Factors of CRM Systems

Failure factors can be caused by mainly strategy, organization and management, customer processing, project planning and technology adaptation.

- **Strategic Problems**

- **Strategy first, implementing later [25]**

Many companies just implements the system before they think about their strategy on how they will proceed with the CRM system. Companies should

first consider thinking on how they will process customer data and for what purposes they will use it.

- **Not having long term strategy**

Having a CRM system is not the answer for all the problems. Having a plan, setting goals and then using CRM system and its tools for reaching those goals will be making the plans come true. Many businesses don't think of in such way and they end up failing their projects or losing customers.
- **Organizational and Management Problems**
 - **Communication problems between IT team and entities**

During and after the implementation of the system if communication between entities and IT team are not clear and objected, result will not be matching with the expectations of the entities.
 - **Not having a project manager**

When you are working on a project, it is always good to have some expert opinion and a leader to handle and drive the team towards the goal. In such absence of a person, employees may not understand the objectives or requirements of the project [26].
 - **Support of the employees**

Employees should participate and learn how to use the system. Otherwise whenever some updates or changes is made by IT team, users will have to go through another training. This will make the implementation and integration of the system into the company much longer than it is expected [27].
 - **Prioritizing technology before people**

Giving much importance on the technologies and not letting some key users involve in implementation process will lead to an unsatisfying implementation and therefore a failure.

- **Customer Processing Problems**

- **Not knowing the customer relationship concept**

Limiting the customer relationship with just purchasing and invoicing is not about the concept of CRM. Companies who doesn't seek to differentiate and improve their business with their customers will not be successful in such CRM systems [28].

- **Mixing customer interaction with stalking**

Sending too many messages, faxes, emails or making too many calls about your customers may not be that good as you expected. Customers may grow weary of that much of marketing activities and reject your business.

- **Ignoring customer needs**

Only using the data from the CRM system and offering more products according to customer behavior is not the best way to serve and satisfy the clients. In many cases also listening to actual needs and wants of the customer and serving the customer according to that information may bring much more benefits [29].

- **Project Planning Problems**

- **Not setting the objectives, roles and responsibilities beforehand**

Before or at the beginning of the project each participant's objectives, roles and responsibilities should be made clear in order to avoid future complications. So that each employee or participant in the project will easily follow their work plan [30].

- **Not setting control points within the projects**

If some control points or evaluation metrics has not been set, a project manager can't observe and evaluate the processes during and after the implementation. As a result, it won't be possible to guarantee whether the CRM project was successful or not.

- **Cost Controlling**

If the project's expected time to be finished and cost expectations are not matching, then project will already start with a deficit and it will increase the chances of going bankrupt on the project. Therefore, a project manager should strictly control the time and budget equality during the implementation till the end of the project.

- **Technology Problems**

It is important that companies should think of what tools for the software and hardware is needed. However, many companies overthink this situation and try to solve problems with more tools and unnecessary hardware upgrades. It is important to keep your objectives clear and try to keep your efficiency when it comes to process the data and use it for your benefits [31].

2.4.2. Success Factors of CRM Systems

This sub-topic is mainly based on reference no: 32.

All enterprises want to be successful in their business life and increase and many of those who are in direct contact with customers are choosing CRM systems. Their main aim is generally about increasing revenues, productivity and customer satisfaction. In this sub-chapter, the main factors of successfulness in CRM systems will be discussed.

- **Establishing Measurable Business Goals**

It is critical to define your goals when it comes to measure how successful you are in the business. Defining your goals and keeping track of how successful you are about them is an essential part of a company's way to success. These goals must be measurable like "reducing service response time by 25 percent" so that after a certain time you may analyze it by the reports.

- **Align Your Business and Your Information Technology Operations**

While CRM is using technology to improve itself, it is not just driven to success by technology. One must take into account that it is also about defining your business goals, requirements and objectives. Companies should use the technology of CRM to get the best effective response to reach their goals.

- **Top Management Support**

It is important to create an environment within the company that everyone believes in the system and they use it to reach the company goals. If top management doesn't give the message that CRM system will be critical and essential to achieve the goals, employees won't take the system into consideration as they should have.

- **Using Experienced Consultants**

It is important to get support when it comes to apply requirements into the software configurations. During this stage if a consultant is not used, applying company requirements into the software will consume your time therefore you budget. An experienced and even certified consultant by your software vendor will know the software in every detail so that he or she will deliver the best results within the specified timescale and budget.

- **Using End User Feedback at Design Stage**

Getting the feedback from the end-users and using that to improve your effectiveness of your CRM system is one of the key success factors of CRM systems. The best way to obtain such data is possible through customer service representative which are in contact with customers and the very end node of the CRM system. Besides they are the most active users of the system on the daily basis. Getting their feedback and of customers' feedback through them, then using it to improve the effectiveness and to reach your goals is important to be successful.

- **End-user Training**

One of the important feature to CRM success is to train the end-users which are in most cases customer service representatives. It is important to not just give training about software features and functionality but teaching how to effectively run the business processes newly enabled by the CRM system.

At this point one other important factor arises. This factor is called as “Change Management”. Change management is about making the employees understand how CRM technology will serve well than before to the company. If employees understand how the system will make them more effective in the long run, they will be eager to adapt.

- **Measure, Monitor, and Track**

It is important to monitor all actions and track down the system effectiveness so that preventive or corrective measures can be taken. When companies want to gain benefit from a CRM system, they should benchmark the processes early on, identify performance metrics with respect to your business goals and measure how CRM system affects these metrics.

After evaluating those results, all employees from top management to front line staff should be informed about the informed about successfulness or failures. After that point, management staff will take necessary preventive or corrective measures according to monitoring results.

- **Using a Phased Deployment Schedule**

This means during the deployment each phase is focused on a specific CRM objective. When a phase is successfully completed, the work and the experience gained from the previous phase legates a “quick win”. “Quick win” means meaningful results in a reasonable amount of time. By applying a phased deployment schedule, it is possible to enable the concept of learn along the way. With that, companies avoid the errors before happening during the developing stage.

2.5. CRM Implementation

Creation of a CRM system is a challenging task to handle. It requires the integration of real world with the software and hardware. To do so, there are some steps that should be followed to achieve best results for the companies' successful business life. These steps are listed like this:

- Planning
- Research
- System Analysis and Conceptual Design
- Design & Construction
- Implementation
- Training
- Maintenance and Documentation

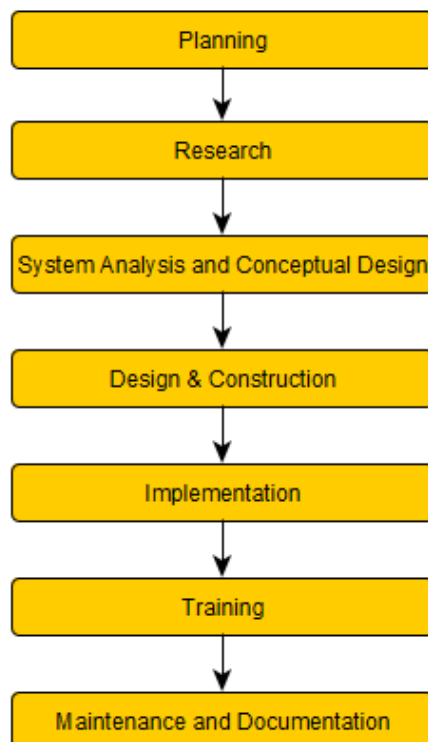


Figure 6: CRM Implementation

2.5.1. Planning

At this point companies have to identify why their organizations need a CRM system. First company should start with arranging some check points and KPI values related to their business or to measure the successfulness of the implementation which will be evaluated throughout the implementation or after the implementation when a certain time period passes.

Then it is better to plan the how the customer interaction points should be identified and decided. During the planning, IT management should decide how to store the data about customer interaction points and how to distribute it throughout the departments. During the planning stage these questions can be asked for efficient planning [20]:

- Why are you implementing this?
- What is not working well in the current system or process?
- What are the most critical phases in the process?
- Where will the system save time and effort on repetitious tasks or duplicated work?
- What are the specific tasks you want to automate?
- What areas of 'pain' will be healed by this implementation?
- What areas of existing customer relations will be incorporated into the CRM strategy?
- What areas outside the existing customer relations process should be considered for expansion into the CRM strategy?

2.5.2. Research

Management should do a research about which software will be the beneficial for the company. During the research such factors should be considered [21]:

- Strength of the vendor's product
- Vendor's experience in the CRM market
- Knowledge level of the vendor's employees
- Vendor's corporate vision
- Vendor's experience in working with companies the same size as yours

- Customer references

Besides, specific needs of the customer touch points should be identified clearly to find out the best software that is matching company requirements.

2.5.3. System Analysis

This sub-topic is mainly based on reference no: 22.

During this stage either IT department or the software outsourcing team should do the conceptual design about how company representatives or the customer itself will be in interaction with the software. For example; during the calls to a customer service center, first customer fills necessary data and then connects to the customer representative. While customer waits to be connected, customer representative reads the data about the customer and brings up the relevant data profile of the customer for better service.

At this point how customer touch points should be designed is the main question of conceptual design. Desired touch points should be written down and argued with the IT team or outsource software designers whether it is possible to visualize or not during the actual design phase.

2.5.4. Design & Construction

After deciding and finalizing of the system and conceptual design, either IT team or the outsourced software designers will be handling the creation of the system. It would be wise to ask some outsource software designers, if the company IT team doesn't have any experience in such design and coding techniques.

At this point IT team or outsourced software designers will handle the coding and visualizing the interface of the CRM software. They are also responsible for the testing and the final controlling before the implementation.

Also during this stage it is better to ask and find answer to these questions will be beneficial for better design and construction of the system [23]:

- Where will the actual hardware and software reside?

- What type of server(s) will be used?
- What type of database will be used?
- What level of security will be required?
- What data sources will be imported versus data that will be linked?
- Who will maintain and support the system?
- Is the in-house IT/IS department willing and able to support the hardware and software?

2.5.5. Implementation

After the design and construction phase, it is the time for implementing the CRM system into the actual usage of the company. During this stage, installing the client systems to the office and other work computers, exporting the data from company's current database, arranging user access levels and security configurations, coordination for remote access for the employee's laptops and such similar arrangements are done.

2.5.6. Training

This sub-topic is mainly based on reference no: 24.

As the training done almost at the final step of the whole development stage, it shouldn't be understood or valued less than other steps which has been spoken of here. Training should be given into three different user groups. These are [24]:

- Sales / Field / Customer Support Representatives (End-users)
- Management (End-users)
- Administration (System-users)

All the groups will receive relative training according to their respective areas. Each group will acquire necessary and related information about how they can use the system as efficient as possible within their respected work fields and needs.

- **Sales / Field / Customer Support Representatives (End-users)**

They have to get practical training about how to get information from in and out of the system while interacting with the customers. Besides, they have to learn to identify promising or potential clients for the future interactions.

- **Management (End-users)**

Management members should be able to know how to use the data for decision making processes of the project(s) that they are working for.

- **Administration (System-users)**

Administrators or IT staff should know how to integrate system with changes or new modules which is needed for the project or service. They should be able to identify problems within the system and solve it. Apart from that, they should arrange the end-user roles properly so that not everyone will be able to reach all the information which may needed to be kept away from some user groups due to the confidential reasons.

2.5.7. Maintenance and Documentation

During the operational time, how system is working and how efficient it is running should be evaluated within specified intervals. By doing so, system administrators can evaluate the problems and check why the system is not working efficiently or within the expected performance.

3. CURRENT CONDITIONS OF THE COMPANY AND REQUIREMENTS

During this chapter, the general background information will be provided. Besides there will be also information about why company decided to migrate to a CRM solution and the situation before CRM implementation will be explained.

Due to the company's safety in their respected business field, name of the company is hidden all the content of this thesis.

3.1. Company Background

Company X was established in the fall of 2003 as an association of two individuals. In this period were also set out the main objectives and policy of the company. Basic activities of the association from the beginning was associated with the field of blood pressure measurement. In early 2004, the sale of Non-invasive sphygmomanometers and a few weeks later, these sales were also made available through the online store. In an effort to extend the offer for customers, the company entered in 2004 into negotiations with the Czech Metrology Institute and the Office for Standards, Metrology and Testing, in order to obtain authorization for mandatory verification of measuring instruments blood pressure. In connection with this step was built metrology laboratory and a quality system.

In 2005 it was transformed into a limited liability company. It was gradually expanding the range of medical instrumentation for professional and home use by prominent Czech and foreign producers until today. In this continuous process, gradually formed customer requests for more advanced services. The scope of the service center was extended for another service, inspection and metrology operations. In terms of increased availability of goods and services to our customers in 2008 was the establishment of a company built on the territory of Prague.

During its development, company X became a manufacturer of sophisticated electronic equipment in the medical field. Since 2005, the company has its own research and development group that provides not only improvements to existing products, but also developing new products, e.g. working on non-invasive blood pressure measuring device, or develops eye-tracking technology for medical applications. Staff development group working closely with elite

research centers in the Czech Republic, for example. Charles University in Prague, 1st Faculty of Medicine, etc.

3.2. Present Condition of the Company

Currently, a limited liability company with Czech capital employed and cooperates with a number of experts from various sectors (metrology, medicine, biomedicine, information technology, cybernetics, technical management, and marketing).

The scope of the company gradually expanded to the following three main areas:

- Sales of medical instrumentation for professional and home use
- Servicing medical instrumentation
- Research, development, and manufacture our own products

In all areas of our business, emphasis is placed on the highest possible quality, continuous improvement leading to customer satisfaction.

Company X is working as a liability company divided into four main sub division companies. They are responsible from:

- Sales medical devices
- Technical services - medical devices (metrology, revision, repairing, safety-inspection check, etc.)
- Legislation consulting
- Production assistive technology
- Eye tracking research and development

3.3. Conditions before and after setting up a CRM solution

After the company X was founded, their major business activity was doing periodically technical services. Each customer have medical devices which have to be regularly measured for their safety and good functionality specifications. For that reason keeping track and knowing the data about the customer, their devices, and date of last valid measurement is essential in running smooth business. If the measurement or controlling dates is not recorded correctly, next technician – customer meeting can't be arranged properly.

As the time passes Company X acquired more and more customers. This has made keeping track of the all data and recordings complex and hard to keep track of. In the next two tables, the increasing number of customers can be seen.

Table 1: Customer Numbers

| | | | | | |
|---------------------|-------|-------|-------|------------|------------|
| Year | 2005 | 2006 | 2007 | 2008 | 2009 |
| Customers | 0 | 1000 | 2000 | 3000 | 3500 |
| Potential customers | 20000 | 19000 | 18000 | 17000 | 16500 |
| DB | Excel | Excel | Excel | Student DB | Student DB |

Table 2: Customer Numbers

| | | | | | |
|---------------------|------------|-------|-------|-------|-------|
| Year | 2010 | 2011 | 2012 | 2013 | 2014 |
| Customers | 4500 | 5000 | 6000 | 6500 | 7000 |
| Potential customers | 15500 | 15000 | 14000 | 13500 | 13000 |
| DB | Student DB | CRM | CRM | CRM | CRM |

Company X has started to keep the customer data and other related information about measurement in the excel sheets in the first stage. This was alright up to some point but due to increasing numbers of the customers, this technology has reached its limits.

Later on, Company X has cooperated with two students from FEE CTU in Prague, whom has created a database for the company as a bachelor thesis. Yet this option was not an ultimate solution for the growing numbers and other needs of the company.

After this step, Company X decided to move through a professional solution by changing all their system to a CRM solution. From table 3 and 4, the growing operations of business activities can be seen.

Table 3: Service Numbers

| Year | 2007 | 2008 | 2009 | 2010 |
|-------------------------|--------|--------|------|---------|
| technical services (TS) | 2979 | 4101 | 4512 | 6859 |
| safety inspection | 523 | 798 | 1142 | 1626 |
| metrology verification | 2222 | 3053 | 2980 | 4502 |
| metrology calibration | 234 | 250 | 390 | 731 |
| servicemen (SM) | 2 | 2,5 | 3 | 4 |
| productivity (TS/SM) | 1489,5 | 1640,4 | 1504 | 1714,75 |

Table 4: Service Numbers

| Year | 2011 | 2012 | 2013 | 2014 |
|-------------------------|---------|----------|----------|--------|
| technical services (TS) | 8201 | 9091 | 9985 | 11708 |
| safety inspection | 1860 | 2257 | 2569 | 2981 |
| metrology verification | 5626 | 5687 | 5817 | 6877 |
| metrology calibration | 715 | 1147 | 1599 | 1850 |
| serviceman (SM) | 4 | 4,25 | 4,5 | 5 |
| productivity (TS/SM) | 2050,25 | 2139,059 | 2218,889 | 2341,6 |

Company X has decided to use an on premise solution which means it is set up in their own hardware installation. According to the information I received, they decided not to use the cloud system for CRM solution due to the fact that it doesn't serve their requirements. Besides, the contractor company has not offering and designed according to such technology. By installing an on premise solution, company has linked their CRM, ERP, MIS and DMS solutions.

CRM implementation was supervised and coordinated by the Company X's project manager and Contractor Company. Implementation took 8 months.

Before the CRM system implementation customer contact records were kept in excel work sheet or in forms of hardcopy. After CRM implementation, company X has started to keep all types of documents linked to each individual customer.

3.4. Current Situation of the CRM Solution of the Company

Even though it has been 4 years since the implementation has been made, Company X has given negative answer to the question; “Have you ever checked your financial improvements that comes through CRM?”.

That led me to the question of “In case of increase in business volume, have you ever done any controlling whether it is from expanding to new customers, differentiating customers or making more sales to your existing customers with the help of CRM?” and since the answer to the previous question was a no, answer to that question would be a negative response too.

Besides to that company has not yet started a feedback loop to increase efficiency of their work and the system after implementation. Only feedback system that is working is the one that Company X receives from end – users and management. According to information they receive, Company X improves the functionality of the CRM system and re-establishes trainings to the all users.

4. CASE STUDY: ANALYSIS of CRM IMPLEMENTATION

4.1. Framework

In this chapter, I will be giving information about how the case study itself, which is formed after gathering the first general information from the Company X. According to the company business purposes, the main reason to migrate through a CRM system was improving the customer satisfaction and keep the customer information in better way. Yet only focusing on this might be lead to overlooking to other financial and performance issues. Many improvements in both topics can be achieved by checking those two criteria.

I have decided to divide the case study into three main parts according to the literature research so that I can focus on each part according to what has been written in the literature research. The main three parts of the research will be “CRM Objectives Related Questions”, “CRM Strategy”, “Performance of the CRM system” and an additional part for couple of related questions under the name of “Related Questions”.

During the case study I have faced the problem of gathering exact numbers about the financial statements. They were either because Company X didn't check it or I couldn't get my hands on the data due to the fact that they are company secrets. In that case I have tried to overcome this problem by approaching financially related matters by giving examples from other resources or publications.



Figure 7: Research Steps

4.1.1. CRM Objectives and Related Questions

In this part of the research, I have prepared questions to see how the Company X interpret the CRM objectives and the main ideology behind it. Here I expected to see how do they understand and evaluate the terms of Customer Loyalty, Customer Satisfaction and Customer Retention.

4.1.2. CRM Strategy

In this part of the research, the main objective was to gather information about how they understand and use the CRM and to understand company strategy driven by the CRM.

Here there may be some changes made according to the company work field, their customer type or the services and products they offer to the customers, if questions don't fit to targeted company.

Some of the main points which are included in this part can be listed like this:

- Customer strategy
- Customer identification
- Customer life cycle
- Customer touch points
- Profitability of customers
- System improvement processes
- Customer data collection
- CRM development

4.1.3. Performance of the CRM system

This is the most specific part of the case study. I have tried to make the questions and their facts fit into company's state of mind about performance of the CRM system as much as possible after getting the background data about Company X. If these questions and their facts will be tried to be used into some other company, author should analyze and arrange the questions according the company they work with.

This part of the research mainly focuses on how Company X measures and evaluates information such as;

- Profitability of CRM strategy
- Total customer value
- Customer satisfaction level
- Customer loyalty
- Customer retention
- Customer value
- Customer Acquisition
- Customer Retention
- Customer Expansion
- Customer Return
- Employee Attitude towards the system
- Overall employee Satisfaction
- Management Approach to system
- Trainings
- Reward system (if you apply any type of reward system for employees)
- Cooperation level between employees
- Orientation in marketing, sales and management activities

This information points are divided in six main topics:

- Organizational
- Customer
- Processing
- Technology of the CRM system which is in use by the company
- Human Resources
- Company Culture

4.1.4. Related Questions

In this part of the research the aim was to find out some points which are related to CRM services and applications and also may yield some financial results which can be taken into consideration by the company for improving their economic efficiency.

Such questions like “How long it was taking to do an onboarding training to a sales person or front desk operation employee before and after CRM system?”, “Have you measured how many service operations do your technicians do? Have you measured the time on the transportation to customer, service time and communications between company and customer takes in a defined period of time? (Defined period of time can be a working day, working month or a year)” has been asked to evaluate some financial data besides the CRM implementation and performance.

5. METHODOLOGY

5.1. Purpose of the Case Study

The purpose of the case study is to put the usage of the literature research with the obtained knowledge throughout the master study program. Case study aims to first create the understanding about the company and then using the literature and self-knowledge evaluate the results. Throughout the research part, I aimed to find out as much as information by using exploratory methods because some of the information may or will be not given straight due to company rules. [33]

5.2. Case Study Approach

The case study is started with collecting first the general conditions information and obtaining background information about the company. Then it moves through, with qualitative approach to response the issues regarding CRM strategy and CRM objectives of the company. Qualitative research allows the researcher to focus on the subject more and gather more details as much as it doesn't collide with the company restrictions [34].

5.3. Research Strategy

During the case study, I aimed to ask how and why questions as much as I can to obtain more feasible answers that I can use to evaluate and recommend on what is good or needs to be improved or might be put into better use. Besides to that, I tried my questions to gather information about the company X's approach to the CRM system and, in case they exist, also reveal some problems which can be improved or worth mentioning.

5.4. Data Collection Method

The data collection has been carried out through email communication with an official from the company within the form of Question and Answer sheets and one face to face interview.

All the information gathered from the data collection is used in the thesis. The questions which were made to gather data, is available to be read in the Appendix.

5.5. Data Analysis

Case studies are difficult as there is no specific example reflecting the case study object's condition. Therefore, I conducted the analysis according to the framework that I have created and conduct the main progression of the data analysis. According to answers which are in the respected category, I have done research regarding the conditions in the questions asked. So that I might have find relative information and narrow the info into some form which can actually give feedback or comment on the condition.

Then according to chapter and condition of the respected question in the chapter, I might find some similar case studies or examples from publications in order to show what could the company do or whether what they do is reasonable or not.

After collecting all the analysis information, a summary of whole analysis and findings are made to sum up the main benefits and problems, then, if possible, recommending actions which can be taken to improve the situation.

5.6. Validity of Information

In order to make sure that the findings and recommendatory information can be trusted, I have used information mainly from the journals, academic publications, books, magazines and literature information that I have obtained throughout my work.

To prove that information that I have obtained is valid, I have kept the questions and the answer recorded in digital forms of e-mail and data storage. All the interviews have been conducted in English due to the fact that it is the only language option we can use.

The interview was recorded by the permission of the respected official and after that put into writing by myself. Only grammatical mistakes caused by live talking has been corrected. None of the speech of respected official were manipulated.

6. CASE STUDY DATA

This chapter consists the data which is acquired from the representative of the company. This information is used for explaining the company's conditions and evaluating the CRM implementation. All the responses to the set of questions were made by the representative of the Company X and answers are not manipulated except in terms of secrecy asked by the company.

Case Studies 1, 2, and 3 were written email interviews and copied here straight. Mainly I have tried to not to change grammatical mistakes to keep the validity correct.

All the questions in each steps are marked with numbers and written in bold to differentiate them from the answers.

6.1. Case Study Step – 1

The first set of questions were made to understand the general information about company and gather general information about passing through CRM system.

1- Business field of the company

- Sales medical devices
- Technical services - medical devices (metrology, revision, repairing, safety-inspection check, etc.)
- Legislation consulting
- Production assistive technology
- Eye tracking research and development

2- Reasons of why company started to look for a CRM system?

Company was found in 2005. One of important business activity was periodically technical services. Each customer have medical devices, which is necessary regularly measured (safety and good functionality). We need know data about customers, their device and date of validation. This date is very important for planning next meeting technician - customer. There are approximately 20000 customers in the Czech Republic. Development of customer acquisition is in the table below.

Table 5: Customer Numbers

| Year | 2005 | 2006 | 2007 | 2008 | 2009 |
|---------------------|-------|-------|-------|------------|------------|
| Customers | 0 | 1000 | 2000 | 3000 | 3500 |
| Potential customers | 20000 | 19000 | 18000 | 17000 | 16500 |
| DB | Excel | Excel | Excel | Student DB | Student DB |

Table 6: Customer Numbers

| Year | 2010 | 2011 | 2012 | 2013 | 2014 |
|---------------------|------------|-------|-------|-------|-------|
| Customers | 4500 | 5000 | 6000 | 6500 | 7000 |
| Potential customers | 15500 | 15000 | 14000 | 13500 | 13000 |
| DB | Student DB | CRM | CRM | CRM | CRM |

We started with excel, but this technology has limitations.... Next we use application which was created for us by two students FEE CTU in Prague by project in their bachelor thesis. And next we buy professional solution, which covers all areas, which we need. In table below is number of services activity.

Table 7: Service Numbers

| Year | 2007 | 2008 | 2009 | 2010 |
|-------------------------|--------|--------|------|---------|
| technical services (TS) | 2979 | 4101 | 4512 | 6859 |
| safety inspection | 523 | 798 | 1142 | 1626 |
| metrology verification | 2222 | 3053 | 2980 | 4502 |
| metrology calibration | 234 | 250 | 390 | 731 |
| serviceman (SM) | 2 | 2,5 | 3 | 4 |
| productivity (TS/SM) | 1489,5 | 1640,4 | 1504 | 1714,75 |

Table 8: Service Numbers

| Year | 2011 | 2012 | 2013 | 2014 |
|-------------------------|---------|----------|----------|--------|
| technical services (TS) | 8201 | 9091 | 9985 | 11708 |
| safety inspection | 1860 | 2257 | 2569 | 2981 |
| metrology verification | 5626 | 5687 | 5817 | 6877 |
| metrology calibration | 715 | 1147 | 1599 | 1850 |
| serviceman (SM) | 4 | 4,25 | 4,5 | 5 |
| productivity (TS/SM) | 2050,25 | 2139,059 | 2218,889 | 2341,6 |

The main reason for the decision was that we wanted to find one ICT solution for all our activities. We were thinking about possibility of development of our business in the future. We had the financial resources that we can invest in the creation of own system (student DB) or take a robust professional solution. We choose the second possibility. I am convinced that it was the right decision.

3- Which type of system did you use? Hardware installation or cloud system? For what reasons you choose your current implementation hardware? (????)

We use on premise solution. Our business is not optimal for cloud. When we started with implementing, the cloud offer was not adequate for our requirements. The

contractor and its technologies are not designed for the cloud. Now we use CRM, ERP, MIS and DMS. These systems are linked.

4- In what areas CRM turned out to be most effective? Acquisition, differentiation or expanding to new customers.

We have an overview of our activities and we can improve the individual processes. We purposefully develop business, which before deploying CRM have been unthinkable.

5- Which types of communication do you use to contact with customers? How do you keep records of customer info before and after CRM implementation?

Before – no information (notes in excel, or student DB – but not actual). After – every activity (call, mail, offer, document, product, service, invoice, marketing project, etc.) were linked with customer.

6- Did you use some expert / consultant help during the implementation process?

Yes of course. Implementation was project which was managed by contractor and our project manager. Duration of implementation was 8 months.

7- What were your main concerns within the financial aspects of CRM system implementation?

Our peoples and their adoption of the amendment work.

8- Have you ever checked your financial improvements?

Still no. Our business is dynamic. The new opportunities, new workers, new activity, worker fluctuation etc.

9- In case of increase in business volume, have you ever done any controlling whether it is from expanding to new customers, differentiating customers or making more sales to your existing customers with the help of CRM?

I don't understand question exactly.

10- Are you using a feedback loop to increase CRM efficiency?

Still no.

11- Have you ever done a training program to the end users?

Yes, we organized many trainings, workshops etc. Each new employee is trained. We are constantly improving processes and thus created new requirements for information system. Many comments also arises as feedback from users. The functionality of the system is still developing in projects. After each change made training workshop.

6.2. Case Study Step – 2

After the first step of questions, I had to ask some more questions about CRM migration, cost and benefit points and clear one important issue about usage of company name. The results of second step is down below.

1- First of all, may I use your company information and name within the thesis? If there may be problem with the data confidentiality, I can manipulate/change some information or hide company name in the final draft of the thesis.

It will be better hide company name. Other company data will not be modified in this case.

I would like to ask couple of more information about the implementation of the system and related matters.

2- Have you ever calculated the costs of one customer to the company?

I don't know what you mean exactly? We have never calculated it. We had customers before CRM implementation. We have obtained customers for the following reasons:

- good product (service with high added value for the customer), good price, suitable communication
- the company's history, high expertise and reputation

CRM help us improve our processes a target communication with customers. Ever employee (for example telephone operator, service man, sales representative, etc.) with using data from CRM can help customer find solution of his problem. We have every information about customer in CRM. This strategy is important for us. It is very nice get gain customer, but for our company is very important keep customer to trade in the future.

3- Have you ever checked minimum time required to spend for servicing to the customer?

Yes, but it is very individual. We have GPS in cars and we exactly know, when our employee come and left to the customer. We provide a several service (metrological, revision, safety inspection check) for medical devices. Service takes varying lengths of time, which is different for each technique.

4- Have you ever checked employee costs per hour per person?

No exactly. We don't have precise costing, but only estimation...☺ We have sales plan and are tied to sales. Every employee has individual calculated wedge, which depend on his work, activities, sales etc.

5- Are you using CRM service tools? (E.g.: reporting or marketing)

Yes of course. We have agenda marketing, where we are able plan marketing projects (customers, product, and communication). We plan the action like presentations, exhibitions, trainings, etc. Reporting is used for controlling, calculation of wedge, etc.

6- What and how much are the main costs for the whole implementation process? Some examples of implementation costs are given below.

- a. Licenses +++++
- b. Hardware ++
- c. Database +
- d. Implementation – Migration of previous data +
- e. Maintenance +
- f. Support service +
- g. Implementation specialist ++

- h. Tools 0
- i. End-user Trainings +

6.3. Case Study Step – 3

After obtaining the first insights of the company, I decided to look to the situation in more detail. To do so the second interview has been made.

According to first two sets of answers that I obtained, it was possible to say the company was mainly focused on customer satisfaction and quality of service rather than the economic aspects. Mainly the answers to the questions about why they have been running such systems like CRM, were about customer satisfaction and quality of service.

For instance, when I asked such questions like “Have you ever checked minimum time required to spend for servicing to the customer?” or “Have you ever calculated the costs of one customer to the company?”. Answers were mainly negative or unclear to be answered.

I have discussed the situation with Mr.Naplava, my thesis supervisor, regarding what it can be done to conduct an analysis strictly focused on financial aspects after receiving the information from the Company X representative. According to his information since the company has never checked such financial benefit points which are related to CRM implementation, it would be not promising good results and possible to conduct strictly economic cost benefit analysis. Therefore, we have decided to change our point of view in this matter to another level, which is more focusing on finding more qualitative information and conduct a research more related on KPI and performance evaluation of the CRM implementation.

To do so, I have written another set of questions to obtain more data from the company. The main framework which has been discussed at the Chapter 4 has been used in here.

CRM OBJECTIVES RELATED QUESTIONS

1- How would you describe CRM objectives which are related to customers?

Understand needs of customers and offer them what they really need. The company offer (services, products) based on information obtained through CRM approach.

2- Which one of the objectives given below seems the most important to you? Would you please also put them into order by their importance in the company?

- a. Customer Loyalty (3)
- b. Customer Satisfaction (1)
- c. Customer Retention (2)

3- How would you describe CRM objectives which are related to the company?

Our Company has business linked with sales medical devices and providing related services. We have around 5500 customers. Information in CRM can help us to understand needs of customers and offer them, what they really need. For example: A group of our customers use some type of medical devices, which is not suitable for planning use in future (change safety standard, etc.) We are able realize direct communication about this problem with each customer from group and offer to him adequate technical solution. CRM help us manage all the business process.

4- Which one of the objectives given below seems the most important to you? Would you please also put them into order by their importance in the company?

- a. Customer identity (who are they) (3)
- b. Customer needs (1)
- c. Expected sales in future (2)

CRM STRATEGY

5- In terms of interacting with your customers, who are responsible from contacting the customers and what are “touch points” that you use to contact the customers?

We have projects. Every project has milestones (checkboxes) – outputs from direct communication tools. The main objective is customer order. We divide the opportunity to standard, nonstandard. Standard opportunity are results of standard activity and is not necessary create special record in the CRM in agenda of Opportunities. Our system can linked mails, phones, notes, etc. to every customer, record in all agendas. In this case communication is linked directly to customer. Nonstandard opportunity is complicated

and there is important create record in special agenda. On this opportunity we work for long time. Every communication is linked first with opportunity and next with customer.

6- Which one of these “touch points” important in the company?

- a. Snail mail, E-mail, Telephone, Service Employees, Sales Persons, public advertisement**

Our main stream is direct communication (mail, phone, Service Employees, Sales Persons, presentation on workshops, etc.)

- b. Which of the touch points you use most to contact customers for regular contacts and marketing activities?**

Direct communication – sorry trade secrets.

7- Does the time spent on contacting a customer changed by using touch points after CRM implementation?

Yes. We communicate with our customers with frequency - once per year before start using CRM. Our plan is 4 activities per year.

8- What is the company’s customer strategy? How does it change after CRM implementation?

Strengthening the sales team (back office and front office as well).

9- How do you identify a potential customer? How does CRM helping you in terms of expanding your targeting new potential customers?

We have completely data about target market. New opportunities are linked with data collection.

10- How do you proceed the customer life cycle? Does it shorten after CRM implementation? (in terms of approaching, time spent on responding a request of customer, closing a deal or offering prices during dealing process)

I don’t know. From my point of view (small company) implementation of CRM is never ending story. New opportunity, new processes, new workers call big or small changes in

CRM. You must have enough time for it and good creativity after that everything is perfect.

11- How do you organize your customer information before and after CRM implementation? Are you digitally archiving your customer information in the CRM system? Do you only archive in digital platforms or still using paper archiving within a storage area?

We have never had paper archives. We have only digital archives. After CRM implementation are data more complex.

12- How do you differentiate customers? E.g. according to number of sales, total monetary sum of sales etc.

- Sum of sales
- Trade agreement – Y/N
- Medical specialization
- Owner (public, private)
- Potential for concrete type of product
- Etc.

13- How does the company calculate profitability of the customers? Do any of the factors given below are important for the company? How these numbers change after CRM implementation?

- a. Individual and total Customer Profit Margin
- b. Average retention rate of customers
- c. Average time that customer will do business with the firm

14- Are you conducting and strategic plans to differentiate your customers to improve your business (term business here means e.g. sales, long term deals, expanding to new customers)?

Partly, we are still working on it. There are new experiences, new opportunities background and on trade etc.

15- Are you collecting any information on why customers choose your or leave you, or else why they do business with competitors and why they stop working with competitors?

Actually no. maybe in future.

16- What are the most critical points throughout the development of your CRM system?

- Employees and their motivation for new solution
- Creativity from business model and processes creation in CRM
- Timing to switch from old to new solution
- Testing the new solution

17- How integrated your CRM system is regarding the conditions of information flow of the customers and related information before and after CRM system?

Now we have information and tools for create a realize business strategy. We are able manage communication with our customers.

PERFORMANCE OF THE CRM SYSTEM

18- How do you give importance/evaluate these criterias in sections given below? Could you please describe what techniques or measuring points are you using to get those values?What kind of tools are you using to enumerate the obtained data? If possible, please write down percentage points of those values with their threshold value.

- a. Organizational
 - i. Profitability of CRM strategy (50)
 - ii. Total customer value (50)
- b. Customer
 - i. Customer satisfaction level (40)
 - ii. Customer loyalty (20)
 - iii. Customer retention (20)
 - iv. Customer value (20)
- c. Processing
 - i. Customer Acquisition (20)
 - ii. Customer Retention (20)

- iii. Customer Expansion (20)
 - iv. Customer Return (40)
 - d. Technology of the CRM system which is in use by the company
 - e. Human Resources
 - i. Employee Attitude towards the system (10)
 - ii. Overall employee Satisfaction (10)
 - iii. Management Approach to system (30)
 - iv. Trainings (20)
 - v. Reward system (if you apply any type of reward system for employees) (30)
 - f. Company Culture
 - i. Cooperation level between employees (50)
 - ii. Orientation in marketing, sales and management activities (50)

19- Are you measuring the accuracy and efficiency of the work done by your employees?

Do you monitor the employee activities from the system? Do you evaluate employee satisfaction by questionnaires to improve working conditions and system quality?

Yes, we do immediately monitoring employees activity and regularly talk with them on this topic. Our effort is motivate our employees for increasing important activities.

RELATED QUESTIONS

20- Do number of people working as account manager, marketing expert or database manager change after your CRM implementation? Please mention even it is increase or decrease in each job position.

Our organization structure was changed after CRM implementation. New people comes to the company, some people leaves us. Our structure is changing every year, because the new colleagues coming. There are new opportunities, new processes, new projects, etc. We have from 2011 to now regularly every year training course for 4 – 5 new colleagues in august. The answer is yes, we increase our staff.

21- How long it was taking to do an onboarding training to a sales person or front desk operation employee before and after CRM system?

It is very individual and depend on education, practice, talent, etc. It is run to the long distance.

22- Have you measured how many service operations do your technicians do? Have you measured the time on the transportation to customer, service time and communications between company and customer takes in a defined period of time? (defined period of time can be a working day, working month or a year)

Yes. We have standards for day, week, month and year. We comparing activity among technicians and we have regularly discussed with them about our and their expectations.

23- How do you organize and storage your customer billings and other related information? Are you digitally storing those information or using an actual paper archiving/storage facility/area?

We have ERP system which is linked with bank and CRM. We are immediately monitoring balance between invoices and payment. We know all information about invoices and their payments about every customer. If customer call us, by the phone number operator see these information together with identification of customer.

6.4. Case Study Step – 4

During this step, I have had face to face conversation to clear out some final details. The conversation was recorded by the permission of the respected official and after that put into writing by myself. Only grammatical mistakes caused by live talking has been corrected. None of the speech of respected official were manipulated.

1- What kind of activities or process you are doing to understand customer needs? (Case Study – 3 Question:1)

Our area isn't strict concurrence area because of customers are very conservative and it is doctors. They say "I need it, if my colleague has new solution otherwise I don't need it." I think, the managing of products of innovation must come from customers. I think

our innovation and product services coming from customers not really by asking in paper form or feedback but interview from salesman and technicians. Salesman and technicians tell us this customer needs that.

2- Why customer loyalty is not so important to the company? (Case Study – 3 Question:2)

We have about 6500 customers, there is no problem about having business agreement with customers but we offer them services which are perfect. Main business for us is safety, inspection checks and medical devices. Our business doesn't need customer loyalty. From first of April, there will be new law and it will be very interesting due to the history about it. Customers change their requirements and companies are very competitive. It will be very interesting.

3- Why customer identity is not so important to the company? (Case Study – 3 Question:4)

Our business is focused on services. It means we have good services and products because we have 6500 customers for this. We have started with CRM system business activity, we created projects with products and we are able to create and manage direct communication with customer.

4- How much time you were spending to conduct a business before and after CRM? (it can be hours, days or months) Have you checked change of this factor after implementation? What do you mean by "4 activities per year" in (Case Study – 3 Question: 7)?

It means we are in contact with our customers one time per year for services. By using our system, we are able to contact with customers more times with some business offer so that we can contact customer and say; we prepare for you this offer.

5- How does the company's customer strategy changed or effected after implementation? (Case Study – 3 Question:8)

Now we are able to differentiate the customers. Some customers need special services and they are able to pay for it. We create the sales team because it is very difficult task.

It depends on new opportunities and products. Our problem is we have some tools but we must live with them because our business increased, still increasing because we have new products and opportunities and we must take it. We realize some changes in organization and we spend some time and we must change it again because we need new people, it is very difficult. If we create CRM for some certain products or services, it is very easy.

- **So do you adapt the system according to your products and services?**

Yes. I think we are good with processes in services. I think efficiency is much better than before the CRM system because we have now correct data about customer.

6- In Case Study – 3 Question: 9, you mentioned you have data about the target market. Yet how does CRM helping you in terms of targeting or finding potential customers?

We are here divided by service or other activities. If we talk about the service, we have information system of all contacts and doctors and hospitals in Czech Republic and Slovak Republic.

- **So you have the information from the state?**

Yes. Free information and we take it from state statistical offices. It is correct for activities and projects.

The salespersons work for technicians so they work with two parameters; first is date of checking the medical device of customer and they see in system table and say “I plan service for technician on 11th May. I create this plan. Then which place? I see that in 11th May, realize some checking for one customer and customer is located in for example Brno. Ok, then information system shows me all customers which need some check around that date. Ok, but I don’t have enough customers for planning. Then information system shows me potential customer in this area. I call them and ask them if they need service. For other type of businesses, it works different of course.

7- In Case Study – 3 Question: 13, you said “Individual and total Customer Profit Margin” is the most important. Could you please explain how do you calculate it and general profitability of the customers?

We don't calculate it exactly because it is very complicated. Our customers are very non-homogenous group. We have 6500 customers but if I would like to calculate profitability, I must divide homogenous group for example into general practitioners, pediatrics etc. For this small groups, we are able to calculate profitability but we don't calculate it because it will be very complicated. If we work with this information, we calculate for example in service area, we are able to calculate the efficiency of services. I see that salesperson plans for technician work which is for 20000 Czech Crowns and technician finish it, other extreme is where service is 2000 Czech Crowns. It doesn't cover costs.

- **So is it easier for you to calculate profitability individually?**

Yes.

8- Why company doesn't look for reasons of customers leaving or choosing another competitor? (Case Study – 3 Question:15)

Ok, I think the market here is on the start and we get some customers. In case of servicing medical devices, this is impossible. From 1st April here new law and I think we will be happy if our 6500 customers stay with us but it depends on many things and I think it's from one point of view it is opportunity, from second point of view it's opposite of opportunity. It is very difficult to describe this in few sentences.

9- In Case Study – 3 Question: 18, I would like to know “How do you evaluate these criterias in sections given below? Could you please describe what techniques or measuring points are you using to get those values? What kind of tools are you using to enumerate the obtained data? If possible, please write down percentage points of those values with their threshold value.”

Ok, we don't set minimum levels, this is my opinion and evaluation. Because, for example in human resources we work with people and that is very complicated area. I

think 50% of people are very bad but the problem is the bad competencies. You don't know them immediately, you check it in future. If you end cooperation with these people, you now then see new problems new people and it is never ending story. Those values in there are my evaluation and estimation.

10- Do you have some KPI values/points to calculate employee efficiency? Do you have a reward system to motivate employees regarding if they reach desired KPI limit? (Case Study – 3 Question: 19)

Yes, we have the system to help us with some backgrounds to reach by employees. We have some systems and we tell our employees; ok we are looking for these activities and if you satisfy with the plan, you will get some money. For example, we have a great product and we have a great employee works only on this product. He get such money like base salary and for every meeting with customer he gets commission. It is perfect because he knows that, this is my base salary and I get commission, if get to realize twenty meetings. This system is very individual because of work. Some activities are not able to be linked directly with profit of company. Typically, accountants or information system specialists have agreed salaries but they are very important for the company.

11- You mentioned increase in the number of staff, have you checked the costs of total costs of the new employees and if you are still able to improve or keep your financial benefits from CRM on positive level? (Case Study – 3 Question:20)

I think it is positive level but I am not sure this is linked directly with CRM. I think we have problem because we are very conservative at the management. We would like to create company on the hard and correct basement. We would like to take twenty people but it will be a work on long time. Because we must add them some skills, show processes. It is impossible to realize it. This is our limitation, because new people comes and we must talk about work. It is very complicated. For four to five people now is our limitation maximum. I think it is positive but I am not sure that depends on CRM system.

12- It does depend on each employee but have you calculated an average time about how long it does take to get an employee learn to use the system properly? So that you can estimate a time and money loss for training a newly hired employee. (Case Study – 3 Question:21)

It is very individual. It depends on position and competencies. If you have some experience and education about the work, it is faster. If you are biomedical engineer and have some certification, I think it is about two months. If you are salesman and your task is call with customer, it is two months. If you are salesman and your task is understand products or talk about project with customers and realize marketing activities, it is one year. If it is service man, it is about two months. If you are manager, it is very complicated.

13- In Case Study – 3 Question: 22, I was trying to understand how integrated your system is when it comes to use in real time operations. A good system with high integration can reduce time spent on road going to customers; can reduce time spent with customer and accelerate getting and preparation of information of daily customer list. In long run it may yield in increase of customer satisfaction and employees. Could you please give me bit more detail?

Yes we are able measure the efficiency because we have connect ERP and CRM systems and for every work of serviceman, every invoices will be for example grouped as services, products and expenses for transportation. We are able to look for these parameters for all days. This is very good information for us. We know from point of view time analysis realizes some services. If we would like to increase efficiency, we must increase the price of services. We are able to look and think about this and time of solutions are divided into three main activity. First is working for order, second is certification and third is working with information system. I think the main is working with devices of customers. Our plan is every technician spends three and half day from five days of a work week with customers. One and half day is used for certification and creation of records to the system. I think it is quite good.

14- Lastly, are you using another solutions in coordination with CRM system? E.g.: ERP, Document Management System, Management Information System. Are they fully integrated with your CRM solution for improving business efficiency?

Yes, we have ERP, Document Management System, and Management Information System. This DMS is integrated with CRM. This means if I link some document with customer, I see it in CRM. I am able to add every document and activity for CRM like task, project, meeting and conversation details. We are quite small company and every year we change our processes but we have I think quite good state because we have many opportunities.

7. FINDINGS

In this chapter, results of whole conducted question & answer papers and the interview will be evaluated. My main aim is to use the knowledge that I obtained from the theoretical area of my thesis and evaluate the obtained data using some more information also coming from some case studies and publications.

7.1. CRM Objectives Related Questions

According to interviews, company X is mainly aiming to use the CRM solution to increase their customers' satisfaction. They want to use CRM solution to be able to keep the customer information -all in one- place and be able to use to realize direct communication with their customers.

On the other hand when it comes to some important matters such as; "Customer Loyalty", "Customer identity" or "Customer Retention", Company doesn't believe they would affect their business. According to information in case studies, their business rules like laws are changing time to time and this can change many conditions in the market. In some other condition, customer doesn't want to use the solution they offer in future so then they offer an adequate solution by keeping track of the customer through the CRM solution.

According to a research made for measuring customer loyalty, loyalty levels are highly depending on keeping promises to customers, providing good quality services and showing concern towards their problems [36].

Also according to another publication "A 2% increase in customer retention has the same effect as decreasing costs by 10%" [37]. So that means even though the business is quite changing and customers are not always willing to work with the company, still there can be quite a cost decrease reached by paying attention to keep some of the customers. Besides according to a research gaining 10% in repeat customers may yield addition about 10% to the company profits [38]. Company X may have set and KPI value for this and look after the change in in numbers after some defined period of time.

Also another important factor is customer identity. During the case study three and four, company representative mentioned customer identity has the least importance among other factor. Even though their main business area is the services, customers are still differentiating from one another. No matter if the customer is only one individual or a whole organization, a better perceived customer identity can yield to better understanding of customer needs.

7.2. CRM Strategy

During the case studies, I have asked questions about how the company reaches out the customer. It seems that they mainly use the up to date tools to communicate yet due to limitations I couldn't get a strict answer about what are the main touch points for communication. Even though, I couldn't learn exact ways, it is quite clear that e-mail, phone calls, service and sales employees are the main touch points.

Before the CRM implementation company was having trouble about keeping records of touch points. After the implementation process, result which are coming from the touch points are enabled to be recorded for each customer. I have been shown how employees are doing this services by the company representative.

By using knowledge of customer's identity and selecting the best way to communicate to the customers H.P. has increase their monthly sales revenue by \$15 million as well as savings of half a million dollars from the e-mail campaigns. Also by reducing the number of calls due to sending product support alerts and e-mails, they reduced nearly additional \$150000 monthly. They have started doing a selective e-mail campaigns according to customer type and their needs about services and products [38].

Comparing a company with this much of scale difference may be not to accurate but this example can give quite a good impression about how much companies can increase efficiency and make financial improvements by using the information from their solutions. Considering they have a huge data of customers provided by state, such campaigns can be done and measured in the defined future time.

Company X is trying keep the customer life cycle in a certain level of quality and time limit. The whole life cycle has not been monitored and measured for an evaluation but I was able to gather information about the part where customer and technician transaction happening and it total takes around 3,5 days to conduct the service, create the records and update all the info necessary about the transaction. This is another issue where Company X should be measuring the actual values to evaluate their efficiency and time costs to conduct and conclude a whole customer life cycle.

Company was storing their customer data first in excel worksheets and then a student project based database and finally in CRM system. According to a research, 75% of the customer information held by most enterprises is inaccurate, out-of-date or ineffective for marketing purposes, 70% of enterprises will spend two to three times too much on hardware and software aspects of marketing solutions, and miss the need for key expenditures on data capture, cleansing and reconciliation [39].

This actually means the more customer data you have the more you are closer to overlook the quality and quantity of the customer data. When entities doesn't use or let the customer data get more and more difficult to reach and differentiate for the marketing and other purposes, they will spend more time and money to get a usable qualitative data. Below you can see an example of available customer data and actual usable data correlates.

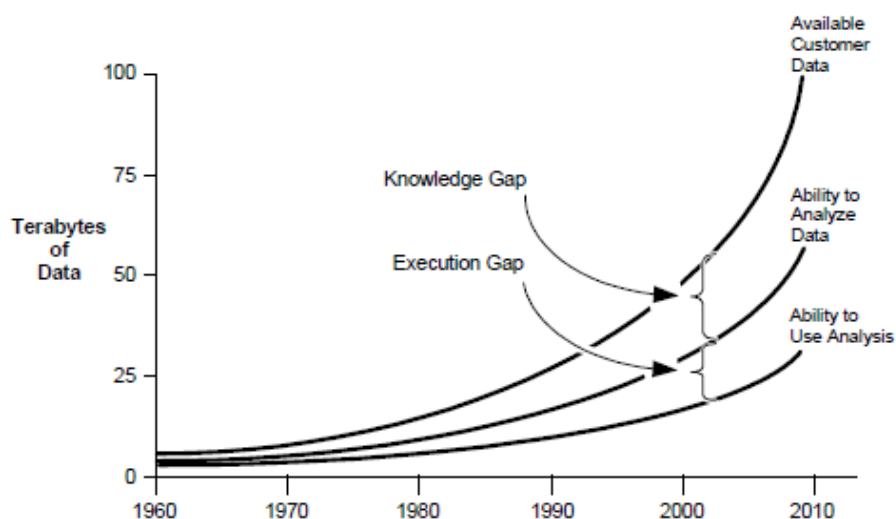


Figure 8: Available and Usable Data Correlation [39]

When it comes to monetary conditions like customer profitability or retention rates, company doesn't exactly calculates the bullet points mentioned in the "Case study – 3 Question 13" but focuses on the efficiency of the of the services they offer. Doing so can be good till some point but after a certain level, when individual spending of customers gets higher, it will be giving them an advantage to differentiate the business and the customers.

Another major point to be mentioned is conducting a research about why customers choose your or leave you, or else why they do business with competitors and why they stop working with competitors. Knowing such factors could help on increasing service quality, offering better prices or learning the strengths and weaknesses of the competitors.

According to information gathered in "Case study – 3 Question 16", company representative has identified the most critical points as:

- Employees and their motivation for new solution
- Creativity from business model and processes creation in CRM
- Timing to switch from old to new solution
- Testing the new solution

Yet if values like "employee motivation levels or process creation time or switching between CRM solutions" are not evaluated as KPI points and measured, for instance it is not possible to say if the company is for example decreased or increased process creation time. If employee motivation levels for adapting into new system or learning the new system are low and this is not monitored and measured, it is likely that Company X won't be able to fully understand employee satisfaction levels.

7.3. Performance of the CRM System

When it comes to important values that may be the core purpose of using a CRM solution, Company X has not yet started to evaluate the such KPI values as; Customer satisfaction level, customer loyalty, customer retention, customer return, employee satisfaction, flawless work processing/ cooperation between employees. They may seem to be not so important while the company does work and keeps earning money yet these factors are

essential to understand the customers and improve or expand their business and relation with them.

According to an information paper it takes about twelve positive contacts to make up for one single problem with the customer in the banking industry [40]. That means customers are really fragile and remember companies more with their mistakes more than their good services.

Also according to another research shown at the “Figure 9”, the 68% of the customers who are not happy with the quality of the service they receive have changed their service providers, among the tested customers 53% said their main reason to change was price.[41] This leads to another important issue, according to that test customers are concerned almost equally about the service quality and the money they paid for that service.

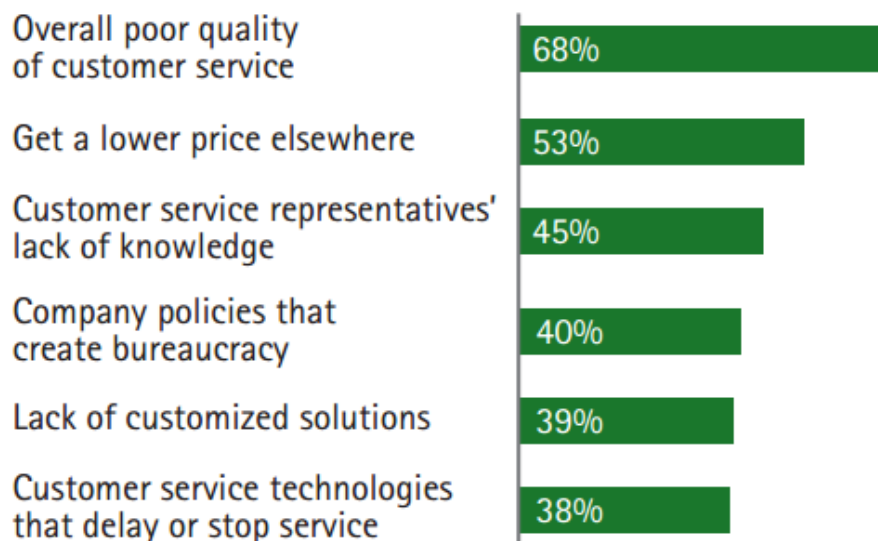


Figure 9: Churn reasons of customers [41]

According to the same research which I mentioned above customers base is described in three main value groups and their generated profits were described in a graph. According to the graph 30% of the customers were named as “value destroying”, 50% were named as “value neutral”, and 20% were named as “value driving”. The “value driving” %20 percent has created the net 80% of the company profit[41]. That means knowing the customer, making them do more

business with you may yield greater results than companies can imagine. Below you can see the mentioned graph.

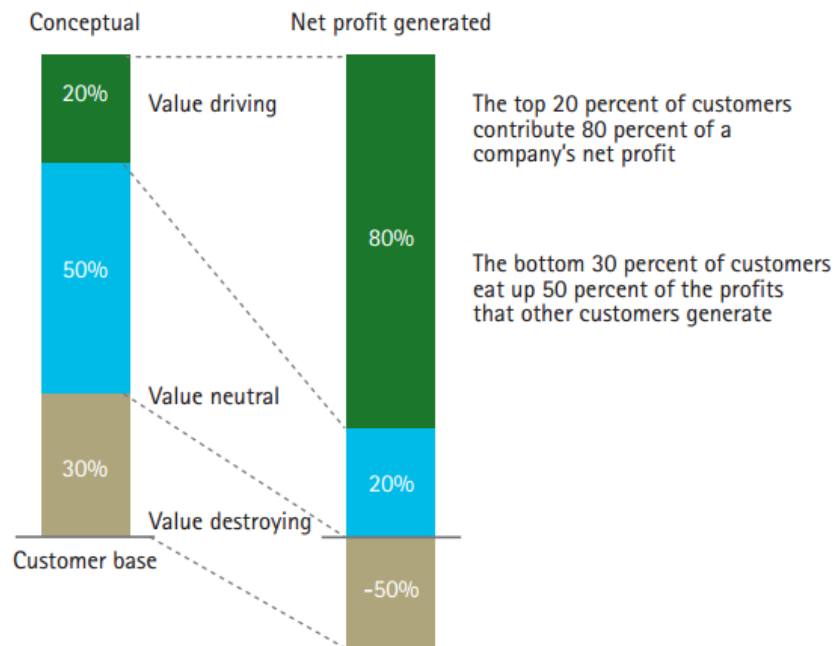


Figure 10: Impact of customer value on net profits [41]

Company monitors the employee activities and regularly have conversation and feedback about their efficiency. This is important to keep the employees careful and do their jobs paying more attention towards it. For some departments like sales they have some commission system if they reach the limits set by the management. This can really help to motivate the workers in direct contact with the customer and their services. As a result of this company may lose some profit but in long run, they can retain customers which will result back as increase in revenues.

7.4. Related Questions

During the interview first point that got into my attention was the implementation costs. Due to the restrictions I was only able to gather a percentile information showing the costs of the implementation. I decided to look for some information which can confirm if the company has done the same expenses as it would be expected to be seen by any other company. Below you can see the table for implementation costs in percentile given by the company representative.

Table 9: Implementation Costs Ratio

| Cost Points | Costs in percentile |
|---|---------------------|
| License | +++++ |
| Hardware | ++ |
| Database | + |
| Implementation/Migration of previous data | + |
| Maintenance | + |
| Support service | + |
| Implementation Specialist | ++ |
| Tools | 0 |
| End - user trainings | + |

According to the research *"In a typical CRM implementation, 28% of the total cost goes to buying software, and 38% of the cost goes to services such as software customizations, application integration and training, according to Wendy Close, a research director at Gartner in Stamford, Conn. Hardware makes up 23% of the cost, while telecommunications expenses make up the remaining 11%."*[38]. That means companies should identify their targets and strategy before the start of the such complex processes like CRM implementation considering the prices and the time spent to get accustomed to system.

Company X representative said they will be hiring new staff for their company but they haven't checked such cost – benefit points like “cost of a salesperson, telemarketer or account manager due to increased work load on CRM system”. Even though hiring a personnel is not directly linked with CRM system, the reason of hiring such personnel is customer and keeping their satisfaction levels high so that company can keep or increase their business.

According the case studies three and four, Company X representative said they don't have standard time limits for trainings of the new hires. Depending on the position and education level of the employee, it can take couple of months to a year. Yet, arranging instructions for trainings of different personnel can reduce the time spent on training the new hires. Getting a recently hired employee integrated to work flow reduces the work load on other employees, and saving time is actually means money to the company because they won't be paying the employee and not getting any return. This is also another matter the Company X should arrange a system and also measure a performance level about trainings and adaptation to work of the new employees.

The company uses their premise business solutions integrated to each other to keep their systems integrated and work together. For instance the Document Management System (DMS) is a great tool to save money and time and actual workspace. Saving all customer data in a hard drive in the system can save a lot of money from cutting usage of paper and printing tools. Besides since all the documents that are entered to system will be tagged according to customer ID. So that, end users can reach the desired data more accurately.

According to research, in United States, companies receives around 100 important files needed to be filed. An average employee spends 6 minutes to manually fill the files, meaning 600 minutes of work is spend. Ten working hours multiplied by 15 United States Dollar, average per hour cost of an employee (inclusive of benefits and burdens) makes 150 dollars a day. Given in research, an employee works 250days a year. That makes 37500 dollars [42]. These numbers were given according to the socioeconomic values of the United States of America but it is quite clear to visualize how much money and time are wasted into storing physical copies of paper bills and documents. Besides lost documents may cause crisis sometimes when there is a

problem with customer information. Using such online and digital documentation systems with proper back up techniques can be highly beneficial.

7.5. Evaluation of Findings

As I have mentioned in “Chapter 2.4”, there are many factors that can lead to success or failure of CRM systems. I will conduct a small performance evaluation of findings according to those points and my observations throughout this case study.

Each bullet point will be valued with “one point” out of total number of 12 bullet points. In case of a bullet point having a sub chapters, points will be shared equally among them.

If they are failing on one of the failure factors, it yields a negative point. If they don't have such problem, it yields a positive point.

In success factors; if they achieve one of the factors, it yields one point. Otherwise, it means a negative point.

After calculating the total points I will be describing and evaluating the result.

FAILURE FACTORS

1. Strategic Problems

a. Strategy first, implementing later(+0,5)

Company X was having a strategy about mainly focused on customer and its related factors. From this point they have successfully transferred their customer base form one system to another.

b. Not having long term strategy(-0,5)

Company X may have long strategy on customers but they haven't seem to have set measuring points and plans to evaluate these strategies on a long run.

2. Organizational and Management Problems

a. Communication problems between IT team and entities(+0,25)

According to our interview, they don't have such problems with IT team during and after implementation.

b. Not having a project manager (+0,25)

As the company representative explained, they have gone through the implementation with the help of an expert coordinating with their project manager.

c. Support of the employees (+0,25)

According to the interviews, company X uses the support of the employees to improve the quality of the system.

d. Prioritizing technology before people(+0,25)

As I have realized from the interviews, Company X give importance to the human factor and not straight focuses to the technological solutions.

3. Customer Processing Problems

a. Not knowing the customer relationship concept(+0,33)

Company X's main reason to pass through a CRM solution was to increase their relationship with their customers.

b. Mixing customer interaction with stalking(+0,33)

As the company representative mentioned, they are not bothering customers with too much of activities. They have four main activities during a year due to the type of their business.

c. Ignoring customer needs(+0,33)

Company X pays attention towards customers' needs throughout the feedbacks of workers but has not done an evaluation precisely on this matter.

4. Project Planning Problems

a. Not setting control points within the projects(+0,5)

Company X seems to have handled arranging the roles and responsibilities of the employees during and after the implementation.

b. Cost Controlling(-0,5)

According to my observations of the company representative's comments, they haven't set strict financial evolution metrics about implementation process. On the other hand they seem to have handled the implementation steps well and working.

5. Technology Problems(+1)

Their other business solutions are working integrated well with their CRM solution.

SUCCESS FACTORS OF CRM SYSTEMS

6. Establishing Measurable Business Goals(- 1)

As it is mentioned in the "Chapter 2.4.2", company X doesn't have such values or KPI points to measure their benefits coming from the CRM solution.

7. Align Your Business and Your Information Technology Operations(+1)

According to our interviews, I was able to see that their I.T. solutions are working quite well within their business area.

8. Top Management Support(+0,5)

As I have observed from the interviews, Company X's top management is paying attention to support of the employees to use the system efficiently. Yet, since they haven't had set some complex KPI values, which can be seen at "Case study – 3 Q: 18", I believe there is still somethings to be done from the Top Management itself too.

9. Using Experienced Consultants(+1)

According to our interviews, they have worked in cooperation with an expert from the CRM vendor.

10. Using End User Feedback at Design Stage(+1)

According to our interviews, Company X has been using the employee feedback about their CRM solution

11. End-user Training(+1)

Company X is giving necessary training to new employees and existing ones.

12. Measure, Monitor, and Track(-1)

According to the results, Company X is aware of the concept of the CRM system but they are still lacking on measuring the direct and indirect financial aspects of CRM system implementation.

According to the results, from the two main titles of “Success Factors and Failure Factors”, Company X have achieved total 6 points out of 12. As it can be seen from the results, Company X is working well on usage of technology, paying attention towards their employees and gave importance to the implementation process.

On the other hand, they haven’t started their CRM implementation journey by setting measurable KPI values which can give them ideas about the insights of customer behavior, financial efficiency of CRM solution, and insights about customer financial decisions and the costs & benefits they bring to the company.

From the results of the research it is safe to say, Company X is on right track when it comes to use the CRM solution and some of its benefits, especially in technological aspects. Yet, Company X has much to discover, use and archive to increase their business levels and the CRM solution effectiveness.

8. CONCLUSION

Customer Relationship Management has gained importance as the notion of the customer and their behaviors changes continuously. By using the CRM systems, companies aim to understand customer behaviors, manage their interactions with customers, evaluate their relationship with the customers and look for ways to improve their business. Besides, by using the tools of CRM systems companies are able to use their systems to review and measure financial benefits and losses.

In the first part of the thesis, Customer Relationship Management were explained theoretically to be a guide to the case study. The meaning and concept of these systems, where and how it is used, why it fails and becomes successful were explained to provide a general knowledge to the reader.

When it comes to the work done in this case study; the first case was to understand the conditions of the company. Then further interviews made for the clear out why Company X passed through a CRM solution and what was the reason to do so. In the last two conducted case study steps, the main evaluation of the CRM system were conducted regarding the conditions of the “Methodology” chapter.

According to the information collected and the evaluation, it is clear that company X’s main reason to pass through an integrated CRM system was organizing the customer information and through that, expanding and increasing the business and its quality.

From the interview, I was able to see they are giving importance on efficiency and the quality of the services that they are offering. They seem to use mostly tools and services which are mainly focused on customer and their transactions, and reporting tools that may be used by management to analyze the business.

When it comes to evaluate financial KPI points that can be measured and evaluated through their CRM solution, Company X has not done such applications. As I have mentioned some financial facts during the “Chapter 7”, CRM can clear out many financial aspect related to customer, their behaviors, and their decisions which can affect the company in financial matters.

8.1. Findings of the Case Studies

From the case study steps, I was able to find out these points:

- When companies work in “Business to Business” area, they want to have the all information about the customers and in the most organized way.
- Company X doesn’t believe so much that “Customer Loyalty”, “Customer identity” or “Customer Retention” is crucial in their business field due to often changing regulations and customer behaviors.
- One of the most important benefit of using a CRM solution is that the information of the customers in database can be accessible all the time. This means if an account manager leaves the company, the new hired account manager won’t need to work through customer database. All information regarding each individual customer will be selectively stored for further use.
- CRM solutions allows companies to profile their customers efficiently, so that companies can react to customers according to each customers’ interaction history.
- If companies set out their benefit points correctly and beforehand, CRM solutions can be a good tool to measure returns in terms of both time and monetary values.
- CRM is an important tool to measure employee activity levels and see how they are processing with the customer and customer information.
- CRM is a good solution to organize and synchronize the work flow with the field and back office employees.
- Data management is gaining important with the usage of solutions like CRM. Having the data and usability of it, is an important factor to make better business.

8.2. Further Research Points

In this thesis, I have tried to visualize an analysis to a CRM solution and its usage by a company. However there are still some points that can be investigated and evaluated for gaining more benefits and insight from the CRM systems. Below some of them are listed:

- Further research of customer retention, loyalty and behavior of Company X
- Reasons of why company loses customers to competitors and what can be done to prevent this from happening

- Setting measurable KPI points for a certain time limit and calculating the financial efficiency and effectiveness of the CRM solution of the Company X
- Evaluation of those KPI points within the company or by using a CRM expert
- Evaluating the usage effectiveness of the customer data and how it effects the company in financial terms

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10. ABBREVIATIONS

CRM: Customer Relationship Management

DMS: Document Management System

H.P.: Hewlett Packard

I.T.: Information Technology

KPI: Key Performance Indicator

MIS: Management Information System

PEST Analysis: Political, Economic, Sociocultural, Technological Analysis

ROI: Return on Investment

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14. APPENDICES

14.1. Question Sheet 1

- 1.** Business field of the company?
- 2.** Reasons of why company started to look for a CRM system?
- 3.** Which type of system did you use? Hardware installation or cloud system? For what reasons you choose your current implementation hardware?
- 4.** In what areas CRM turned out to be most effective? Acquisition, differentiation or expanding to new customers.
- 5.** Which types of communication do you use to contact with customers? How do you keep records of customer info before and after CRM implementation?
- 6.** Did you use some expert / consultant help during the implementation process?
- 7.** What were your main concerns within the financial aspects of CRM system implementation?
- 8.** Have you ever checked your financial improvements?
- 9.** In case of increase in business volume, have you ever done any controlling whether it is from expanding to new customers, differentiating customers or making more sales to your existing customers with the help of CRM?
- 10.** Are you using a feedback loop to increase CRM efficiency?
- 11.** Have you ever done a training program to the end users?

14.2. Question Sheet 2

1. First of all, may I use your company information and name within the thesis? If there may be problem with the data confidentiality, I can manipulate/change some information or hide company name in the final draft of the thesis.
2. Have you ever calculated the costs of one customer to the company?
3. Have you ever checked minimum time required to spend for servicing to the customer?
4. Have you ever checked employee costs per hour per person?
5. Are you using CRM service tools? (E.g.: reporting or marketing)
6. What and how much are the main costs for the whole implementation process?

Some examples of implementation costs are given below.

- Licenses
- Hardware
- Database
- Implementation – Migration of previous data
- Maintenance
- Support service
- Implementation specialist
- Tools
- End-user Trainings

14.3. Question Sheet 3

CRM OBJECTIVES RELATED QUESTIONS

- 1- How would you describe CRM objectives which are related to customers?
- 2- Which one of the objectives given below seems the most important to you? Would you please also put them into order by their importance in the company?
 - a. Customer Loyalty
 - b. Customer Satisfaction
 - c. Customer Retention
- 3- How would you describe CRM objectives which are related to the company?
- 4- Which one of the objectives given below seems the most important to you? Would you please also put them into order by their importance in the company?
 - a. Customer identity (who are they)
 - b. Customer needs
 - c. Expected sales in future

CRM STRATEGY

- 5- In terms of interacting with your customers, who are responsible from contacting the customers and what are “touch points” that you use to contact the customers?
- 6- Which one of these “touch points” important in the company?
 - a. Snail mail, E-mail, Telephone, Service Employees, Sales Persons, public advertisement
 - b. Which of the touch points you use most to contact customers for regular contacts and marketing activities?
- 7- Does the time spent on contacting a customer changed by using touch points after CRM implementation?
- 8- What is the company’s customer strategy? How does it change after CRM implementation?
- 9- How do you identify a potential customer? How does CRM helping you in terms of expanding your targeting new potential customers?

- 10-** How do you proceed the customer life cycle? Does it shorten after CRM implementation? (in terms of approaching, time spent on responding a request of customer, closing a deal or offering prices during dealing process)
- 11-** How do you organize your customer information before and after CRM implementation? Are you digitally archiving your customer information in the CRM system? Do you only archive in digital platforms or still using paper archiving within a storage area?
- 12-** How do you differentiate customers? E.g. according to number of sales, total monetary sum of sales etc.
- 13-** How does the company calculate profitability of the customers? Do any of the factors given below are important for the company? How these numbers change after CRM implementation?
- a. Individual and total Customer Profit Margin
 - b. Average retention rate of customers
 - c. Average time that customer will do business with the firm
- 14-** Are you conducting and strategic plans to differentiate your customers to improve your business (term business here means e.g. sales, long term deals, expanding to new customers)?
- 15-** Are you collecting any information on why customers choose your or leave you, or else why they do business with competitors and why they stop working with competitors?
- 16-** What are the most critical points throughout the development of your CRM system?
- 17-** How integrated your CRM system is regarding the conditions of information flow of the customers and related information before and after CRM system?

PERFORMANCE OF THE CRM SYSTEM

- 18-** How do you give importance/evaluate these criterias in sections given below? Could you please describe what techniques or measuring points are you using to get those values? What kind of tools are you using to enumerate the obtained data? If possible, please write down percentage points of those values with their threshold value.
- a. Organizational
 - i. Profitability of CRM strategy

- ii. Total customer value
- b. Customer
 - i. Customer satisfaction level
 - ii. Customer loyalty
 - iii. Customer retention
 - iv. Customer value
- c. Processing
 - i. Customer Acquisition
 - ii. Customer Retention
 - iii. Customer Expansion
 - iv. Customer Return
- d. Technology of the CRM system which is in use by the company
- e. Human Resources
 - i. Employee Attitude towards the system
 - ii. Overall employee satisfaction
 - iii. Management Approach to system
 - iv. Trainings
 - v. Reward system (if you apply any type of reward system for employees)
- f. Company Culture
 - i. Cooperation level between employees
 - ii. Orientation in marketing, sales and management activities

19- Are you measuring the accuracy and efficiency of the work done by your employees? Do you monitor the employee activities from the system? Do you evaluate employee satisfaction by questionnaires to improve working conditions and system quality?

Related Questions

20- Do number of people working as account manager, marketing expert or database manager change after your CRM implementation? Please mention even it is increase or decrease in each job position.

- 21-** How long it was taking to do an onboarding training to a sales person or front desk operation employee before and after CRM system?
- 22-** Have you measured how many service operations do your technicians do? Have you measured the time on the transportation to customer, service time and communications between company and customer takes in a defined period of time? (defined period of time can be a working day, working month or a year)
- 23-** How do you organize and storage your customer billings and other related information? Are you digitally storing those information or using an actual paper archiving/storage facility/area?