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# THE IMPORTANCE OF DATABASE IN CUSTOMER LIFECYCLE MANAGEMENT

# CASE COMPANY: UPRA Salers

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# ABSTRACT

## THE IMPORTANCE OF DATABASE IN CUSTOMER LIFECYCLE MANAGEMENT CASE: UPRA SALERS

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The purpose of this thesis was to discover and explore the importance of database in customer lifecycle. Nowadays valuable customer retention is one of the principal objectives of the companies. Database is a tool to achieve this goal.

The challenges of the study were to define clearly the concepts in relation with the thesis such as relationship marketing, to clarify a subject that is pretty new and to conceive a tool for companies.

In the first part of the thesis, the principal topics essential to the subject comprehension were discussed. The principal objective of the theoretical part was to confront the different theories concerning the subject.

In the empirical part of the thesis, the theories were compared to the information collected through the semi-structured interview. The objective of this part was to see how a company, with financial limitations, can deal with a database management strategy and to give pieces of advice to the company.

The research revealed that the most important thing is to have a database adapted to the objectives and to the company capabilities. The communication and corporate commitment are also fundamentals to implement an efficient customer relationship management politic.

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## **1. INTRODUCTION**

Over the past few years, the world has evolved and companies with it. The so-called typical customer does not exist anymore. To face this situation, companies have had to change their behaviour to adapt it to that of the customers. Until very recently, companies were only worried about the product or service they delivered and did not take into consideration their potential customers. Their objective was not to satisfy their clients but to sell as many products as they could thus all their organization was product orientated.

Nowadays, companies are obliged to be more customer orientated if they want to survive and prosper in the present competitive environment. The only exceptions are companies that are able to propose a revolutionary product like for instance high technology products. However, these companies represent only a few percent of the total number. In fact, only companies with no direct competitors can survive if they are not customer orientated.

So, to face competition, companies have to interact more with their customers and that is why, they develop customer relationship management strategies aimed at getting even closer to their clients. In this way, companies can manage customer life cycle with the final objective of retaining valuable customers This new philosophy has redefined the structures of the companies. As they become more customer orientated, they need to know more about their customers and are therefore confronted with large amount of data. But it is physically and humanly impossible to register all the pieces of information they acquire when interacting with customers. Thus, companies have to find a solution to deal with all this data. The solution is to build a database accessible by all those responsible. The database is used by managers as a tool for customer relationship management. And this is the subject focused on in this thesis.

The first part of the thesis will make clearer the concept of customer relationship management. The second part will explain how to use databases as tools for businesses. In another part the portrait of customer life cycle will be raised. Before considering these subjects, a brief introduction of the case company will be drawn up.

# 2. CASE COMPANY

#### 2.1. The Mission of UPRA Salers

UPRA Salers was created to bring together all the partners acting for the improvement and promotion of the Salers' breed of cattle on a national level. It is a young association created in June 1992, at the present time it has 8 employees.

The association interacts as a coordinator and promoter within the sector and defines the norm of the breed. It organises and participates in several promotional events in France and the rest of the world through the year.

The association interacts at different levels. It has relationships with governmental or non governmental organisations, the general public and with cattle-breeders who are effectively managers of companies with one or two employees. This is why a special status is given to the interactions between the UPRA Salers and the cattle-breeders who comprise the association and who pay fees to become members and to benefit from the advantages of membership.

The primary advantage is firstly the inscription of the animals corresponding to the breed standards into the national HerdBook. This makes it easier for the cattlebreeder to sell their animals as they are nationally recognised.

Another major advantage is participation in the auction sale of the young male breeders during the month of April. This is a major event and an opportunity for cattle-breeders to export their animals and to gain a good reputation. Membership also offers the possibility to participate to shows. For the association, these shows are a source of revenues. During them it is selling derivate products (such as books, clothes, pens and posters).

#### 2.2. Brief Description of The Salers' breed

#### 2.2.1. The Legend and History of the Salers

According to the legend, one day God was sitting with Saint Peter on a cloud contemplating the volcano of Cantal, (a mountainous region of central France). The volcano erupted and God found that the string of fireballs, coming out of the volcano, were magnificent. Saint Peter said suddenly that it was unfortunate that there would be no more fireballs when the volcano eruption finished. After a time of reflection God said, that from the fireballs he would create cows. They would live in these mountains and eat the grass he would make grow. Then God created the inhabitants of the Auvergne to take care of these cows that would be named Salers.

In the reality, the breed has existed at least since Pline (the roman author -23 after JC). Its origins can even been seen in the drawings of the Lascaux'cave. And some of the paintings represent cows with the same characteristics as the Salers of today. Officially, it was only in 1850, with Tyssandier d'Escous, that the breed took its name and acquired its definitive characteristics. A few years later, the first show was organised and the Herd Book was created. In the 1960, mechanization almost caused the extinction of the breed but it has recovered and nowadays the breed is present on all five continents in 25 countries. This success is due to its qualities in phase with our world.

#### 2.2.2. Characteristics of The Salers

The Salers cow has a curled fur of mahogany colour though some individuals are black. Its horns have the form of a lira with black extremities.

Salers is able to resist to a wide range of temperatures and this rusticity is an important asset when the cows are destined to be exported to countries where conditions of living are extreme like in Russia for instance.

Another asset of the race is its maternal characteristic. The breed has one of the highest levels of fecundity and facility to give birth. This is important as nowadays the cattle-breeders have more and more cows and less and less time for taking care of their livestock. They also have a considerable longevity.

In terms of productivity, each cow will give birth to a calf each year. The breed is suitable for both meat production and milk production so that both categories of cattle-breeder are interested in this breed. In fact, the meat is of the highest quality and the cows can produce a large quantity of high quality milk. It explains why this breed is qualified as mixed.

These are the reasons why this breed has been able to meet and overcome the problems it has been confronted with and is now present in 25 countries like for instance Australia or Denmark. In France in 2000, 204 683 cows were registered. Of this total 100 000 are in the department of the Cantal which is the cradle of the breed. The cattle-breeders often adopt it for its profitability and ease of breeding and then they fall in love with it for its beauty and its gentleness.

# 3. CUSTOMER RELATIONSHIP MANAGEMENT

#### 3.1. Definition of a Relationship

According to Blois (1997, 53) an activity of relationship can only exist if it takes place between two individuals. That is why even in a B2B situation, the relationship activity will not take place between the two companies but between the seller and the buyer. The notion of individuality even within a company is very important. Barnes and Howlett (1998, 16) added the notion of mutual perception and acknowledgement by both parties not only by the firm but also by the consumer himself. Therefore, they concluded that a simple occasional contact cannot be consider as a relationship because a relationship is recognised as having a special status.

So a company cannot have a relationship activity if the customers have no wish to enter into it. Therefore, companies seriously have to consider any modification they want to make concerning the way employees communicate with consumers as these employees are the link between the company and their customers.

Different types of relationships can be defined. In fact, there are an important number of variation factors influencing a relationship like for instance the company and the customers themselves. However, all relationships are based on fundamental criteria such as trust and commitment.

#### **3.2.** The Different Types of Relationships

If we consider the views of Coulter and Ligas (2004, 485) ,four types of relationships can be identified :

- Professional relationships
- Casual acquaintances
- Personal acquaintances
- Friendships

Emotional attachment, personal conversations and socializing outside of the service encounter are the criteria of this classification

Emotional attachment has been defined by Fournier (1998, 343) as the customer's need to belong to a group. That is to say that the level of emotional attachment of a customer will be evaluated according to his desire to be part of the company. The stronger this feeling is, the deeper the relationship with the customer will be. This is an irrational factor.

Crosby, Evans.& Cowles (1990, 68-81) said that personal conversations is characterized by the fact that a customer is confident enough in a firm to ask it for advice. This notion means an important level of personalization is implied in the relationship to reach a better relationship with its customer.

Liljander and Strandvik (1995, 141-167) and Price and Arnould, (1999, 38-56) define socializing outside the service encounter as having informal and more personal contacts. It could be for instance having a dinner with a customer where talking about business is not the only subject of conversation.

If a customer feels that these three factors are strong in his relationship with the concerned company, his relationship will tend towards the friendship type. To reach the friendship level in a relationship the company must make a considerable investment in both money and also in human resources.

These relations between these factors and the depth of in the relationships can be expressed by the following figure.

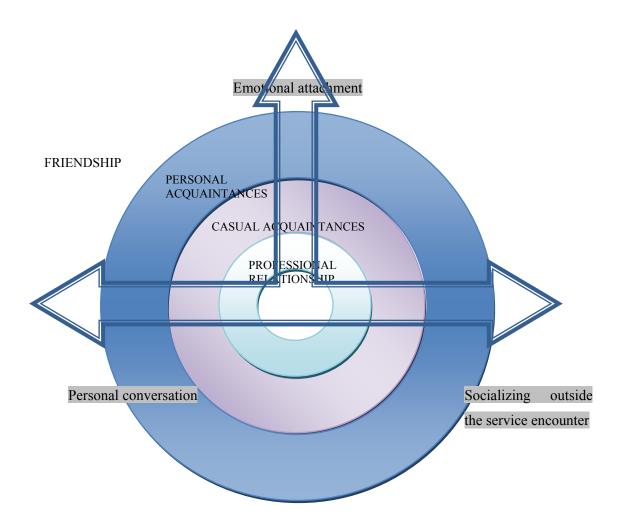


Figure 1 : The various types of relationships and their factors of influence (the author)

Relationships can also be distinguished according to the parts who are implied and not only according to their degree of deepness and implication of the parties. In this case, two major categories of relationships can be identified : B2B relationships and B2C relationships. The B2B relationships category includes, for instance, buyerseller relationships or retailer-supplier relationships. This category of relationships differs from B2C consumers in that it is almost entirely based on reason and rationality. On the contrary, in relationships in B2C situations, the customers are more sensitive than companies to emotions and feelings even if companies are managed by individuals. The focus is not on this type of distinction as the subject of this thesis is consumers life cycle and it does not cover the business to business circle.

## 3.3. The Concept of Relationship Marketing

Over the past few years, companies' attitudes towards their customers have evolved. They have become more customer-orientated than product orientated. So the relationships between the companies and their clients have become even more important. This evolution has lead to the introduction of the expression of relationship marketing (RM).

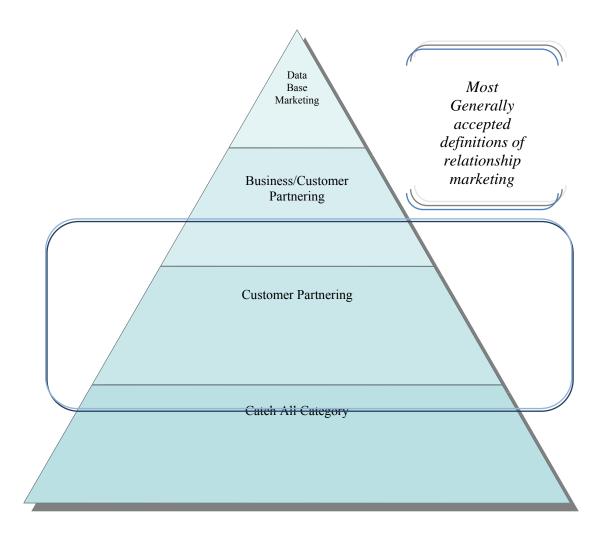
According to Gummesson et al., (1997, 11) RM is a new term, but it represents an old phenomenon that firms are only recently becoming aware of. No general definition has been accepted so there are at the present time as many definitions as there are theorists. Other writers have placed relationships within a broader perspective. For example, Webster (1992, 1-19) viewed marketing relationships as a component of a strategic marketing continuum beginning with one-off transactions and ending with vertical integration. Grönroos (1994, 9-29) on the contrary, defined the concept of marketing strategy continuum from transaction cost marketing to relationship marketing.

If the phenomenon of marketing relationship is considered, it can be said that a relationship marketing philosophy has as its principal objective the retention of valuable customers. For a company it implies being in continuous contact with its customers. It is focused on providing value to the customer on a long time scale and thus developing good customer service that satisfy his expectations.

Relationship marketing has four levels of application:

- Database marketing. At this level, relationship marketing is considered to be a technology-based tool to facilitate the acquisition and management of customers. Database marketing is the process of collecting data concerning customers to build a profitable individual relationship with each customer. It is used to increase marketing results.

- Business/customer partnering. At this level the company focuses on customer retention. According to Dunn and Thomas (1994, 7) it is a collaborative and relationship oriented way to sell since buyer and seller partner with each other and are looking in the same direction. The customer is at this stage involved in the production or service being offered.
  - Catch-all category. This level concerns all relational concepts from databases to loyalty programmes.



Breadth of relationship definition

Figure 2: Relationship marketing definitions. (Egan 2004, 8)

## 3.4. Definition and Objectives of Customer Relationship Management

Kotorov (2003, 2) has written that customer relationship management is a corporate level project and that the involvement and commitment of the managers is important for its success. The notion of corporate involvement is important so that companies can know every aspects of its customers, from the products they are interested in to the payment method. He added that it was important not to confuse CRM with a technology solution used to facilitate a marketing function where sales-force automation, campaign automation and so on were the objectives of these software programmes. These elements are just components of CRM strategy and are not a strategy in themselves.

Crosby (2002, 1) remarks that buying software as a technology solution to implement CRM was almost always a failure. Because these companies were taking no measures to set up a real business strategy focused on the customer.

Dyché (2006, 4) defines the customer relationship management as the infrastructure that permits the delineation of an increase in customer value as well as a more adapted way to motivate valuable customers to remain loyal and to buy again. So he supports Crosby who before him already mentioned that the objective is to build a long-term relationship with customers. The definition proposed by Dyché is relevant as it also suggests the corporate dimension of CRM.

An objective of CRM is to simplify the relations between the customers and the company and to register their behaviours. But the primary reason for a company to adopt CRM is to improve revenues by improving the relations customers have with the company in the long-term. To achieve this CRM strategy implementation requires a lot of financial investments. A strategic change in a company is an important decision that has to been taken carefully. The degree of complexity will vary according to the CRM strategy defined by the company. CRM is complex and

can vary a lot from one organisation to another one. The complexity of CRM relies on two main parameters: the quantity of functions and the range of usage the company wants to achieve. So must be clearly defined by the companies.

Dyché (2006, 165) created the following figure to express CRM complexity degrees according to these two factors of influence: the quantity of functions and the range of usage.

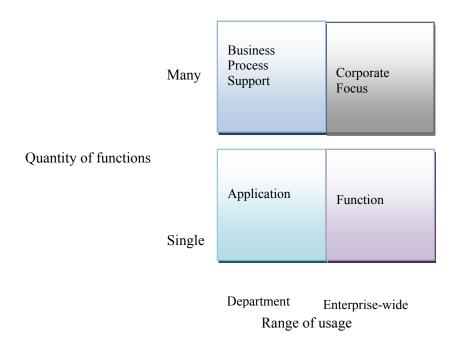


Figure 3 : Estimating CRM complexity (Dyché 2006, 165)

According to this figure, the simplest level of CRM complexity is "application". This word is used when CRM will be applied to a single department and to a single function. The most complex degree is applied in the case where many functions of the whole company will be affected by CRM. This level is called "Corporate asset focus".

## 3.5. Building Customer Relationships

A Relationship cannot be built overnight; it evolves over a long period. The customer relationship will pass through different stages and this evolution takes time. It takes

far longer to improve the relationship between the customer and the company than to degrade it. So the company has to be patient and to avoid mistakes. Even if the customer's tolerance is evolving as the time is passing.

# 3.5.1. Phases in Building Customer Relationships and Business Environment

Dwyer, Schurr & Oh. (1987, 15) identified five phases of evolution of the customer relationship.

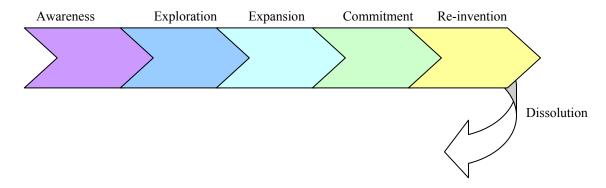


Figure 4: Evolution of relationships (Egan 2004, 139)

The first step in any relationship is awareness. At this step of a relationship, the firm or the potential customer is becoming aware of the existence of the other party. A potential consumer can become aware of a company through an advertising campaign for instance. A company can go through this step by, for example making a market research.

Egan calls the second step exploration. During this period, both parties are exploring the advantages and disadvantages the relationship is bringing them, at the present time and might bring in the future. This phase is crucial as it is here when parties will decide whether to pursue their relationship. It is the most sensitive phase as it is the first time that the parties will judge if the other one is living up to its promises, both implicit and explicit.

Expansion is the first step in the relationship's development. Within the company the status of the customer is getting more and more important and the company is becoming more and more important in the life of the customer.

The commitment step is reached when the relationship between both parties is deep and a feeling of trust is consolidating it. There is a mutual commitment between the two parties involved.

Like all relationships, customer relationships need to be re-invented. Both parties are continuously assessing the relationship. They evaluate if it has been profitable and if it can still be. This phase will lead either to the continuity of the relation or to the dissolution of it.

Dissolution can happen at any time in a relationship but in his representation, Egan puts it at the end of the evolution as his aim was to show how far a relationship can evolve.

The existence of these different phases reveals a "prospect hierarchy" which is nowadays used by most relational and database managers. The objective of this "prospect hierarchy" is to segment the business environment against what can be called the "relationship proneness" variable. Different segmentations can be made with more or less levels. But the following scheme has been made according to the previous criteria. (Egan 2004, 268)

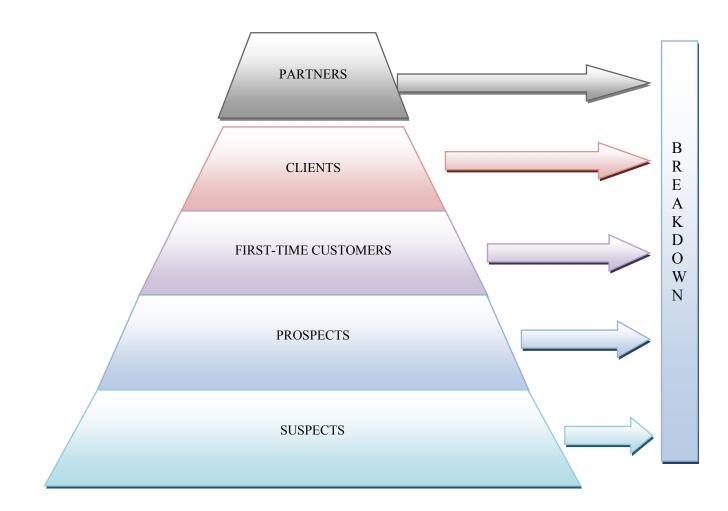


Figure 5: Prospect Hierarchy (adapted from Egan 2004, 268)

#### Suspect

Everyone can be considered to be a suspect. The individuality of a suspect is that he has no individuality. In fact, "not everyone with hair and skin is your prospect (hair is optional)". (Witter, 23/01/2008)

A suspect has a need but is not yet aware of it. It is not known if he has the authority, the ability or the resources to pay for the product or if he wants to hear anything about the company and its products. In fact, nothing is known about this person.

He is just a name in a list, so that a telephone directory can be considered as a suspect database. Similarly, demographic or lifestyle analysis can provide a list of suspects.

In the case of a corporate database, a suspect list would only consist of a list of company names with no contact name indicated. The name of the employee of the company to be referred to is not known.

#### Prospect

A prospect is a suspect with whom there has been contact. This contact can have been made either by the company or the suspect. A real prospect is one that is showing interest in the company and through the contact the name of the interested person will be known. Even if it is not the person who makes the original contact, a communication process with the company has been established and the goal is now to know the decision-maker, and his level of interest.

A prospect is therefore at a higher level than a suspect. But different levels of prospects can be defined according to their potential. So there is an existent hierarchy within the prospects.

#### First-time customer

A first time customer has no experience of the product or service offered by the company. Therefore the customer is in a phase of research and trial and it is at this stage that the customer is creating his opinion by considering obligations, benefits and burdens. The customer's opinion will also depend on the other stages he has gone through before.

#### Client

A client has already experienced the product or service the company offers. At this stage, the benefits obtained by both parties and their degree of interdependency are increasing at the same time.

According to Kotler's theory, the company aim is to convert customers into "clients". As defined by Egan (2004, 66), the notion of a "clients" implies " a higher status and some form of psychological contract or bond" between the individual and the organisation.

A final stage can be defined where the client is even more involved within the company orientation. In this new step, the client is considered to be a partner.

#### Partner

At this stage there is a continual implicit or explicit relationship between the parties. The partner is considered to be a member of the company and is associated with the strategical decisions of the company.

Two partners are associated because they trust in each other and they have the same objectives or at least are going in the same direction. They also share the same basic values and are ready to cooperate. In the case of partnerships in B2C a legal contract might not be formed but in general there will be considered to be a moral contract.

#### Breakdown

It is very important for the company to keep in mind that disengagement always remains a possibility in any relationship. It can happen at any stage, but, the risk of a potential disengagement varies from one stage to another and is dependent on the tolerance level of the customer. (Egan 2004, 68)

#### 3.5.2. Tolerance and breakdown

Relationship duration has a direct influence on the dissolution of a relationship but this influence cannot be considered as being directly proportional to the relationship duration. In fact, it is clear that at the beginning of the relationship, there is a "honeymoon period". At this stage of the relationship, even critical problems are tolerated. But this period is short and in times, the high level of tolerance drop to a low point. After that, the tolerance level will increase progressively over the time.

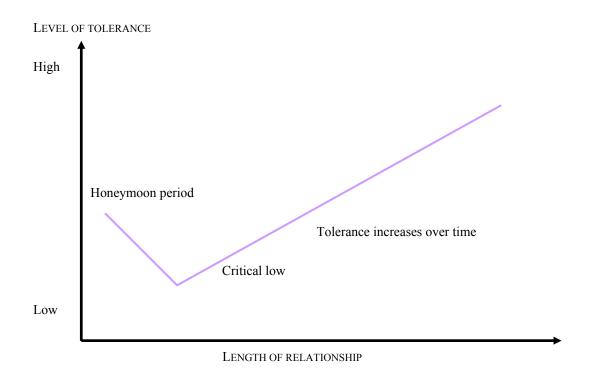


Figure 6: Tolerance of critical negative incidents (Egan 2004, 139)

However a high level of tolerance does not mean that a breakdown will not happen, it is just that the risk of breakdown is reduced.

Three types of breakdown can be defined:

- Dissolution. It is suggested that the breakdown is made by mutual agreement. This type of separation occurs usually in business-to-business relationships. The notion of mutual agreement does not exclude the existence of unequal balance of power. Where one of the parties can decide on separation and the other has no choice but to approve.
- Customer exit. This is defined as a "term used to denote the economic phenomenon of a customer ceasing patronage of a particular supplier". In this case, the customer makes the decision and the company has no influence on it once the choice made. The only option for the company is to manage preventive actions. (Stewart, 1998, 235)

- Supplier withdrawal. In this case, it is the company that decides that a separation is necessary. Some customers can be definite "burdens" that make the company lose money. Also it sometimes happens that customer retention can reduce rather than increase the profitability of the company. This option is dangerous and not always affordable.

# 4. DATABASE

Buttle considers that data and information technology are major supporting conditions for CRM implementation and he emphasizes the importance of data quality. In fact, it is his view, that a customer database is the foundation for the execution of CRM strategy. (2004, 47)

Databases assume two functions in business: an operational function (to help to run the business in the everyday life) and an analytical one. For instance the customer database is used in Business to manage database marketing: "using a database to hold and analyse customer information, thereby helping create strategies for marketing." But it is also used in Direct Marketing "to communicate directly to customers so as to attract a direct response". This is why it is so important or a company to develop a coherent and complete database.(Egan 2004, 215)

According to Goldberg & Emerick (1999, 135), a customer database, in a situation of B2C, does not have to be treated like a B2B customer database. In fact, the two markets present major differences like for instance the capture and storage of information electronically. It is easier to manage a long-term customer database in a situation of B2C. One reason for this is because when individuals move information concerning their new address is more accessible than in a case of a company.

Why would customers agree to communicate pieces of information concerning themselves? Kasper et al. (1999, 247) answered that it was less annoying and quicker for the clients if they did not have to repeat their details each time. This response implied that it was only a question of facility and saving of time.

However, nowadays if one considers the lives of consumers, other elements of motivation can arise. One of these elements of motivation is the ability to get information automatically about events of interest. Thus companies do not need to worry about the willingness of customers to participate as they also find advantages in to the management of a database.

#### 4.1. Creation of a Business Database

A database is a structured system with coherent and relevant information linked strongly together. It is representative of the problem to be treated and omits repetition. Therefore, it is important to have first a method of conception for its creation.

From a technical point of view, a database aims to achieve the correlation of information related to the problem the company wants to solve. It is imperative for an efficient functioning of the database to separate the information and the data processing. In fact, the database is a business tool used for a long period of time thus it can help executives to solve several problems. This is why the independence of the information from the system of database management is important.

A system of database management is a software programme which allows interaction with a database with the following objectives:

- To ensure the correlation of data.
- To control the integrity of the database and the management of the authorised modifications.
- To simplify the functioning of the database.
- To make periodical safeguards
- To make possible the sharing of data to allow various applications to access the same database.

A system of database management is composed of 3 levels : a physical, a conceptual and an external level. The physical level concerns the implementation of the data in the database. The conceptual level is the logical representation of the system studied. The external level is the level which defines the right of the users to use or to access the data.

Different steps in the creation and management of a database can be identified.(Paris J.L. 2008)

#### 4.1.1. Data Mining

This is a tool used whatever the type of the System of Database Management. It is totally independent from the programme language and from its physical implementation. According to Tamura et al. (1997, 13), the aim of this tool is to discover useful information existing behind data.

Data mining has two aspects.

Firstly, in Sharp's view, data mining is a necessary step as business processes are today getting more and more complex. Data mining gives a functional view of data relationships. In other word, it is the phase of database creation during which the relations between data are structured.

It is considered by Sharp as a useful tool of CRM strategy and therefore this step of the database conception has to be carried out with a lot of attention. It is an essential step for the success of the database in its future uses. To be done efficiently the organisation has first to define the future functions of the database. (2002, 55)

Even after the creation of the database, data mining will remain essential. In fact, the second function of data mining tools is to uncover interesting trends, correlations or patterns which would have not been possible without it. It is this aspect that was considered by Tamura, Oguchi & Kitsuregawa as being the primary aim of this function and in his view the functional view of data relationships aspect is only a necessary step used to reach the final aim. It is this aspect of data mining that executives are more interested in. This method can be used, for instance, to do a "basket analysis". "Basket analysis" consists of deducing an interrelation so that companies can explain customer behaviour or future trends. For instance, if a customer has bought products A and B will he also buy product C? This particular aspect of data mining will be developed later in this thesis.

Therefore data mining can be considered as both the key element of the database creation and a management tool. Even if executives are more interested in its second aspect, related to its exploitation, they must not put aside its first aspect because the relevance of the second function depends on the proper execution of the rules of the first.

#### 4.1.2. Data Inventory

This step has the objective of constructing a reservoir of information that can be taken into account. In fact, all information is collected and classified.

To know which information is needed, an organisation has to ask itself some questions, for instance: what do we already know about our customers, what do we want to know and where and how can we get this information?

The information can then be collected in two different ways; conversations with responsible persons within the sector and the reading of official documents. Conversations have to be managed in a professional way by preparing pertinent questions and by reacting to each answer by asking why?

Then, the collected information has to be purified. It is important to clarify the cases of polysemy (for instance: does "company" means "enterprise" or "business" and to eliminate synonyms.

The sources of the data are also very important as the relevancy of the information depends on the quality of the source.

Although relevant, the logical representation of data and the use of the SQL language are not the core profession of businessman, I will not talk about it. Engineers are the persons who will deal with this. (Paris 2008)

### 4.1.3. Data Maintenance

After its creation a database can then be exploited. But if a company wants the results to continue to be relevant it needs to maintain the database so it is necessary to upgrade both the system of database management and the information within it. This is not an automatic process and Rundensteiner, Koeller & Zhang. (2000, 58), state that some information can be considered to be autonomous. Thus if there is any change the company may not even notice it.

Also, according to the same author, most commercial databases are not continuously updated. So on the day of the updating, the results from the database exploitation will be relevant and correct but the results will become progressively less so if the company then waits for several months before making another updating.

On the contrary, changes in information related to the company are more likely to be identified and automatically amended in the database.

#### 4.2. Information

#### 4.2.1. What Information

The information needed to create a CRM database will vary depending on the specific business function to be solved. In fact, the different departments of the same company will not regard the database in the same way. The sales department and the engineering department will not expect the same things from this tool but nevertheless each point of view is important. That is why, to obtain an efficient database, it is preferable to combine all the ideas and so all the key customer information is needed.

Buttle adds another dimension to the question "what information". He says that firms have to make the distinction between need-to-know and like-to-know information but he agrees that it is important to take into account all the departments within the company. (2004, 142)

Thus a company can have multiple customer databases which can be linked by the information they have in common (for instance: name, details, product reference...)

The link between all the different customer databases within the same organisation is important and the departments can be considered as independent organisations. In fact, sometimes, departments within the same company have difficulty sharing the information they collect. In fact, information retention within a department occurs frequently because information is a tool to provide a competitive advantage and often a competitive spirit rules a company to the extent that the different departments of the same company can act as independent companies. In that case, a common database can be created to make available and "a complete customer profile to a range of different organisations often means storing data in a centralised, cross-functional database known as a data warehouse". (Dyché 2006, 124).

In many cases, internal data is not sufficient to provide answers to some key business questions. That is why, it can be beneficial to integrate operational CRM data with information from around the company so that the environment of the customers is taken into account as well as the company acts. This could be represented by the following diagram:

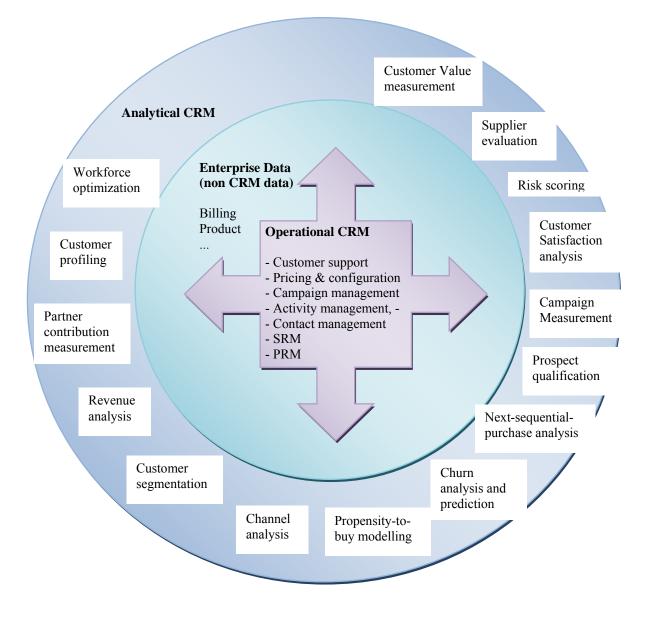


Figure 7: Analytical CRM decomposition (Dyché 2006, 130).

#### **Operational CRM**

According to Buttle (2004, 4) operational CRM is the process "focused on the automation of the customer-facing parts of businesses." This part of CRM often implies the use of CRM software applications to automate the major applications such as marketing automation within operational CRM. Automation is defined by Accoval as the process of applying technology to business processes like marketing, sales-force or service. Thus it often involves database management. In fact, technological tools are used to support the diverse components of the customer

relationship: sales department, marketing and customer service such as call centres (Accoval, 26/01/2008).

## Enterprise Data

This data is internal to the company and some is confidential. This category includes all the information that customers do not have direct interactions with. It is for instance the process of billing or the product composition...

#### Analytical CRM

Analytical CRM involves database use as it "is concerned with exploiting customer data to enhance both customer and company value". (Buttle 2004, 5-9) In fact, the database is an important element used in CRM and in particular at the analytical level. "Analytical CRM analyses data (gathered as part of operational CRM, or from other sources) in an attempt to identify means to enhance a company's relationship with its clients." (JMY L.L.C. dba Manage Customers, 26/01/2008) In conclusion, analytical CRM is the part of CRM that helps managers to take more appropriate decisions through the use of different tools like for instance customer value measurement or revenue analysis.

According to, Xu Y. & co (2002), in all cases companies should use customer information wisely to build a long-term relationship with their customers. Therefore they will try to retain them by making them delighted and building a feeling of trust.

#### 4.2.2. How to get the information

Some information is internal to the company such as information concerning the product, the price... and according to Buttle (2004; 148), internal data is at the origin of most CRM programmes. Internal data can be found in various functional areas of the company like for instance customer service or finance.

The other pieces of information that are needed can be collected during any period of interaction between the company and its customer. These moments of interaction can be called "moments of truth". The greater the quantity of information the company

can collect the better it is as this will allow it to build a more complete customer profile.

The following table demonstrates the major moments of truth that are used as sources of information. direct sales interactions are the major source, which indicates the importance of the role of sellers. And they have to have been taught how to obtain the necessary data and why it is important to do so. They also have to be motivated because if they are not, they will not do a good job at collecting it.

Direct Sales Interactions	60%
E-Mail	50%
Call Centres Interactions	43%
Web Site Visits	40%
Surveys	28%
Focus Groups	28%
Events/Trade Shows	27%

Figure 8 : How customer information is gathered (The Yankee Group 2000)

## 4.2.3. How to use the information efficiently

According to Chaudhuri and Dayal, another thing to consider, in addition to data warehousing, is on-line analytical processing, which is better known under the abbreviation initials OLAP. (1997, 1)

Dyché, agrees on the importance of OLAP and underlines its popularity. According to him, OLAP can be defined as a decision-support analysis allowing executives to explore data online by focusing on different levels of data. (2006, 132)

Sharp also considers OLAP to be a tool with the aim is of allowing executives and analysts to look at data from a different point of view as it gives access to summarized or detailed data. He also adds the concept of "complementarity" between data warehouse and OLAP. The complementarity enhances the data warehouse as it is more efficient and gives faster access to corporate data. (2002, 111)

As indicated in the previous part of the thesis, data mining can give executives valuable information such as customer profitability, customer buyer values or customer behavioural segmentation.

These are three types of data mining which are commonly used by companies :

- > Prediction: to use archived, historical data to determine future behaviour.
- Sequence: to identify combinations of activities that occur in a particular order. This technique is used by companies to find out if a customer is doing something in a particular manner so that it can predict his future behaviour and understand him better.
- Association: to detect groups of similar items or event. It is mostly used by businesses to know if two products, such as chocolates and cakes, are purchased together so that the consumer group can be more easily targeted by understanding customer and product affinities.

There are also other types of decision support analysis but nowadays, "many companies have acquired dedicated data mining servers, onto which they load customer data records [...]. These servers are usually linked to the company's data warehouse". (Dyché, 2006)

But if a database is to be used efficiently, analysis must be translated into action. If the company is not prepared to rely on its database, then it is not ready to build it so that when a company has chosen to build a database it means that it must also has to be ready to change its system of decision-making.

#### 4.3. Control of Efficiency

According to Hayne (1949), from an economic point of view, efficiency is the relationship between "ends" and "means". A situation is considered to be inefficient when the goal could have been achieved using less inputs. Another type of inefficient situation is when the method employed could have produced more of the end result desired. The evaluation of the efficiency of a situation is made in terms of value. Therefore the efficiency of a situation is judged by, the relationship between the value of the ends and the value of the means.

If a company is efficient, it is likely that it will make a profit. Profit is the first goal of any business because without making a profit, a company will not survive. With income and expenses the profitability can be measured.

Thus, according to Hofstrand (2008), if a company wants to measure the profitability level of the implementation of a new database, it will have to compare the income and expenses generated by it. However, the profitability of a new activity, whether it is the implementation of a database or other initiative, will not be constant.

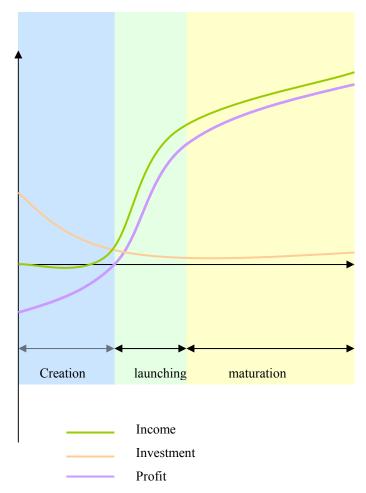


Figure 9 : Profitability of a database through the time.

During the creation phase of the database, a lot of investments need to be made in technological material, human resources, time and money. Thus initially, the organisation willing to implement a database to improve its CRM will invest a substantial amount of money. Therefore, the company will not make a profit from the initiative immediately. As it has to be ready to invest a considerable amount of money, it may have to inform its bank.

During the launching phase, the company does not make any more investments. At the same time, the company starts to use the database which begins to have a positive impact on the company income and the database starts to increase revenues to the company. During this period of time, the profits of the company rise steeply. This phase is critical because, the economic success of the company depends of the decisions the managers take at this time. The decisions must be decided according to the database exploitation.

The maturity stage is characterized by a low stable level of investment for the updating of the database. The income generated by the use of the database remains stable. So the profit level also remains stable provided the company properly manages the updating and upgrading of its database.

If the database is fully utilised, Sharp (2002, 83) said that it can bring good results for the company. Full utilisation of the database means using it to:

- Identify the best prospects and customers
- Tailor products and services to the special needs of targeted customers
- Pattern spotting
- Strengthening customer relationships
- Activating customers
- Avoiding overlapping or ineffective marketing

In conclusion, as it has been said by Sharp (2002, 85), the real value of a data warehouse and its contribution to a CRM strategy will depend on how it impacts on the business users and their decision-making. The principal goal of any database is to provide all the elements necessary to take good decisions in phase with both the interior and exterior environment. Thus a company should create a database only if it plans to use it to the full.

# 5. CUSTOMER LIFE CYCLE

The concept of customer life cycle in the trading area is defined by Wikipedia as the sequence or stages a product or a service will go through. This definition reveals the fact that in trade, the concept of customer life cycle is in fact an adaptation of product life cycle.

## 5.1. Customer Acquisition

Customers are at the base of any business. Customers are the source of revenues and without them, companies cannot survive. Any loss of customers has to be replaced or the company will see its revenues reduce so that nowadays, in the context of competition, companies have become more aware of their customers.

According to Egan the first step in customer life cycle that must be taken into account by companies is the acquisition phase. In his point of view companies were less concentrated on it because in general market growth provided a steady supply of new prospects. But nowadays, the availability of competitors products or alternative products, has changed the way companies consider their customers and they will not always find new customers to compensate their losses. (2004, 58).

But competition is not the only factor that can explain why companies are trying to retain their customers. Companies have realised that acquiring a new customer is more expensive than to secure his loyalty. According to Dyché, the cost of acquiring a customer is six times greater than to retain an already existing customer. (2006, 4). So that now, companies are trying to maximize existing customer relationships by knowing them better and motivating them to stay and CRM strategies are the developing tools used by companies to increase customer value and to motivate the valuable ones to remain loyal.

#### 5.2. Customer Segmentation

Segmentation is the division of the mass group called "customers" into different smaller groups. It is recognised by various academics as one of the fundamental principles of marketing.

Segmentation is used to target the right market. During this step the company becomes familiar with the various components of the different markets (type of

customers, competition...). so it can make better choices. The information concerning the market may sometimes not exist, for the example a company has created a totally new product or is offering a totally new service. It does not know who will be the real customers and initially just can only make assumptions.

When a similar product is launched, data becomes available about the consumers and data analysts are able to associate a product to a precise group of customers. All the customers of this group have something in common: a special characteristic. It can be their age, gender, profession, or other personal criteria. In fact, the determinant of the group can be almost anything in so far as it is a relevant factor in the case study.

Good segmentation of the market is synonymous with a good choice of target and then a good communication campaign adapted to the target. It is important to remember, that the success of a product can depend of the right choice of target. According to Dyché effective segmentation allows companies to focus on a certain market and to adapt their communication to it instead of doing mass customisation and mass communication campaign. (2006, 22)

According to the same author, the better the data concerning the target can be analysed, the more effective the campaign communication would be, creating a "closed-loop effect" illustrated by the following figure.

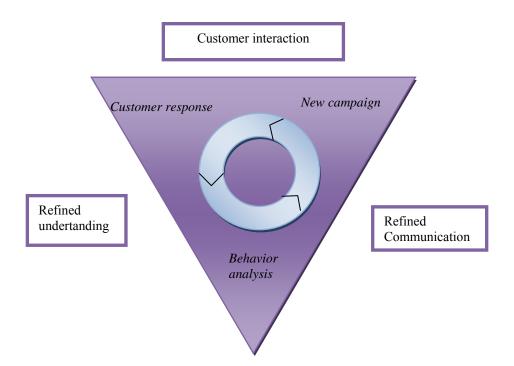


Figure 10: Refining marketing campaigns (Dyché 2006, 25)

This figure demonstrates well the process of segmentation and in particular the importance of behaviour analysis which is the central point of segmentation. In fact, it shows how through behaviour analysis and then a communication refinement, a new campaign can be initiated. Customers will react to this new campaign which will lead to customers' responses to the campaign analysis of the customers' behaviour and another communication refinement thus continuing the cycle.

# 5.3. Customer Satisfaction

Satisfaction is the feeling experienced when a desire or a need has been fulfilled. A satisfied customer is a customer who will tend to remain loyal. Loyalty is often associated with to satisfaction. In fact, according to Bennett and Rundle-Thile, satisfaction is often the end goal. However it is important to make a distinction between contentment and loyalty concepts as satisfaction does not always lead to loyalty. (2004, 1) Bennett and Rundle-Thile (2004, Issue 7) and Bowen and Chen (2001, Issue 5) both introduce this idea of differentiation. In fact they have said that

the relation between satisfaction and loyalty is not "symmetrical". In this thesis the distinction will be acknowledged by dedicating a part to both concepts.

Concerning satisfaction, it can be noted that nowadays even if what customers have asked for has been given to them, it does not mean that they will be satisfied. In fact, customers' expectations and customers' formulated expectations are often distinct. Customers often hope that the company will do more than it has been asked for. That is why, to satisfy customers, companies are looking to have a positive impact on customers' opinions by achieving a "magic moment of truth" of interaction with its customers.

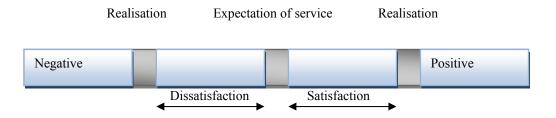


Figure 11: Expectation and realisation of service (Egan 2004, 108)

This representation by Egan of a "satisfaction scale" illustrates well the idea of different satisfaction stages. It also shows that to fulfil the expectations of customers is not to satisfy them. It is actually the point of balance in this satisfaction scale. This idea of satisfaction range is important as Bowen and Chen (2001, Issue 5) said that it is a high level of satisfaction that will lead to loyalty.

#### 5.4. Customer Loyalty

ICLP (a global loyalty marketing agency) defined customer loyalty as the "totality of feelings or attitudes that would incline a customer to consider the repurchase of a particular product, service or brand or to revisit a particular company, shop or website. Customer loyalty has always been critical to business success and profitability." (22/01/08)

According to Javalgi and Moberg (1997, No3), loyalty results from a high level of satisfaction. This level which can be achieved by providing a positive feeling thanks to a better consumer service than provided by competitors. (1997, 165) But the contrary does not always mean defection. In fact loyalty can be caused by the lack of alternatives for instance in the case of a monopoly. Thus the competition environment has to be taken into account in reaching the loyalty stage.

# 5.4.1. Improving customer satisfaction and building customer loyalty

## Improving customer satisfaction

A company can evaluate its customer satisfaction level by using customer retention strategies, customer satisfaction enquiries or behaviour predictions.

Customer retention strategies help companies to identify the customers who might leave so that they can try to set up strategies to keep them.

Customer satisfaction enquiries reflect the opinion and feelings of a sample but can help the company focus on its weakest point and so to improve its customer satisfaction level.

Behaviour predictions help marketing departments determine what customers are likely to do in the future.

These three tools all make use of the database. Thus it is important for a company which wants to satisfy its customers and to gain their loyalty to collect information about them. Thus the company acquires the knowledge of its customers and then uses the information to be more competitive.

To improve the satisfaction level of their customers, companies have to provide them with the product or services needed and/or desired. Nowadays, when companies sell a product or service they sell a complete package with this product or service. In fact, customers now expect more than just the product or service which is why, companies have to pay more attention, for example to the channels and personalisation. There are different types of channel: communication, selling, distribution... and the knowledge at any moment of the preferences of customers in term of channels is important as their preferences evolve.

Dyché defined personalisation as the facility to adapt communication to the consumer's preferences and behaviours. The personalisation is also in the Dyché definition given a time dimension, because according to him personalisation at a certain moment will not be valid at another time. (2006, Chapter 2.3 to 2.6) Customer personalisation can adopt multiple forms. It can be simply the addition of the name of tour interlocutor on the mail you are sending, we talk about tailored message or a personal communication to a specific person.

So, improving the level of customer satisfaction requires the use of the database to get the information needed to personalise or to adapt the channel to the preferences of each customer (see following figure). Nowadays, according to Rosenbloom the new technologies are tools that can be used by companies to reach their targets more efficiently on both a large and small scale. (2004, 451)

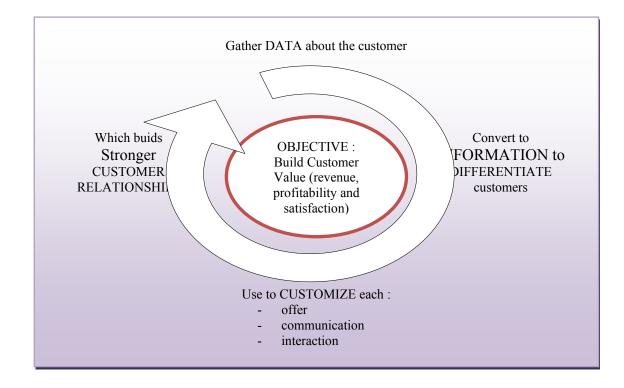


Figure 12: The learning relationship (adapted from the Courtesy theory of Eddie Bauer, Inc)

This figure of Bauer explains the learning process in a relationship. The objective of companies is to build customer value. In this objective companies try as a first step to gather data about the customers they are targeting. This information is analysed to allow the company to be able to segment the market into different customer groups. The information is then used to adapt the offer and to improve communication and ways to interact with customers to help to build stronger customer relationships.

#### Building customer loyalty

Many companies are nowadays proposing loyalty programmes to establish a higher level of customer retention in profitable segments. These loyalty programmes provide increased satisfaction and value to certain customers. Loyalty programmes can include for instance, the creation and distribution of loyalty cards that attract rewards when used.

The interest of building loyalty programmes is that it helps to build lasting relationships with customers, to create higher profits, to gather customer data, to defend market position and to pre-empt competitive activity. There is little doubt that customer data has the potential to be valuable and it is frequently suggested that this value balances out the costs of loyalty schemes which is strong motivation for building customer loyalty.

But, according to O'Malley, loyalty programmes are not a perfect solution for companies wanting to build loyalty and according to him there are sometimes not lucrative and profitable. In fact, loyalty programmes only target customers who are already loyal and do not create new loyal customers. As they are only reinforcing the loyalty of existing loyal customers, they are not a means of building customer loyalty. (1998, 52)

According to Ndubisi (2007, 102) customer loyalty is determined by four variables: trust, commitment, communication and conflict handling. So a company that wants to build customer loyalty has to focus on these four variables. However it is important to understand that, a critical episode is not always synonymous with loosing the customer if the company deals with the situation well.

Trust is defined by Wong and Sohal (2002, 3) as a level of perception between exchange partners. To trust is often related to confidence as to trust is to be confident that your partner will act in a certain way. According to the same authors, customer trust has a positive effect on the quality of the relationship between the two partners.

Commitment is also one of the most important variables influencing the strength of a marketing relationship. According to Mowday, Porter & Steers (1982), the commitment value increases with the value of the relationship. In fact, the benefits received encourage the customers to take part in the relationship in a deeper way.

Communication has been defined by Ndubisi and Wah (2007, Issue 1)as "the ability to provide timely and trustworthy information". In fact communication is the process of an exchange of information between both parties where the information is reliable and can be trusted. It can for instance help to solve problems and fulfil promises.

According to the same authors, conflict handling is the supplier's ability to minimize the incidents which can happen along the relationship. The concept of conflict handling integrates both the will to avoid conflicts but also to solve them.

It is the way how a company will manage these four components which will determine its capacity to build loyalty.

# 5.4.2. Benefits of customer satisfaction and loyalty

To calculate overall customer profitability, a company first has to understand the various costs of its different products, to "roll those products up to the account level and then associate a single customer with multiple accounts and perhaps with a household" (Dyché 2006, 34)

To calculate customer profitability requires a lot of data which is why efficient database management is needed. Customer value measurement is data-intensive. In fact, the conclusions of customer value measurement will be accurate only if it is based on a rich customer database to get as close as possible to the reality.

Despite the cost of doing so in term of money, time and people, customer value measurement helps companies to evaluate the sensitivity of the customers at a given time.

Nowadays companies can also make an estimation of a customer's lifetime value. Similarly, a customer who does not have a high value ,at the moment of the evaluation , can become more valuable for the company in a few months time, so the potential value of a customer can be evaluated. These two concepts can help companies manage their customer life cycles by knowing who are and who will be the more interesting customers.

Then companies can adapt all their communication strategies to offer the right message to the right customer at the right time.

Reichheld and Sasser (1990, 105-111) found that when a company retains just 5 percent more of its customers, profits increase by 25 percent to 125 percent.

Customer loyalty "represents an important basis for developing sustainable competitive advantage" (Dick and Basu, 1994, 99).

Keeping existing customers is considerably less expensive than acquiring new ones. Reichheld and Sasser claimed that only a 5% improvement in customer retention lead to an increase in profitability between 25% and 85%, depending upon the industry sector. Therefore, customer loyalty is directly linked to profitability

A loyal customer means lower costs for the company. The acquisition costs (at the beginning of the relationship) are amortised and the account maintenance costs declines as a percentage of total costs. One reason for this is that loyal customers are more consistent in their buying behaviour.

Another advantage in building customer loyalty is that this type of customers tends to be less inclined to switch, and also tends to be less price sensitive. Satisfaction breeds habits and habits are hard to break so it is less easy for competitors to penetrate the market or to gain market share.

Loyal customers may be a source of new customers by word of mouth

Loyal customers are more likely to purchase add-ons. In fact, companies know the products the customer could be interested in and so it is easier for them to sell more services or products. Thus loyal customers usually buy more.

"In sum, both cost and revenue sides of the profit equation are impacted by customer retention" (Buttle 2004, 18)

## 5.5. Unsatisfied customers

According to Dyché (2006), it is more important to understand why customers have left, but this is even more difficult than knowing who are they. If companies know why customers are leaving, they can work on it and improve their offer.

Therefore, complaints are an important source of information. The "number and nature of complaints give an indication of the quality perception of customers." In fact, if they are well analysed complaints could give important information concerning the failure of the company in its task of customer satisfaction. However only a small percentage of unsatisfied customers will manifest their dissatisfaction by complaining, the company has to make enquiries to know the reasons of their dissatisfaction. (Kasper et al. 1999, 196)

# 6. AIMS, OBJECTIVES AND CONCEPTUAL FRAMEWORK

Nowadays, companies cannot ignore customers and have to take them into account in their global strategy. Thus all actions of successful companies are customer orientated. This customer orientation is also called customer relationship management. More and more companies are adapting themselves to this concept and changing their way of doing business to be more customer orientated and less product orientated.

Database management is one of the key tools of a customer relationship management strategy so the objective of this research is to answer the following questions.

What is customer relationship management and why do companies need it?

How can an appropriate database be build?

How can an appropriate database help companies in their customer life cycle management?

Is the implementation of a database profitable for the case company?

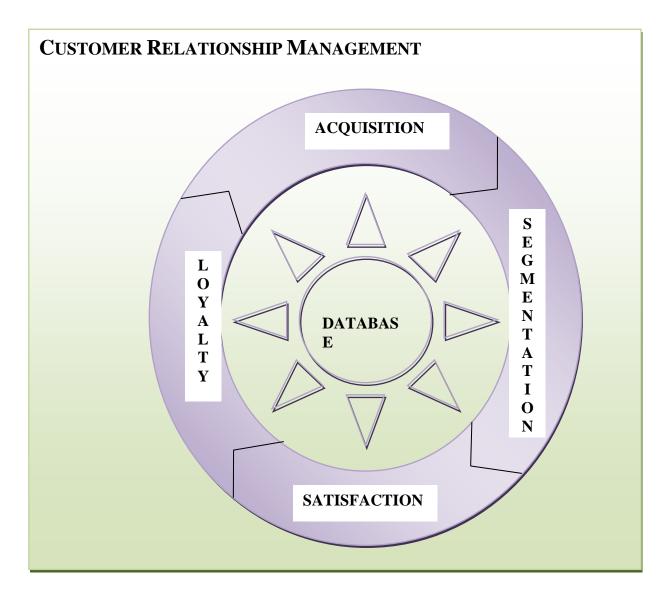


Figure 13: Conceptual Framework : The influence of the database on the customer life cycle.

This conceptual framework illustrates the basic steps of customer life cycle. At the centre is the principal object of the study, the database. It is placed in a sun form because as the study will try to demonstrate, the database has an impact on each step of the customer life cycle management. In fact, it is actually the key element of every customer relationship management strategy. To retain a customer and to secure his loyalty, which is the aim of every organisation, the company has to know him, as if the company was a person.

At the present time, companies develop customer relationship management to retain valuable customers. Thus the company will need the involvement of all the employees from the seller to the secretary through the marketing manager. Customer relationship management is a corporate policy that should be adopt by all the company members. The database is only a tool used in customer relationship management. It is designed to fulfil objectives such as to target a new potential interesting market. Database is a tool which can help managers managing each stage of the customer life cycle whether it is the acquisition or loyalty one.

Thus it is important to understand how a database can be used to customer lifecycle management.

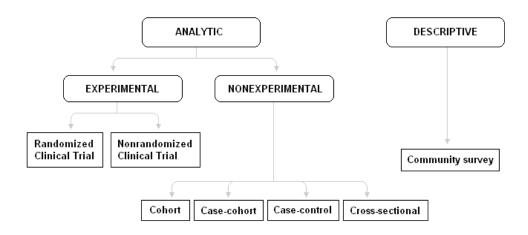
# 7. METHODOLOGY

This chapter describes the methodology used to conduct the study. The different concepts of research design, method, target population and sample, are explained together with the opinions of the author. The questionnaire is analysed according to the theory and to the objectives set out in the thesis. There is an explanation about how the data were gathered and then analysed. In the conclusion, the quality assessment of the study will be set out.

#### 7.1. Research Design

Different types of research design exist but it is generally accepted that there are two major categories : analytic and descriptive studies.

In these two categories, other more specialised designs are regrouped according the following figure.





Analytic design of research consists of the examination of similarities that can exist between various phenomena or behaviours. The objective of this examination is to develop a hypothesis. If no relevant similarities are identified, this may be due to the non-validity of data or to a target population that is too wide and heterogeneous.

Descriptive research design is also known as statistical research. In this type of research design the population studied is described. The objective of the study is to determine the characteristics of the population but the origins of these characteristics are not explained so this type of study is mostly used for frequencies or averages.

Experimental studies aim to analyse the effect of an independent or experimental variable on other relevant variables. In practice, an experiment can be defined as a set of observations performed in order to prove or disprove a particular hypothesis concerning the sample studied.

Non-experimental methods describe behaviour but cannot lead to the identification of the causes and reasons that cause this behaviour. This is contrary to the experimental studies, which allow the researcher to explain the behaviour by manipulating various variables.

A randomised trial is used mainly in clinical studies but is also sometimes used in other sectors such as social research. The fact that this research design type is randomised ensures that factors are evenly distributed between treatment groups. For instance, in doing a satisfaction enquiry, the researcher will choose the population studied according to their characteristics (age for instance).

Cohort studies are also called panel studies. A cohort or panel can be defined as a group of people who have in common the characteristics the researcher is interested in. For instance, all the people who got married in the last year forms a cohort or panel. This type of study can compare the cohort with the general population, or the cohort with another cohort, or it can even compare subgroups within the cohort.

Classical case cohort studies can be defined as the fact to obtain a smaller cohort randomly. We can so oppose them to stratified case-cohort design. "In the stratified design, the smaller cohort is selected by independent Bernoulli sampling with arbitrary selection probabilities." (Bin Nan et al., 2004)

Case-control study design is mainly used in the medical sector where it is employed to identify factors that may be at the origin of a particular medical condition. In this type of study design, the procedure is to compare two groups of people with people who exhibit symptoms of the medical condition in one group and people without the condition in the other group.

Cross-sectional study is defined by the frequency of the characteristic studied within the sample during a given time period. It is used for instance in the medical sector to identify the extent of an illness at a particular moment.

Community survey study is a survey that is carried out a sample to establish for instance, their satisfaction, such as a customer loyalty survey. The objective of this type of design is to better understand the behavioural attitude of a community

To choose the appropriate type of study design, it is important to consider various types of factors. In fact, it may have to be adapted to the objective of the study, to the nature and extent of the information available, to the time period during which the study can be done, to the financial limits... (Wikipedia, http://en.wikipedia.org/wiki/Research\_design)

Taking all these factors into account, it appears that the research design most appropriate to this thesis is the descriptive one and the main objective of the thesis is to describe how, in the company studied, databases can influence the customer lifecycle.

# 7.2. Research Methods

## 7.2.1. Quantitative Methods

Quantitative methods are research methods concerning something that can be expressed in numbers and why the result of the research is a number or a whole group of numbers in relation to the object of the study. The results are often presented in the form of tables and graphics that are more visual and more understandable.

The use of quantitative methods gives a more scientific and in some cases more reliable appearance to the research because mathematics is generally accepted as being a reliable and logical science. (Kaartinen, 2008)

### 7.2.2. Qualitative Methods

The objective of qualitative methods is not to focus on numbers but on the depth of the survey. To gain this depth, different types of techniques exist :

• **Conversation** is the more informal method to gather data. It has to be used when a high degree of trust link the interviewee and the interviewer in order to get in-depth data. This method requires more than one meeting with one to three informants.

- **In-depth interview** forms part of the unstructured techniques as well as conversation. The difference with the precedent method is that the interviewer must direct the interview according to a list of questions, not previously communicated to the informant. Major problem is the difficulty of analysis and comparison of cases.
- Focus interview or semi-directive interview. The informants, in many cases managers, have to follow an interview guide composed by key words, openended questions...but can speak freely. The interviewer will interrupt the informant using probes if the subject of discussion changes. This method is easier to analyze than conversations and in-depth interviews.
- **Group interview or focus group**, as the precedent method, is classified into semi-structured techniques. A group of people is interviewed concerning the subject of interest. No questions are asked and the objective of this technique is to establish the opinions of the group concerning the topic in question. This method is mostly used when the topic to explore is new and has the advantage to underline new ideas or opinions.
- **Open-ended questionnaire** is a structured method that can be carried out through face-to-face; telephone or posted inquiries. The qualitative data collected through this method are "convertible" into quantitative data. Interviewees are free to use their owned words and can furnish data of interest, the interview would have not thought about.
- **Multiple choice questionnaire** is the "classical" method employed to obtain quantitative data. The respondents must choose among predetermined answers so it is the quickest method. However, the researcher must obtained several completed questionnaire to obtain valuable analysis results. (Kaartinen 2008)

In general, quantitative and qualitative methods are often combined. In practice, the use of qualitative methods makes the interpretation of the numbers obtained by the

analysis of quantitative methods easier. Thus when it is possible it is better to use a combination of the two methods.

In this thesis, qualitative methods and in particular, a semi-structured interview is used. In fact, it is difficult to use quantitative research methods because the subject of the thesis is to investigate how a database can influence the customer lifecycle and not to establish the effect of the use of a database on the customer lifecycle.

Another point in favour of qualitative research methods in this thesis is that it is more beneficial to go deeper into the analysis of the subject than to translate it into numbers and statistical data.

Thus, semi-structured interview is used as the research method for this thesis.

## 7.3. Target Population and Sample

The target population is defined as a entire group of people, companies or market that is examined. The sample is a part of the target population but has been chosen according to the study requirements. The validity of the study results depends from the appropriate sample choice.

The target population of the thesis is the case company: UPRA Salers. Important information will be easier to access for the author as she has had a work placement here before.

For the purpose of this study, the non-probability sampling method has been used. The chosen person to be interviewed is the Communication Manager of the association: Sophie Bargy. She is in contact with customers of the association and is the most relevant person in the company to answer these questions. Mrs Bargy is in charge for the events organization, the image of the company and the communication in general.

#### 7.4. Data Gathering

Considering the topic of the thesis subject, it is difficult to find "second-hand data". Second-hand data is information that has already been gathered and used during previous studies. The subject of database used in customer lifecycle management is a new one and just a few companies have already realised surveys about it.

That is why data gathering will only concern primary data. As the reliability of the practical part of this thesis is based on this primary data, the data gathering methods used are important to get primary data of quality.

During the semi-structured interview that will be done, it seems important to take notes during the interview. During the analysis process of the pieces of information it will probably be necessary to make phone calls to clarify some points of the interview, to go deeper into the dialogue and to get missing elements of information. The objective of data gathering is to get all the information necessary to understand how, in the case company, databases impact on the customer lifecycle management.

All information gathered will be first hand and, they will be analysed as soon as possible to avoid losses of information. The interview will be in French as it is the native tongue of the interviewer and interviewee. The questionnaire in French is in the appendix of the thesis.

#### 7.5. Analysing Data

Data analysis methodology has to be defined clearly as the validity of study results will depend on it. Miles & Huberman (1984, 15), explored the question of a method analysis that will draw valid meaning from qualitative data and that will be "practical, communicable, and non-self-deluding". The objective of drawing such a method analysis is to prevent the researcher from making rapid and unfounded conclusions. Miles & Huberman proposed a methodology, applicable for both qualitative and quantitative research, where the data after being collected has to go through four steps : data assembly, data reduction, data display and conclusion. The following figure summarizes their approach to data analysis.

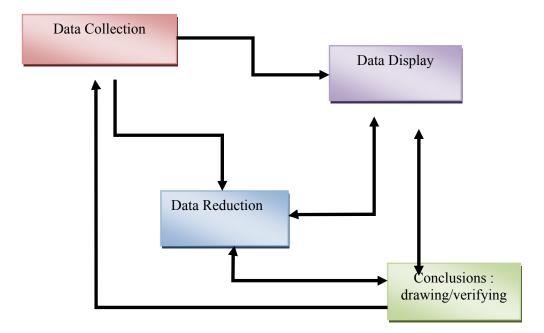


Figure 15 : Methodology of data analysis (adapted from Miles & Huberman, 1984)

# • Data Collection

This phase corresponds to the transcription of the data collected during the interview or meeting. The researcher is at this step checking if he is in possession of all the information needed.

The author of the thesis has taken notes during the interview and made a phone call after awhile to confirm and go deeper in the information already collected.

# • Data reduction

For my case any classification; selection or simplification were made as there was only one interviewee. Moreover, during the semi-structured interview no unnecessary information was collected. The discussion was "direct" as the author and the interviewee already knew each other.

• Data display

This step of the methodology is the more important one. Miles & Huberman were convinced that the validity of qualitative analysis depends on better displays. The role of this step is to assemble and organize information collected and reduced in an immediately accessible, compact form so that it makes easier for the researcher to draw conclusions.

In this study, this step corresponds to the translation and transcription into the author's own words of the information collected during the semi-structured interview .The only difficulty will be in the translation into English as the author is not a native speaker. Otherwise, the information was collected in conformity with the structure of the theoretical part.

#### • Conclusions and data verification

This step consists in an interpretation of the displayed data, which has to be tested by the researcher because the conclusions must be relevant, plausible and verifiable.

The conclusions of the thesis establish the links between the theory and the reality, demonstrating how a company can apply theories without even knowing them. However, in some cases, theory is not always in phase with the reality of a company. This is why the author has written this thesis, so that it can help companies to make their own decisions concerning the creation and exploitation of a database.

This thesis has been designed to be a tool and a support of decision-making.

## 7.6. Quality Assessment of The Study

# 7.6.1. Reliability

Reliability is defined as "the consistency of your measurement, or the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects" (Reliability and Validity : What's the Difference, 2008).

Thus, study results must be considered reliable if there is a repetition in the data collected and their analysis. Reliability cannot be measured it can only be estimated.

Two reliability estimation methods exit: test/retest and internal consistency

The first method consists in checking that the results obtained the first time will remain the same when they are measured in a second time. It is assumed that there is no change in the underlying condition between the two tests.

internal consistency, the second method, estimates reliability by comparing two questionnaires that are supposed to measure the same concept. The comparison will underline a correlation between those two questionnaires to determine if they are reliably measuring the concept studied.

This study can be considered as reliable since the questionnaire and the findings could be applied to other companies of the same size. In fact, the research findings show that it is the size and not the sector of a company that influences its politics of database management. Moreover, the thesis aims at making the managers thinking about their own database management policy so that they are able to ask themselves the good questions.

# 7.6.2. Validity

Cook and Campbell (1979) define the concept of validity as the closer approximation to the truth or falsity of a given statement.

Two types of validity are distinguished: internal validity and external validity.

• *Internal validity* asks if there is a relationship between the empirical and the theoretical parts. It reveals the respect and fulfilment of the objectives of the study. If the research findings respond to the subject of the research, they are considered as internally valid.

The research findings of the thesis are not always in accordance with the theories developed in the first part of the thesis. However, they are still responding to the subject and make it even more interesting as it underlines its complexity. Moreover, the aim of the study was not to create a unique theory but to help companies to find what best suit them. So the research findings of the thesis are internally valid.

*External Validity* refers to the ability of the researcher to generalize the results of his study and to transfer them to other conditions.
 It is evident that a research findings based on only one interview cannot be considered as a paper of reference on the matters dealt with in the research. But, the author decided to underline that not all theories can be applied to all situations. The author decided, voluntarily, to choose a company case that will be an illustration of these cases where theories not always can be traduce into actions. This is why the thesis can help companies in different situations in helping them in their reflection process.

## 7.6.3. Objectivity

The concept of objectivity can be defined as the ability to perceive or describe something without being influenced by personal emotions or prejudices.

To be as objective as possible, the researcher needs to strive, to reduce or eliminate biases, prejudices, or subjective evaluations by relying on verifiable data. Thus, the researcher must not influence the interviewee if he wants to obtain objective information.

This study can be considered as totally objective as the interviewer carried out a semi-structured interview in a face-to-face situation. Therefore, it cannot be totally insured that the interviewee has not been influenced even if the interviewer tried to remain as objective as possible.

# 8. RESEARCH RESULTS

## 8.1. Questionnaire

The questionnaire (appendix 1) is designed according to the theoretical part of the thesis and according to the elements of methodology defined in the previous chapters. That is to say, it is a semi-structured questionnaire designed to be a guide to the semi-structured interview. It is divided in seven parts :

- What is your definition of relationship?
- What characterize the concept of relationship marketing?
- How do you build customer relationships?
- Creation of your database: how does it work?
- Information
- Customer life cycle
- Customer loyalty

The author decided to detail the Questionnaire in order not to forget any important information during the interview.

The author had a face-to-face interview with Sophie Bargy, the Communication Manager of the association. The author interviewed her since she was her work placement tutor last year and is the Communication and Marketing Manager.

The author communicated the aim of the thesis and the different subjects that will be discusses during the semi-directive interview. Then a phone call was made to go deeper in the study.

The aim of the interview is to illustrate the theoretical part through a small company case and a practical view of the matter dealt with. The interest of this study case is that it illustrates how a SME company, which is also an association, uses its databases to manage customer life cycle.

## 8.2. The Concept of Relationship within the company

Mme Bargy defined the concept of relationship as a link between two persons, which is built on the long term and based on the ability to listen, to exchange and to understand other needs.

Thus for the association, a relationship is a tacit agreement between two parts. According to Mme Bargy, a relationship is based on the following characteristics:

- The ability to listen
- The ability to understand

After a long period of time, a feeling of confidence will link the two parts. Concretely, Mme Bargy accords a high importance to the mutual recognition between the partners and to the availability of the other part.

A relationship can lead to friendship but, it is better for business to keep a strictly professional relationship.

Thus, the company is in phase with the theory and understands well the concept of relationship and its characteristics.

# 8.3. The Concept of Marketing Relationship

The concept of relationship marketing is unknown to the interviewee. And that is maybe the reason why the company only stays in contact with the clients, untill their needs are satisfied. So the time period during which the company is in contact with a customer varies a lot from customer to customer: it can be a week or a year. And the clients are not always in contact with the same person for instance during the organization of the National Salers Show.

Thus customers can be disappointed and it is understandable. Relationships are built between two persons linked by a confidence feeling so when there is a change of contact person the precedent relationship is not transferred to the new contact : a new relationship has to be build.

There is no department dedicated to customer service because the structure of the company is too small. Having a department dedicated to customer service would be impossible because of the financial limitations. Moreover, customer service is needed as all the employees are working together to satisfy to the demand. Thus, if

an employee is not able to deal with the demand, he will transfer the demand to the person with the abilities to deal with the matter. The efficiency of such a customer service is principally based on the communication between the staff members and the team spirit.

## 8.4. How the case company build its relationships with its customers?

The association does not distinguish the different status of the prospects and the different phases they go through. Mme Bargy only underlines that it takes a long time to build a relationship and that it is first built by listening the other part and then by establishing a confidence feeling.

The company has not identified a prospect hierarchy so it may cause difficulties for it to manage adapted communication actions.

The concept of tolerance is synonym of open-mindness according to Mme Bargy, who precised that it is essential to understand and accept the needs of the other party. According to her; it is also required to accept making concessions to reach a solution satisfying both parties. Thus the point of rupture can be avoided except if the needs and expectations of both parties are not compatible.

Again the communication has an important role to play as it permits to be aware of the needs and expectations of the other. Misunderstandings will almost always lead to a rupture between the two partners so communication is important all along the relationship life time.

This is why; the company case should give more importance to the communication with their prospects even after their needs have been satisfied. Moreover, a relationship is not only built on a unique exchange but on a multiplicity of exchanges through which the confidence will come.

For the association, building customer relationship appears like an evidence and a necessity to satisfy the customer and to build loyalty.

#### 8.5. Database Creation and Updating the database

The case company builds databases for three reasons. :

- to be more effective.
- to identify the prospects
- to classify the history of the relationships.

The database dedicated to customer relationship management is only composed by the basic details concerning the prospects such as the name, surname, phone number. It can seem not convenient to register only basic details to build a database, but the more complex databases are not the more useful. In the case company the database is used as a tool to support communication and marketing actions by Mme Bargy, the communication and marketing manager. Other members of the staff are not using the database dedicated to customer relationships. Mrs Bargy is the only person in contact with the prospects. Thus, she updates the database after any contact she had with a prospect.

No upgrading of the database is made as it is managed on an excel document. So there is no need for upgrading it like for a more complex database created on a special software.

Mme Bargy concluded by adding that all depends on what the company wants from the database. The database of the association is in phase with the reasons that have lead to its conception: efficiency, identification of the prospects and classification of the history.

### 8.6. Information

As the author mentioned in the precedent paragraph the database dedicated to customer relationships gives only basic details such as the phone number, the postal address or the last contact. These pieces of information are the essential ones. The name and surname can allow the identification of a prospect. The phone number and postal address are used to contact the prospect. The information concerning the last interaction with the prospect is helpful when managing communication or marketing actions as it can mention the status of the relationship (is it recent, beneficial for the company...)

Pieces of information are collected by different ways. The most common way to obtain information is to do research on the internet. Mme Bargy also uses the existing contacts. In marketing and communication sectors, the relations are important. Finally, the prospect himself is also a possible source of information, which is used by Mme Bargy.

Information is used for commercial actions but also in everyday life when a prospect is getting in touch with the company.

A control of efficiency is difficult to manage so no one does that within the company case. Moreover, the association, since its creation, has never worked without a database so there is no elements which permit to calculate database efficiency.

#### 8.7. Customer Life Cycle

Because each customer has its own history it is impossible for Mme Bargy to define a customer life cycle scheme. It is clear that the sector of activity of the association is particular, but reacts the same way as other sectors in terms of marketing and communication. The case company objectives are to create interest for the Salers breed and to find "partners" willing to support them. These "partners" are the companies participating in the events organized by the association. Different types of participation can be distinguished. The association proposes different formulas for the companies willing to participate in the events (see appendix 2).

Some of these companies are really partners as they are always participating and the association is giving them priority over the other ones. But some companies are just attending the event once or twice and often in reason of deficit stop participating :

not all companies can find an interest in attending these events that are attracting general public.

So a general customer life cycle cannot be defined for the association but, in my opinion, several ones could be drawn according to their profiles: are they choosing publicity, stand or gifts?

#### 8.8. Concept of Loyalty

As the communication and marketing manager, Mme Bargy was not able to precise a customer lifecycle within the association, she could not tell the author after which steps the customers reach this stage in their relationship with the association. She explained that the loyalty stage can be reached after some months or after some years, the duration depends on the degree of confidence and implication of both parties.

No particular strategies are used to gain customer loyalty. A loyal customer is considered in the same way as the other ones and do not benefit from advantages such as discounts, reductions or free publicity. The only benefit is that the association gives priority to loyal customers for the reservation of the stands for instance. That is to say that they will first call loyal clients and will call the others only if the loyal customer does not want to attend the event. In the author's opinion, the company by behaving like this is making a mistake. In fact, the priority is given to loyal customers because the company is not able to estimate the number of stands needed and that reduces the opportunities to enlarge the customer panel. During her work placement, the author was obliged to refuse customers because the number of stands was reduced. This problem can affect the financial benefit of the company and also its reputation by refusing to create new customer relationships.

# 9. CONCLUSION AND RECOMMENDATIONS

#### 9.1. Conclusions

#### 9.1.1. Summary of The Research

This research is a source of information for companies willing to be more customer orientated by implementing a customer relationship management strategy using database management tool. This research provides information and advice on how database management influence the customer life cycle by answering the following questions:

What is customer relationship management and why do companies need it?

How can an appropriate database be built?

How can an appropriate database help companies in their customer life cycle management?

Is the implementation of a database profitable for the case company?

The theoretical part tries to give the reader the key elements to understand database management tool. To get onto the subject, the author decided first to explicit the concept of customer relationship management. This part is the basis of the work and is essential to its cohesion and good understanding.

The second part of the research explains the basic steps of database creation and makes explicit the principal requirements due to the creation and management of a database. The last part deals with the customer life cycle as it is important for companies to take into account the customer into their strategic choices. The author makes the choice to elude the technical steps of the database management as a lot of companies do not use specific softwares to create their databases.

In fact, the objective of the thesis is not to be a technical guide to create and manage a database but to help companies to understand how a database can improve their customer relationship management strategy. A well-used database can improve the financial benefit of the company but the choices of the company concerning the database creation have to be judicious and appropriated.

The author decided to interview an association of small size to compare the theory, addressed in priority to big organizations, to the case of an association of small size.

In this choice there are two opposites:

- companies versus non-lucrative associations
- big organizations versus small ones

Thus the empirical case answers to the question how can small company deal with database management

The empirical case was based on qualitative study of the association UPRA Salers. The case company objective is to improve and promote the Salers' breed of cattle in France by organizing events such as the National Salers Show that the author organised during her work placement in 2007.

The informant in this research was Mme Sophie Bargy, Communication and Marketing Manager, who was the work placement tutor of the author. The author chose this organisation because of its interest when confronted the theoretical part and also because the confidence feeling existing between the interviewer and the informant.

The information was collected according to the structure of the thesis during the semi-structured interview in order to be confronted to the theoretical part findings. The confrontation calls for reflection as the aim is not to give precise creation and management methods to apply directly to an organisation but to help them to build their own method adapted to their needs and abilities.

9.1.2. Findings versus Theory

To help to draw conclusions and recommendations, the author decided to create a comparative statement. This way it is easier to compare theory and findings and then to make recommendations.

	Theoretical part	Empirical part
Definition of Relationship	<ul> <li>Individuality</li> <li>Mutual perception</li> <li>Mutual acknowledgement</li> </ul>	<ul> <li>Individuality</li> <li>Comprehension</li> <li>Mutual acknowledgement</li> </ul>
	- Special status Based on trust and commitment	- Ability to listen => availability Based on trust and tacit commitment
Concept of relationship marketing	Objective : the retention of valuable customer Implications : - continuous contact with its customers - good customer service to satisfy customer expectations	Continuous contact until customer needs are satisfied No customer service : all employees contribute to customer satisfaction
Customer relationship Management	<ul> <li>A way to motivate valuable customers to remain loyal and buy again.</li> <li>Implications : <ul> <li>corporate involvement</li> <li>financial investments</li> </ul> </li> <li>Objectives : <ul> <li>to simplify the relations between the customers and the company and to register their behavior</li> <li>to improve revenues by improving the relation in the long-term</li> </ul> </li> </ul>	<ul> <li>no customer relationship management :</li> <li>interrupt contacts with the customers who are sometimes disappointed.</li> </ul>
Database creation	<ul> <li>Data mining : the relations between data are structured and then uncover interesting trends, correlations or patterns</li> <li>Data inventory : to construct a reservoir of information (after being collected and classified)</li> <li>Data maintenance : so that the results continue to be relevant</li> </ul>	<ul> <li>Data mining is not fully exploited: no trends, correlations or patterns are uncovered. The database is just used as a listing.</li> <li>Data inventory is classified according to the organized events.</li> <li>Data Updating is done after each contact with a customer.</li> </ul>
Information	Information needed will vary depending on the specific business function to be solved.	Basic information (contact name, details and historic)

	Communication within the company is important Internal & external information ( CRM data)	Mme Bargy is the one in charge of customer relationship management. Only external information obtained through researches, contacts and customer himself
Customer life cycle	<ul> <li>Acquisition</li> <li>Segmentation</li> <li>Satisfaction</li> <li>Loyalty</li> </ul>	Not determined
Loyalty concept	Loyalty programs to establish a higher level of customer retention in profitable segments. Only target customers who are already loyal. Loyalty determined by trust, commitment, communication and conflict handling.	No loyalty programs Loyalty is not even considered.

Figure 16: Findings versus Theory

# 9.2. Recommendations

The following recommendations are made according to the previous comparative statement.

- Considering the concept of relationship marketing, the author would recommend the company to stay in permanent contact with its customer even if his needs are satisfied. The company has no customer service but it does not need one because of its size and corporate commitment.
- The discontinuous contact with customers reveals the absence of customer relationship management within the company. Thus, the author would recommend the association to bring more attention to the customers even if one good point is the corporate commitment that is essential to relationship management.

- The author would also recommend the case company to develop its database and to use it more efficiently by uncovering trends and tendencies.
- The last recommendations would be to accept new customers even if at the moment they are not valuable. The association by refusing new potential customers refuses to establish with them a potential beneficial long-term relationship.

# 9.2.1. How far can the findings be generalized?

The precedent recommendations are made only for the case company but can be applied to all small organizations whatever the sector of activity is. But the theoretical part of the thesis is more appropriate to big organizations. Thus the thesis in its whole content is a reflection on the differences between big and small organizations concerning customer relationship management.

It is clear that each organization is different and has its particularities but the case company is similar to a lot of small companies characterized principally by their limited financial investments. More important companies are not limited by financial considerations so that they can apply the theory to their case.

#### 9.2.2. Assessment of the Conceptual Framework

The conceptual framework has been designed by the author herself to underline the influence of database on the basic steps of customer life cycle as part of customer relationship management. The table of content was then designed in order to cover all the concepts it covers such as the definition of the relationship concept.

The conceptual framework is as simple as possible to be applicable to all organizations whatever their size or their sector.

#### 9.2.3. Proposal for future research

The thesis is a tool for both big and small organizations willing to implement or optimize the use of a database as part of their politic of customer relationship management. It underlines also the differences between the big and small organizations so that a future research subject could focus on these differences but in another sector of study such as the implementation into a foreign country or the creation of a communication campaign.

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# SEMI-STRUCTURED INTERVIEW

#### **1.1.** What is you definition of relationship?

## Which characteristics?

Between two individuals Mutual perception and acknowledgement Trust and commitment

#### Which type of relationship?

Professional relationships Casual acquaintances Personal acquaintances Friendships

# 1.2. For you what characterize the notion of relationship marketing?

Are you in continuous contact with you customers? Customer service developed in your company?

## 1.3. How do you build customer relationships

1.3.1. Different phases

Prospect hierarch

- 1.3.2. Notion of tolerance and breakdown
- 1.3.3. why do you build customer relationship

#### 1.4. Creation of your database: how does it work?

1.4.1. Data mining

- 1.4.2. Data inventory
- 1.4.3. Data maintenance
- 1.4.4. why do you build databases

# **1.5. Information**

- 1.5.1. What information and why?
- 1.5.2. How do you get them
- 1.5.3. How do you use them
- 1.5.4. Efficiency control?

# **1.6.** Customer life cycle

- 1.6.1. Acquisition
- 1.6.2. Segmentation
- 1.6.3. Satisfaction

# 1.7. Loyalty

- 1.7.1. How to improve it
- 1.7.2. What are the benefits of it?

# **ENTRETIENT SEMI-DIRECTIF**

# 1. Quelle est votre définition d'une relation ?

- 1.1. Quelles caractéristiques attribuez-vous au concept de relation? (entre deux individus, perception mutuelle et reconnaissance, confiance et engagement...)
- 1.2. Quel type de relation entretenez-vous avec vos clients ?(relation professionnelle, relation occasionnelle, relation personnelle, amitié...)

# 2. Selon vous quels élément caractérisent la notion de relation marketing ?

- 2.1. êtes vous en contact perpétuel avec vos clients ?
- 2.2. quel service client dans votre entreprise ?

# 3. Comment construire une relation client ?

- 3.1. Différentes phases et la hiérarchie des prospects ?
- 3.2. Notion de tolérance et de rupture ?
- 3.3. Pourquoi construisez vous des relations clients ?

# 4. Création de vos bases de données : comment ça marche ?

- 4.1. Pourquoi construisez vous des bases de données ?
- 4.2. Quelles données ?
- 4.3. Inventaire des données ?
- 4.4. Maintenance de la base de donnée ?

# 5. Informations

- 5.1. Quelles informations et pourquoi ?
- 5.2. Comment les obtenez-vous ?

- 5.3. Comment les utilisez vous ?
- 5.4. Contrôle d'efficacité ?

# 6. Cycle de vie du client ?

# 7. Loyauté

- 7.1. Comment l'améliorer
- 7.2. Quels sont les bénéfices de la loyauté ?