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How Analytics are shaping a new era for Customer Relationship Management: a case study in Lechler

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ABSTRACT

The goal of this thesis is to present the benefits a company and its customers can enjoy from a well-structured Customer Relationship Management (CRM) process. It will try to provide an in-depth view of its purpose, its history, and its adoption practice. Working alongside a data analyst in a company (Lechler S.p.A.) that is in the middle of the process of implementation of a CRM system gave me a fundamental insight on the practical aspects of the subject. During my experience in Lechler I have been able to experience at first hand the complications that can arise from transitioning to Customer Relation. Through the use of the Salesforce platform the company is aiming to adopt both strategies, but to do so a shift in the culture of the company is necessary, and the learning curve is rather steep. While the focus of the thesis wants to be on the transitioning, I will firstly address how CRM and CEM generate value for a company and why adopting a customer-centric view in the company is crucial. In addition to that, a CRM, if properly used, can be the ultimate organizational tool for a company allowing an unparalleled coordination between the employees. The last part of the thesis is going to try to assess what the future holds for data analysis and how it could shape the currently evolving landscape of management.

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INTRODUCTION

In this work I study the evolution of data-based marketing decisions and the purpose, usefulness, and effects of the adoption of data analysis in marketing. Specifically, I'm going to focus on the use of Customer Relationship Management as it is the most popular and adopted tool to make use of the data volume companies are supplied with. Since I had the opportunity to work for three months in a company in the process of taking up Salesforce as CRM solution, there are several references to my experience in that period, in order to compare the theoretical findings to a real-life experience. I first give an excursus on the conceptual framework surrounding CRM: provide insight on the various definitions found in literature, give a brief history of it, analyze its scopes and its adoption process. The second part of the thesis establishes in what way CRM serves a company on a practical level: which services it offers and how it does so, the way it can aid managers in decision making based data, and how it makes the application of theoretical models possible. The third chapter goes over application of a CRM in a real company by presenting a case study on Lechler, a company based in Como (Italy), that produces and distributes paint in over 65 countries. I give an overview of various activities related to the adopted Salesforce software, how sales and marketing processes were carried out before and after the application of the CRM, and the technical and organizational advantages that the system led to.

1. Conceptual framework

The topic of CRM is a broad one, with many acceptions to it, so much so that Picoto et al. (2018) conducted a bibliometric analysis on the subject, identifying seven main topics categories in which CRM is mentioned:

1. Methodology in the CRM research field
2. Relationship marketing
3. Service quality and customer loyalty
4. Implications of market-oriented strategy
5. CRM theory and its practical implications
6. Strategic management
7. Customer value.

Most of them will be covered in the thesis with various degrees of depth. Over the next section I will give an overview of the history, definition and acceptance of CRM that better fit the scope of my work. This should serve as a theoretical foundation and a frame of reference for subsequent chapters.

1.1 Customer Relationship Management History

Customer relationship management has been in existence for a long time, however, it did not come into its name and officially gain momentum, especially in terms of its name, until the 1990s (Jackson, 2005). Simple notes taken on a notebook used to serve the same exact purpose some seventy years ago. While back then it could have looked like a perfectly sound system, today we know that it ignored very important factors such as customer behavior, characteristics, purchasing history and much more useful data that would have been hard if not impossible to analyze without the technological tools available nowadays.

In the 1950's the way to do CRM was an instrument called Rolodex: a series of cards attached to a cylinder contained sensitive information about contacts. The cylinder could rotate to consult the different cards. In the slightest way more efficient than a notebook it was difficult to update modify or delete info from them.

Figure 1: An old original Rolodex

In the 70's the first form of digitalization of information took place, not much more than a digital Rolodex but it allowed to create the first primitive databases to manage data and write applications that would lead to lookup tables. It wasn't until the 1980's that database marketing started to gain some momentum, also thanks to Lester Wunderman's work on the direct marketing concept. He suggested that a more focused approach, personalized to the single customer, is a more efficient and effective form of marketing, respect to the scattershot approach of general advertising. Even if still far from today's CRM, he introduced integration of customer data and a rudimentary sales strategy. But apart from that, it was an uncanny intuition on what direction marketing would have taken in the future.

By the second half of the 80's decade marketers grasped the potential that customer data represented. With banks and insurance companies being early adopters, the marketing, sales, customer service and accounting departments

started to connect and integrate their information like never before. Is not until the early 90's though that the first true and recognizable CRM frameworks are introduced. Lead management, opportunity management, deal tracking, and contact management are unified in one single over-arching infrastructure, until, in 1995 the term "customer relationship management" is coined, some say by the tech research company Gartner, some say by IBM's Tom Siebel. In 1999 the first mobile versions of CRM started to circulate, and despite being hindered by the technological level of mobile devices of the time, cloud-based CRM still represented an appealing solution to cost-concerned companies. They could still enjoy a high-grade CRM service developed by the best companies without costly on-premises applications and installations. From this point on CRM had nothing but an exponential increase in usage and popularity. With the beginning of the 21st century huge companies like Microsoft and Amazon rolled out their own versions (respectively Microsoft Dynamics and EC2 & S3). More small businesses entered the CRM market as cloud infrastructure matured and Internet access improved around the world.

In 2008 with the introduction of social media, CRM saw a shift from transactional interaction to a relationship model (within the B2C context). CRM turning social drove companies to create social media strategies to engage customers and social media were treated as complementary tools of traditional CRM.

1.2 The hard task of defining Customer Relationship Management

A universally accepted definition of CRM does not exist, there are many, and they span through a vast array of concepts. Popular definitions include: "CRM is a term for methodologies, technologies, and ecommerce capabilities used by companies to manage customer relationships" (Stone and Woodcock 2001).

"CRM is a comprehensive strategy and process of acquiring, retaining, and partnering with selective customers to create superior value for the company and the customer" (Parvitiyar and Sheth 2001)

"CRM is about the development and maintenance of longterm, mutually beneficial relationships with strategically significant customers" (Buttle 2001).

"CRM includes numerous aspects, but the basic theme is for the company to become more customer-centric. Methods are primarily Web-based tools and Internet presence" (Gosney and Boehm 2000)

"CRM is data-driven marketing" (Kutner and Cripps 1997).

"Customer relationship management (CRM) is the overall process of building and maintaining profitable customer relationships by delivering superior customer value and satisfaction" (Sen & Sinha, 2011)

So, when referring to CRM we could be talking about a wide array of concepts to the point that *Payne and Frow* (2005) identified the best way to portray it, in a continuum ranging from a narrowly defined tactical connotation, to a broadly defined strategic one.

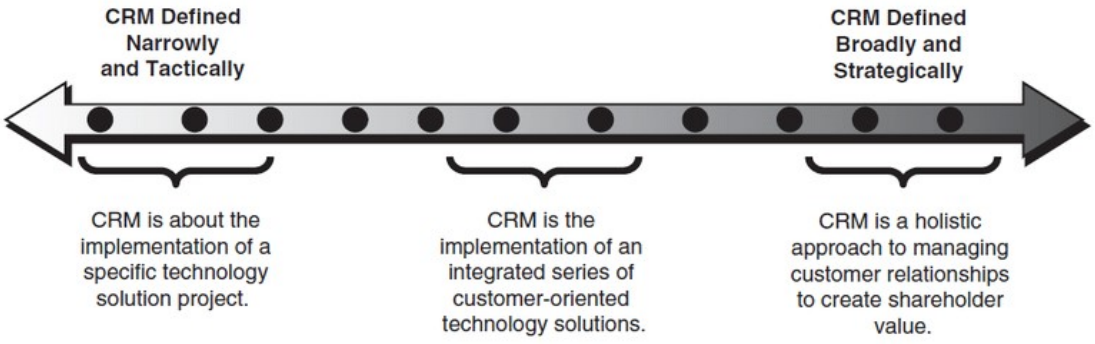


Figure 2: The CRM Continuum - Payne & Frow, A Strategic Framework for Customer Relationship Management

To be more explicative in the meaning of these perspectives we can think of CRM as:

- **A tool** - a cloud based technological product used to collect and analyze interactions between the company and its users.
- **A process** - a method that a company uses to nurture and manage its customer relationships.
- **A strategy** - This is a company's perspective on how to manage those relationships with consumers and future customers.

As Payne and Frow highlight, the importance of how CRM is defined is not merely semantic. Its definition significantly affects the way an entire organization accepts and practices CRM (Payne & Frow 2005). Considering this premise, they define CRM as:

> *"CRM is a strategic approach that is concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments. CRM unites the potential of relationship marketing strategies and IT to create profitable, long-term relationships with customers and other key stakeholders. CRM provides enhanced opportunities to use data and information to both understand customers and co-create value with them. This requires a cross-functional integration of processes, people, operations, and marketing capabilities that is enabled through information, technology, and applications."*

While this definition is important in order to have a solid conceptual framework of the subject and obtain a deeper understanding of the strategic and cross functional facets of CRM, Doshi (2007) provide a more practical and practical definition that will serve a better purpose for the development of this thesis:

> "CRM is first and foremost a strategy and corporate philosophy that puts the customer at the center of business operations so as to increase profits by improving customer acquisition and retention. It involves identifying high-value customers and automating processes so that sales,

marketing, and service efforts will be more efficient and effective. In its complete form, CRM provides a 360-degree view of the customer and integrates all necessary information about the customer at every touch point"

This definition entails that to properly implement a CRM solution a company must:

- Evolve its cultural attitude and clarify the need of transforming into a customer-centric organization
- Perfect a strategy that defines the CRM objectives, how to achieve those objectives
- Adopt a fitting technological infrastructure for accomplishing the planned strategy

This definition serves as the foundation for consensus on the key components of CRM, and these elements are critical foundations of CRM adoption and execution.

1.3 The scope of Customer Relationship Management

In order to give a better and more organized frame of reference, the objectives of a CRM will be divided into three groups. These objectives are customer objectives, relationship objectives, and outcome objectives. This classification is based on several CRM metrics used by businesses to assess CRM effectiveness (Greenberg, 2004) and it is useful to break down the great number of metrics that are part of a CRM.

Customer objectives

The objectives addressing the customer's experience and sentiments of the connection are included in the category of customer-related objectives. This includes customer loyalty and retention, as well as objectives

concerning customer satisfaction. Almost every author describes these objectives, and expresses them in different forms which can be unified in the three following definitions:

- Strengthen customer loyalty
- Retention
- Customer satisfaction

These objectives have analogous meanings, that is because they are linked, and they may be determined in the same way. If a consumer is loyal, the company's business will continue, hence customer retention will ensue. The same is true for customer satisfaction, a contented customer is a customer who is very likely to reiterate a business transaction.

Relationship objectives

This set of objectives encompasses the goals pertaining to the company's activities. These can be particular goals relating to customer-related objectives, but their focus is on what the company does to improve the quality of the relationship with a customer. Again, many authors have given many different acceptions to these objectives but there is a general consensus about the following ones:

- Superior service
- Higher internal efficiency
- Increased customization capability
- Higher level of communication

Superior service refers to how the firm provides its consumers in accordance with their demands. The efficiency and productivity goals are both related to the company's internal operations. The efficiency object is significant also because it addresses the human side of CRM-using workers. Higher productivity is also a relevant goal because it focuses on the company's capacity to generate the correct product and therefore customizing products and services more

easily. The communication goal applies to everyone who interacts with the firm, including customers and suppliers, as well as the company's own staff. These four goals are crucial while examining a company's CRM.

Outcome objectives

The goals that affect the company's gains when utilizing CRM are covered by the outcome-related objectives. These are primarily monetary, but they also include other factors that will help the company's performance. Here are some of them:

- Increased profit and revenue
- Reduced costs of sales
- Improved forecast capability

An increase in the profits and revenues for the company almost an implicit objective for a CRM, but to do so efficiently all elements of the company need to be coordinated. When adopting a CRM strategy, one of the most essential goals to keep in mind is to reduce sales expenses. This is done by comparing the areas where CRM can save money to the places where CRM can enhance sales. The forecast objective is included because it addresses the element of future results created by CRM capabilities.

1.4 Customer Relationship Management as a Decision Support System

Having made clear the many objectives that a CRM aims to reach, it is time to shed light on the core essence of it: an analytical tool used to support decision making processes. The architecture behind the analytical analysis of data is the same employed by CRMs and it is generally called a Decision Support System (DSS). Analytic techniques are frequently classified into three major categories: descriptive, predictive, and prescriptive. A brief description of each category is given below, and their role will be analyzed in the CRM context. During the course of the thesis both the DSS and the analytic classifications will be referred

to on several occasions as they are fundamental themes of the analytical process of a CRM.

Descriptive

Descriptive analytics derives information from significant amounts of data and answers the question of what is happening. (Souza 2014) It is used for business reporting purposes, and it gives snapshots of past situations the company was in. It addresses well defined business problems and opportunities, and it serves to assess whether the opportunities were seized, and the problems were solved. Descriptive analytics is based on the access and manipulation of datasets. This kind of approach is commonly known as a Data-driven one and for the purpose of this work it will be analyzed and compared to the Model-driven approach which instead provides capabilities for demand planning and scenario analysis and thus supports business forecasting and simulation. Comparing present figures with past ones though is not a novelty and, even if it serves this purpose, it is not the main feature of a CRM solution.

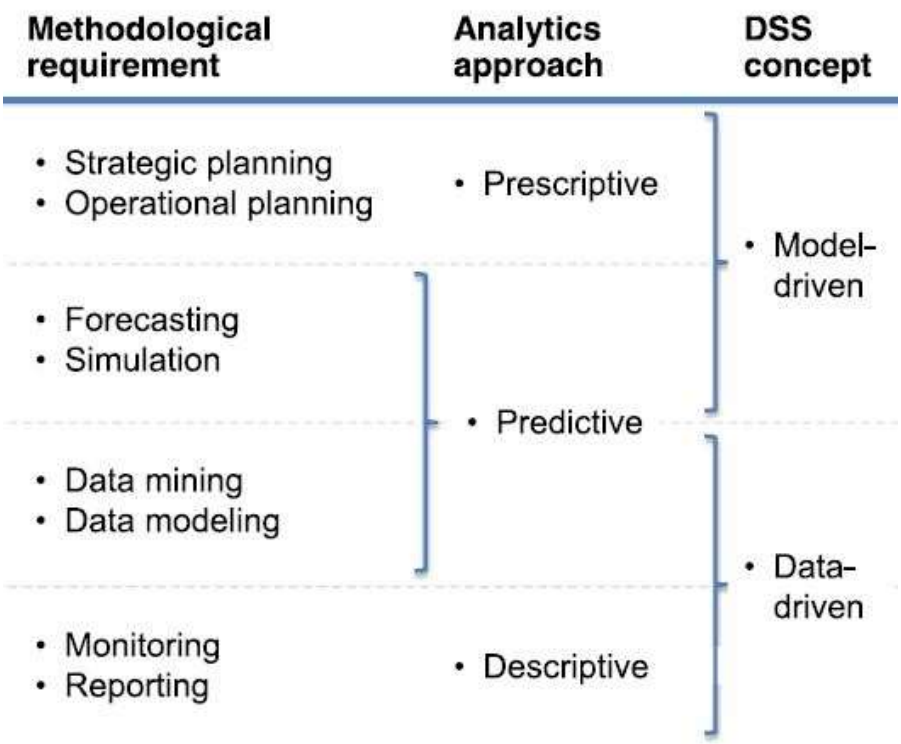


Figure 3: A framework for analytics applications. - Hahn & Packowski, Decision Support Systems.

Predictive

Predictive modeling techniques provide some projection of system or process performance into the future and answers the question of what will be happening (Souza 2014). Trying to generate accurate projections of the future requires an approach that both looks at past data, but also has a sound model reference onto which the data can be projected in order to formulate a prediction. Data mining and monitoring (better examined in a subsequent part of the thesis) are used to build the methodological foundation for reactive sense-and-respond use cases. They help to discover knowledge and patterns that can be translated into business rules. (Hahn & Packowski, 2015) Hence the predictive analysis is both a data-driven and model-driven and more in line with the function of a CRM as it produces a valuable insight about what the company can expect from its endeavors.

Prescriptive

Prescriptive analytics focuses on the use of mathematical optimization and simulation techniques to provide decision-support tools built upon descriptive and predictive analytics models. (Souza 2014) Somewhat related to game theory, prescriptive analysis suggests what is the best course of action given the situation that is presented by the data. It simulates scenarios based on similar ones that already occurred and it has the goal of producing reliable models that can support decision makers pick the right choice. Contrarily to predictive and descriptive analytics, prescriptive analysis is not used necessarily by managers as it can also support salesmen and marketers in everyday practices. In some CRM applications, if the prescriptive analysis proves to be particularly effective, it can become the guideline for standard behavior inside a company, effectively transforming some decision makers into mere executors of what the systems suggests being the most advisable response to the situation.

This anticipates a subject that will explored in the case study of the thesis: a software architecture that allows companies to analyze data in such integrated and unified manner opens the possibility of having a deep look into the internal workings of the company. A structure that makes it compulsory for users to report the data that they generated from their interactions with customers will inherently keep an eye also on the users themselves. This implication paves the way for a prescriptive analysis that highlights almost automatically the optimal mechanism simply based on the historical showcase of what worked best in previous similar circumstances. This phenomenon, that can almost seem like a collateral one, gives a clear idea of how salesmen and marketers work, but paired with a structured prescriptive analysis it also greatly reduces their autonomy in making choices. This circumstance can lead to tensions between people who actively utilize the software, benefitting and exploiting its findings, and people who instead are in charge of only feeding it with information about customers and, inevitably, of their work performance, without ever seeing the bigger picture and the tactical advantage that this system brings to the company. This issue will be explored in more detail in the third chapter of the thesis.

1.5 Technology adoption

Most of the academic literature agrees on the fact that companies must realize that CRM deployment is more about the customer than about the technology. People, procedures, and systems should all be involved in CRM deployment. This makes the technology adoption more challenging respect to the implementation of just another software. In this regard Segal (2009) proposes seven steps to keep in mind when contemplating CRM implementation. Here is a mention of the most important ones:

Objective assessment

In a survey conducted in the United States, Goodhue et al. (2002) discovered that 91 percent of companies had a CRM system in place or were intending to have one. The deployment of a CRM system, on the other hand, is fraught with danger, with significant failure rates recorded. According to Boardman (2005), 70 percent of CRM initiatives fail, and more than half of all firms who invest in CRM consider it a letdown. It is tough to assess industry experiences since there is not a clear and uniform definition of what defines a successful CRM system deployment. Determining the success or failure of CRM system installations in terms of benefits realization is one way to solve this challenge. Understanding the business advantages is seen as a key success element for CRM system deployment (Wilson et al. 2002) and low benefit awareness is seen as a roadblock to successful implementation.

CRM impact on processes

The synchronization of information technology and business processes is critical for the effective adoption of CRM solutions. To guarantee that this alignment occurs, customer-related business processes must be created and managed. One of the main reasons CRM systems fail is a failure to realize that process management is just as essential as customer data management.

Benefits anticipation

As wide ranged and versatile as it is a company needs to fixate what kind of gains it expects from a CRM solution trying to be as detailed as possible in order to directly relate to the adoption's predicted results. Shanks et al., (2009) provide a detailed benefit framework divided in operational, tactical, and strategic levels of management described in table 4

Figure 4: CRM Systems Benefits Framework - Shanks, jagielska & Jayaganesh, A Framework for Understanding Customer Relationship Management Systems Benefits.

Incentives and measurements to support CRM adoption

As mentioned above starting to use a CRM can prove to be a demanding transition for employees that are already used to carry out their tasks in a certain way. While it is obviously essential to give basic training so that everyone can learn how the various tools and resources function, it is also useful to explain the benefits to better understand the value of CRM. This way it can be seen for what it is: a way to save time and improve the customer relationships, rather than just another chore.

Despite these guidelines and evident benefits of adoption, CRM often still met with skepticism from managers and while most CRM implementations constitute a great investment for the sales organization, they may fail to be accepted by the sales force (Speier & Venkatesh, 2002).

All customer data and interactions may be centralized with the help of a CRM system. This implies that workers get a comprehensive picture of all relevant information and may access it at any time, making the benefits evident for the

staff, demonstrate the value to each user, and stress the influence on the company's performance.

Over the next section I will go over the more practical aspects of the adoption of a CRM solution and explore its functionalities, presenting in general terms the sequences of actions the sum of which defines the relationship to the customer. I will also introduce the concept of market analytics and outline the structure and use of decision support systems.

2. What does CRM provide for companies?

The amount of information about their customers companies can gather these days is unprecedented. Every click, every website visit, with a dystopic view of the state of technology, even every word we say when close to a smartphone represents raw data for companies; data that if properly harvested opens up possibilities that early marketers could only dream of. The availability of vast amounts of data about consumers can be successfully leveraged by modern information technology solutions to better understand them. Companies can now aim at understanding each customer individually, hence improving the quality of their relationship with them and of their business overall. Customer Relationship Management's purpose is that of helping companies handle that information in a sensible and standardized way, as opposed to methods left to the discretion of lower management or salespeople. This allows companies to stick to a studied selling processes design that fits their needs.

During my days at Lechler I was able to witness how everyday processes were carried out with a CRM solution (in the central Italian branch) and without one (in the other foreign national branches). Furthermore, I had the advantage to be behind the curtain of the CRM engine, on the receiving end of information and processes, and having the privilege to observe a bigger picture than most of the other people working in the company.

The exchange of information with the branches that did not adopt Salesforce yet was slow, clunky, and confusing. Every individual retaining data and insights personally made gathering intelligence look like a treasure hunt. Adjustments to the databases had to be done from dictation and the retrieving of data was sluggish. On the opposite, carrying out the same actions on the CRM software was as easy and intuitive as browsing a social network. Every subject of interest was linked to relevant data about it and every piece of information was attributable to the person who entered it.

The investment and commitment needed to make all of these features effective for a business cannot be ignored though, so the burning questions for managers should be: is the effort needed to adopt a CRM system worth it? How does it create value that actually pays off for an organization? By building and maintaining customer loyalty, acquiring new ones and retaining those who are thinking to leave. According to Newell (2000), customers are often classified into three different groups: the upper, medium, and bottom groups. The top group (top 10%) consists of consumers that are extremely loyal and generate a lot of money for the company. The CRM system must keep these clients and offer them the best service possible in order to keep them from shifting to the competition. Those in the middle, the next 40 to 50 percent, are those who earn the company a lot but have the opportunity to expand their profitability and loyalty. These are clients who are most likely also doing business with competitors. In these cases, the CRM system must be utilized to accurately identify the demands of this group, which is the primary source of prospective expansion for any firm. Customers in the bottom 40 to 50 percent have the lowest profitability. Some may have potential growth, but the expenses and effort required to fulfill it are too expensive or time consuming. Accordingly, CRM should be utilized in this way to identify these groups and decide what it should be done with them. This has the triple benefit of increasing the company's potential profitability, place a higher focus on the most profitable prospects, and leaving the burden of more difficult to convert customers to the competition.

As Freeland (2003) pointed out though, CRM is still one of the best strategies for growing revenue and increasing market share, and it offers richer opportunities for developing the customer franchise and increasing brand value than most companies have realized. In fact, for companies that seek to keep customer relationships strong and profitable, acquiring the right mix of CRM processes,

workforce, management approaches and technologies is critical. (Hazbon 2006). To reap the fruits of CRM the whole philosophy of the company should shift "CRM is not just a technology; it's a philosophy for survival in the customer-centric economy" (Helm, 2002). A customer-centric vision economy implies that the worth of a company lies in the value it can provide for its customers and that the customers provide for the company in return. Knowing the customers is arguably the primary purpose of CRM, and although distilling information into customer knowledge and that knowledge into monetary value is no easy task, CRM, if used the right way, combines the best set of tools to precisely achieve this task.

But what does a CRM represent practically for a company, and how can it be explained to people who managed to do their job just fine without one? A CRM is used to equip the sales force with an important instrument to manage and expand their commercial activities. It helps its users to handle the activities they have to conduct on customers or potential ones with systems that overall increase the competitiveness of the company. It is a new way to manage, gather and track specifics of the interactions with customers or contacts. The information previously held by individual salesmen, is converted in company-wide knowledge about the client that can often lead to generation of new selling opportunities. It is not an Enterprise Resource Planning, which consist of a registry of only a few clients' information used to issue invoices. While an ERP is used by the administrative sectors, CRM is mainly for the sales and marketing teams. The use of a CRM supports the salesmen in managing and rationalizing the relationship with their customers and their activities, may them be for acquiring new customers or retain the existing ones. A CRM solution tracks all interactions with said entities such as phone calls, e-mails, scheduled or past appointments, tasks related to the account, sent offers, quotes and past sales, but most importantly it permits to obtain with a glimpse the current most

relevant opportunities related to them. CRM solutions can often be used on the move by setting up applications via smartphones, tablets, and notebooks. Synchronizing them all on a mail client such as google calendar so to try and integrate it with simple and intuitive systems already known by users making it easier to pick it up. But to what end? In the next part of the chapter, I will examine some of the main features that make a CRM valuable.

2.1 Customer satisfaction

By delineating and comprehending what Customer satisfaction is, it can assist any organization find possibilities for product and service innovation, as well as serve as a foundation for performance assessment and reward systems. It may also be used as the foundation for a customer satisfaction surveying program, ensuring that quality improvement efforts are appropriately targeted on the issues that matter most to the consumer.

Figure 5: the satisfaction-profit chain - Buttle & Maklan, Custumer Relationship Management

Westbrook and Reilly (1983) define customer satisfaction as "a cognitive consistency model, in which consumers compare pre-purchase beliefs about a product to post-purchase beliefs formed during consumption of the product. The extent to which post-purchase beliefs disconfirm their pre-purchase counterparts is theorized to be the principal determinant of their satisfaction/ dissatisfaction." Customer satisfaction, according to the description above,

refers to a pleasant fulfillment reaction, whereas dissatisfaction refers to an unpleasant fulfillment response. The satisfaction evaluation can be focused on any or all aspects of the customers' experiences such as the product, service, or process. The most frequent method of quantifying customer satisfaction is to compare the customer's impression of an experience, or a portion of it, to their expectations.

This method is known as the expectation disconfirmation model of customer satisfaction. Essentially, the concept argues that customers whose expectations are met are satisfied while negative disconfirmation occurs in the opposite case. Customer satisfaction leads to increased loyalty and repurchase behavior. Customers who are just content, on the other hand, can quickly switch to another company. Most customers are, at most, moderately happy or moderately dissatisfied at most, implying that the majority of customers are ambiguous about their allegiance to a specific firm. With the introduction of even a little incentive, such as a lower price or a more accessible retail store, these consumers are likely to migrate.

Improving customer relationships and increasing their loyalty isn't simply about managing interaction with customers better or targeting them better. It is about serving them in a fundamentally improved way. This generally requires changes outside the sales and marketing area, to redefine the customer's experience with the organization in some meaningful way (Calhoun 2001). A firm has to launch several initiatives to improve contact with consumers and deliver services that meet their expectations, allowing the relationship to go to the next level and achieve customer loyalty and a more profitable relationship. A successful CRM requires strategic insight into how to serve the customer better and the involvement/commitment of senior executives to align departments and divisions with a common strategic goal. CRM needs to be about business

strategy, supported by technology, not about reducing marketing costs, or simply interacting more effectively (Calhoun 2001).

2.2 Customer acquisition

Customer acquisition plays a different function and has a different proportional significance depending on a company's position. A late market entrant, for example, will be primarily focused on client acquisition, whereas an established company will be more concerned about customer retention. Typically, the client acquisition process is concerned with issues such as obtaining consumers at a lower cost, acquiring more consumers, obtaining more appealing customers, and obtaining clients through innovative methods. Determining the existing customer acquisition cost within the primary channel utilized by the firm and discovering how these costs change throughout different customer groups are the starting points in evaluating consumers' value from the perspective of the supplier organization. Customer acquisition is the initial step for managing a customer's lifecycle. It goes without saying that if there are no clients to keep, customer retention is meaningless. Customer acquisition is usually the most essential aim when launching a new product or starting a new business. To replace natural attrition, client acquisition is the only way to mend to unavoidable loss of some clients and it will always be required. As Buttle (2015) eloquently said: “Even in well-managed companies there can be a significant level of customer attrition. These lost customers need to be replaced. Even with well-developed and implemented customer retention plans, customers still need replacing, sometimes at a rate of 25% or more a year. In a B2C (business-to-consumer) context, customers may shift out of your targeted demographic as they age and progress through the family lifecycle; their personal circumstances may change, and they no longer need and find value in your product; they may even die. In a B2B (business-to-business) context, you may lose corporate

customers because they have been acquired by another company with firmly established buying practices and supplier preferences; they may have stopped producing the goods and services for which your company provided input; they may have ceased trading. Customers lost to these uncontrollable causes indicate that customer acquisition will always be needed to replace natural attrition."

Although the idea of product life-cycle planning is well entrenched in the marketing literature, the idea of customer life-cycle planning is much less well established. A number of customer management authorities have developed conceptual notions of a customer ladder or staircase (Christopher, Payne & Ballantyne 1991; Gordon 1998; Buttle 2015) up which customers progress. The initial steps on this customer journey are named as suspect, prospect, and first-time customer. These are the focus of our research. A suspect is a person or organization that has yet to be qualified as a prospect; a first-time customer is a customer who has made an initial purchase from a vendor (Buttle 2004). As I will expose later Lechler fully adopted this concept and made it a fundamental part of its CRM structure.

Sargeant & West (2001) propose a 7-stage approach for developing a successful customer acquisition campaign:

1. Set campaign objectives. These might include: target response rate, numbers of new customers recruited, acquisition cost per new customer, average new customer (lifetime) value
2. Segmentation and profiling to identify prospects most likely to respond to a campaign. This can use either market and/or existing customer data
3. Targeting. Tailoring of the communication message and channel, and offer, for the selected audience. Targets might include current or former customers, unconverted enquiries, or new-to-company and new-to-

market customers. Channels might include member-get-member schemes, and online or offline advertising

4. Media planning. Selection of cost-effective media within the selected communication channel
5. Communication of the offer
6. Fulfillment, following customer response
7. Response analysis, using metrics such as percentage response, cost-per-response, percentage conversion, cost per customer, revenue per customer, profit per customer, projected lifetime value per customer, percentage return on investment

This seven-stage approach, like nearly all modern management literature on CRM, sales, and marketing, believes that customers can, and should, be managed throughout their relationship with the company. One of CRM's fundamental tenets is that technology may aid in the delivery of more successful client acquisition campaigns. CRM does in fact provide companies with useful tools to aid them in the customer acquisition process, like *lead management, campaign management* and *event-based marketing*.

The *lead management* process is composed of many subprocesses such as:

- lead qualification, to ensure that priority is given to the most promising leads because can generate the best returns or are easy to acquire or have a high likelihood for repeating sales. Other factors in determining the lead qualification are the time frames for the lead's purchase decision and determine its ability to pay through credit rating services.
- lead allocation, to ensure that each lead is assigned to a fitting salesperson
- lead nurturing, ensure that leads receive service and assistance that helps them gain trust and confidence before becoming purchasers.

Campaign management consist in designing, executing and measuring marketing campaigns that target multiple leads via multiple channels such as social media, direct mail, email and phone calls. They can be wide ranged experimental campaigns to get an understanding of what works where, or very specific and focused ones that cater to a limited number of subjects in order to be as personalized as possible and not qualify as spam. On top of that, CRM systems can make most of these campaigns automatized and yet responsive to the feedback received from previous interactions. More on this matter will be discussed in the practical/operational part of the study.

Event based marketing also known as trigger marketing is a highly focused kind of marketing that generally produces excellent results since it guarantees that campaigns are always linked with the activities and lifecycle of a consumer, making them relevant and engaging. Event-based marketing creates marketing tactics focused on a specific event in a customer's or company's life. An event can be something simple and predictable, such as the conclusion of a contract, or something more complex and personal, such as the birth of a child or a marriage. It is a more customized kind of marketing that can assist in the formation of personal relationships with clients. Not only that, but an effective event-based marketing plan enables you to respond to your consumers' requirements at the best possible time.

2.3 Customer retention

Customer retention is the maintenance of continuous trading relationships with customers over the long term. Customer retention is the mirror image of customer defection or churn. High retention is equivalent to low defection (Buttle 2015). Retaining a customer can be translated into maintaining the relationship between him and the company profitable, healthy, and mutually convenient. These premises arguably represent the scope of all the knowledge

about its customers a company aims to obtain through a CRM. So why is retaining a customer so important and valuable for a company? There are plenty of economic arguments in that make the case for its relevance:

As tenure lengthens, so do purchases. Customers get to know their providers over time. If the connection is satisfying, trust rises while risk and uncertainty decrease. As a result, clients devote a greater portion of their expenditure to providers with whom they have a proven and satisfying connection. Furthermore, since suppliers establish deeper client familiarity over time, they can benefit from higher yields from cross-selling activities.

Reducing the cost of client management over time. When a customer is gained, the relationship start-up expenses might be significant. It may take several years for the partnership to generate enough profit to offset the acquisition expenditures. Particularly, in the B2B environment, continued relationship management expenses, such as selling and service expenses, might be minimal in comparison to the costs of acquiring the account. As a result, there is a good chance that the account will grow more lucrative on a fixed periods basis as the tenure extends. As the parties get closer over time, these relationship maintenance expenditures may be lowered considerably or even eliminated. In the B2B context, once automated processes are in place, transaction costs are effectively eliminated, and portals largely transfer account service costs to the customer.

Customer recommendations. Customers who actively devote a greater portion of their purchases to a favorite vendor are typically happier than those who do not. As a result, they are more likely to spread good word-of-mouth and impact the attitudes, sentiments, and behaviors of others, especially in B2C contexts.

Premium costs. Customers who are happy with their provider may be willing to pay a higher price. This is due to the fact that they get their sense of worth from more than just prices. Customers that have a long-standing relationship are also less inclined to respond to promotional offers from competitors. it

is empirical evidence that there is a relationship between customer happiness and their willingness to pay.

So, having proved the benefits of retaining customers, when is it that we can consider them retained? One of the definitions can be: The number of customers still doing business with a company at the beginning and at the end of a determined period of time (usually a year) represents the ability of that company to retain customers. This method for measuring customer retention, is called *raw customer retention rate.* A high raw customer retention rate does not automatically imply an efficient allocation of resources in customer retention as it can be deceiving since it does not consider other important factors in the assessment of this Key Performance Indicator (KPI). *Sales adjusted retention rate* expresses the retention rate as the percentage of sales achieved from all customers who were active at the beginning of the period. *Profit adjusted retention rate* expresses the retention rate versus to the percentage of profit from the customers that were active at the beginning of the period. The profit adjusted retention rate suggests that retaining customers that contribute more value should be the focus of companies, meaning that the focus is not necessarily on retaining customers per se but on the most significant wallet shares. For many CRM systems, increasing client retention is a central objective but it is crucial to note that the goal of concentrating CRM efforts on customer retention is to guarantee that the company's ties with value-creating customers are maintained. Maintaining connections with all clients may not be advantageous. Some may be prohibitively expensive to service. Others may be cunning switchers who are always looking for a better price. These people might be value destroyers, not value creators. So, when making efforts to retain customers, the matter cannot be simplified to “as many as possible”. Companies should focus on the most value yielding customers hence strategically

significant for the companies' future. These can be identifiable in different classes:

- *High future lifetime value customers*. Customers who have an expected long lifetime are more likely to contribute more to companies' profitability and for a longer period.
- *High volume customers.* Even if not generating high profits, high volume customers are significant because of their contribution to the absorption of fixed costs and help maintain efficient economies of scale keeping unit costs low.
- *Benchmark customers.* These are customers that might not generate high margins but can act as a good springboard to access other customers – "if we are good enough for 'benchmark customer' we are good enough for you"
- *Door openers.* Are extreme versions of Benchmark customers. They may generate no profits but represent an opportunity for further expansion in a new market. They can be particularly useful for crossing cultural boundaries like gap between West and East.

As a general rule of thumb though, companies concentrate their efforts on retaining newly gained consumers. They generally have a higher potential for future lifetime value than customers that have been with the company for a longer period. There is some evidence that retention rates increase with time, hence preventing defections in an initial phase of the partnership will pay off in terms of future income streams and profitability. Research into service failures provides another rationale for focusing on newly acquired clients. Customers may be more tolerant of service failures if they have previously received good service from the service provider.

This framework does not necessarily make retention choices an easy task. Whether effort should be concentrated on retaining high share customers that offer high returns, medium share ones whose shares might be lost to

competitors, or low share customers with the most potential to increase the customer life value is unclear. The answer though depends on the current value of the customer, the potential for growing that value and the cost of maintaining and developing the relationship. (Buttle 2015)

2.4 A decision support system.

"A Decision support system (DSS) is a coordinated collection of data, models, analytic tools and computing power by which an organization gathers information from the environment and turns it into a basis for action" (Little, 1980). A DSS analyzes vast volumes of data, producing detailed information that can then be utilized to solve issues and make decisions. Using a set of input data, the system, which is often based on a model and a computer software package, describes the implications of certain marketing and sales related decisions, or suggests specific activities. The information can be primary such as sales and cost data from business records, or secondary like the sales of competitor's items from a syndicated database built through shop audits.

There are four parts constituting a DSS:

Input: low-volume data or massive databases, analytical models.

Processing: interactive, simulations, data analysis tools.

Output: special reports, decision analyses, responses to queries.

Users: professionals, managers.

(*Noori, Salimi*, 2005)

Decision-makers integrate various forms of data (e.g., internal and external data) and expertise during the decision-making process. The decision-making process itself leads to a better understanding of the problem and the process, as well as the generation of new information. CRM's information gathering, storage, and transmission operations enable the dynamic construction and maintenance of decision models, therefore improving decision support. In turn, the application and examination of multiple decision models, as well as the

documenting of decision instances, supported by a DSS, provide a way of obtaining and preserving the intelligence withheld by different decision makers, facilitating the generation of new knowledge.

2.4.1 Analytics

The information analysis in a DSS context is called analytical CRM and it is defined as the process through which organizations transform customer-related data into actionable insight for either strategic or tactical purposes. The process is made up of a number of sub-processes including data acquisition, data enhancement, data preparation, data analysis and data delivery. (Buttle & Maklan, 2015) Analytical CRM is the backbone of any CRM system, and it's the step in which collected data is transformed into valuable information. Customer-related data analysis may assist in answering critical operational CRM issues such as: How pleased are customers with the service we offer, and what can be done to enhance it? What should we offer, and when? How does our sales performance vary between areas and product lines, and how can we address any issues?

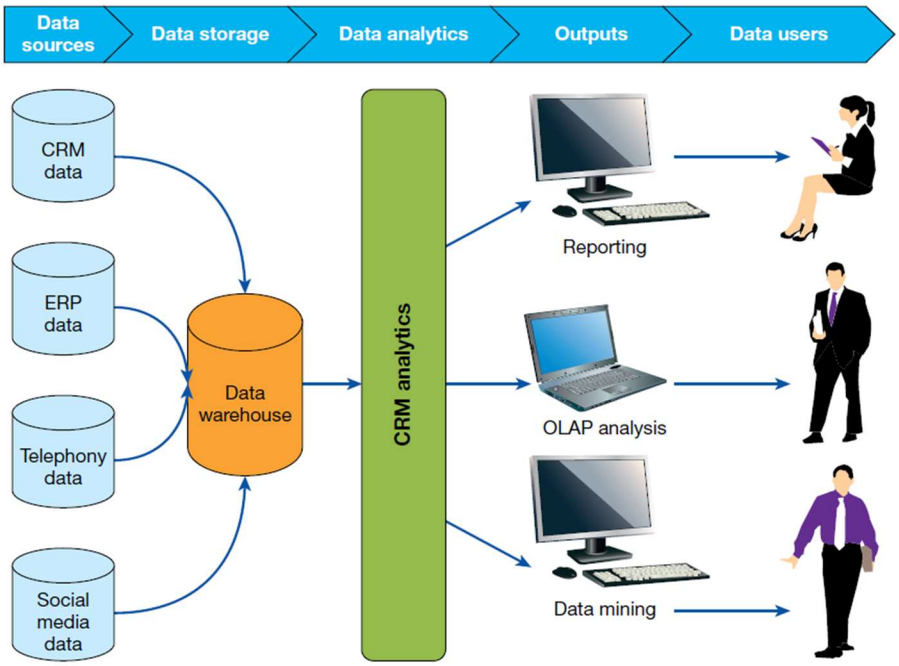


Figure 6: Basic data configuration for CRM analytics - Buttle & Maklan, Customer relationship management

But how is the information extracted? Data is put into a data warehouse from many sources, internal and external to the company, including the CRM system, the Enterprise Resource Planning (ERP) system, and others. An analytics software package is added to the setup so that users in sales, marketing, service, and management may query and interpret the warehoused data. When interrogating the data warehouse to extrapolate customer related insights, Buttle and Maklan identified three main ways for users to obtain the analytical insight:

Standard reports. Reporting is a key component of a successful CRM system. CRM is built on the understanding and segmentation of customers, for which it is fundamental to have reliable customer information. Reporting can range from simple listings of information like important accounts and annual sales to more complex reports on specific performance indicators. Reports can be standardized or query-based, the first being a premade report with some freedom of customization, through filtering and selecting between a limited number of options to choose from. Query-based reporting, on the other hand, offers to the users a set of tools that may be utilized to build a particular report tailored to the user's needs. This is considerably more versatile, and it is a powerful instrument in the proper hands since it enables to satisfy the request of very specific reports that can help unveil otherwise hidden insights.

Online analytical processing. Also referred as the OLAP cube, it allows for data to be analyzed in a more detailed manner, and allows users to quickly extract specific information and facilitates analysis. The operations that make this process possible are called Slicing, Dicing, Drill-down, Roll-up and Pivot.

Slicing consists in reducing one of the dimensions of the research queries to a single value hence generating a “slice” out of the OLAP cube.

Dicing is similar to slicing but reduces the number of values to one or more dimensions creating a sub-cube.

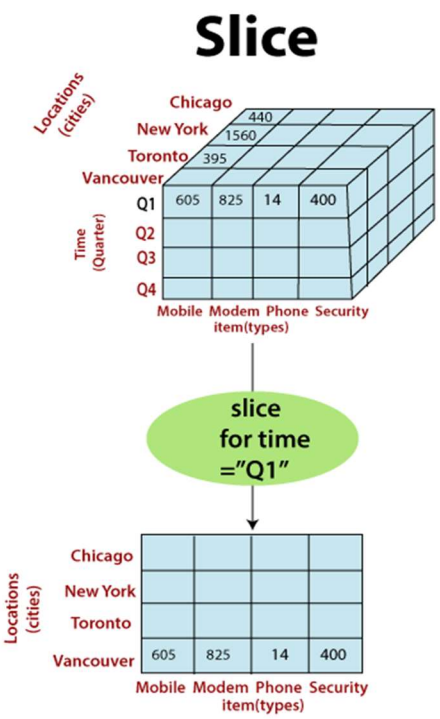


Figure 8: OLAP Dicing - javatpoint.com

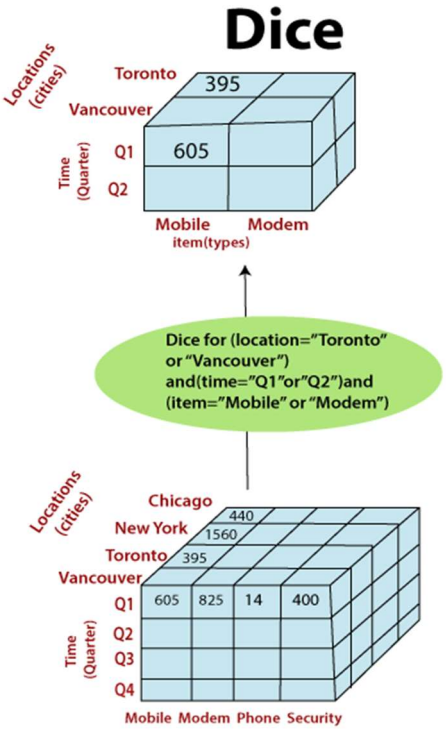


Figure 7: OLAP Slicing - javatpoint.com

Drill-down is an operation that allows to fragment values into more specific ones.

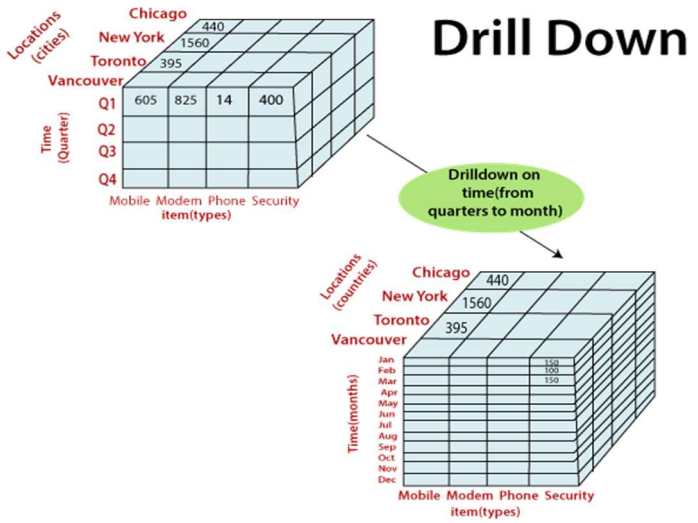


Figure 9: OLAP Drill Down - javatpoint.com

A Roll-up operation, instead, aggregates the data from different values in a subset that contains them all

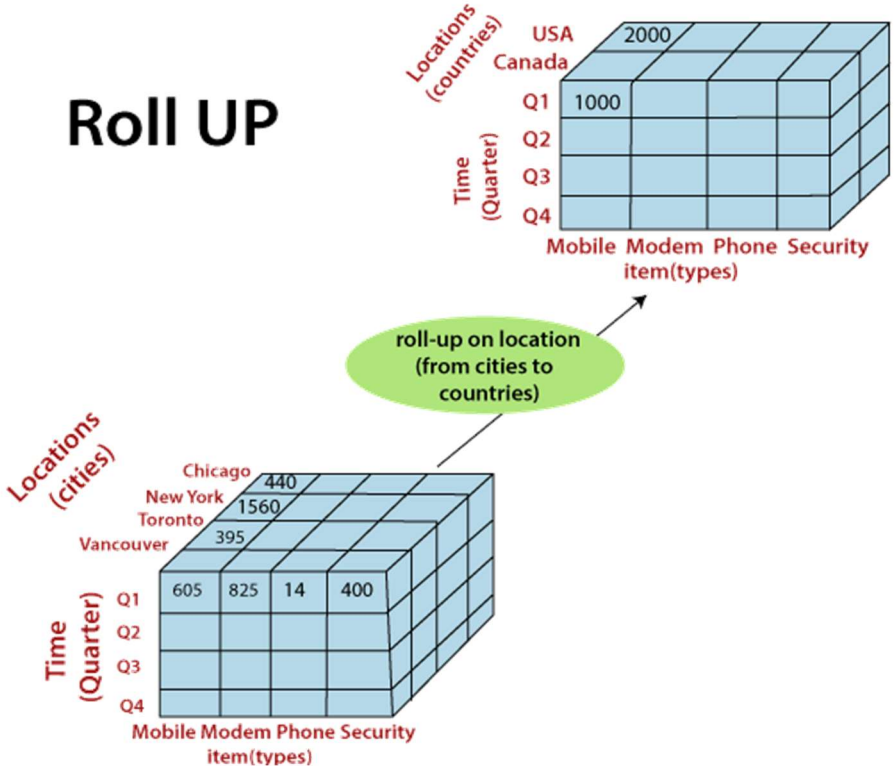


Figure 10: OLAP Roll up - javatpoint.com

Pivot is a visualization operation that rotates the data axes in order to give a different way of seeing the data.

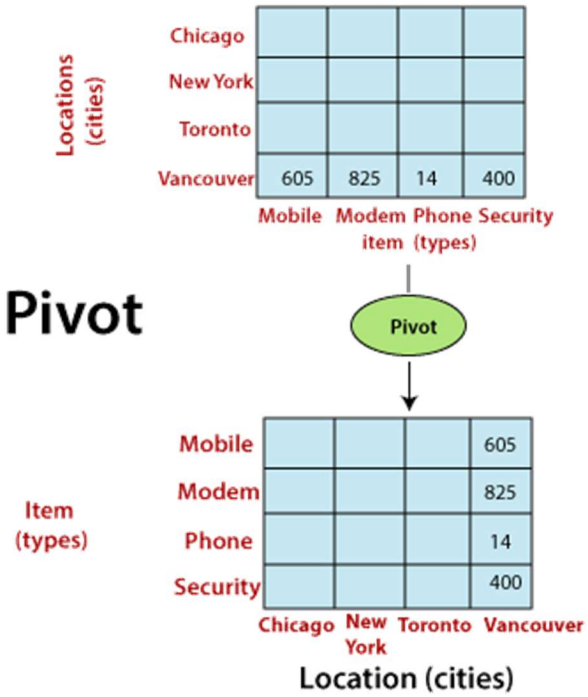


Figure 11: OLAP Pivot - javatpoint.com

Some of the mentioned operations may seem trivial, but an important element in CRM analytics is the information delivery mechanism. How the data is presented can have a big impact on how well it gets understood and perceived.

Data Mining

A disclaimer is due here: data mining is not going to get the attention it deserves. Even if it is a rather new technology, it is being adopted in many different fields, and its usefulness in data extraction is indisputable. Unfortunately, though, it is not very relevant to the case study examined in the third chapter and although a mention of the topic is a must, it will not give enough credit to the importance of the subject.

Data mining is defined as a process that uses mathematical, statistical, artificial intelligence and machine-learning techniques to extract and identify useful information and subsequently gain knowledge from databases. (Bahari & Elayidom, 2015) Classification, estimation, prediction, affinity grouping, clustering, and description and visualization.

Classification is the practice of setting a newly observed item into a predefined scheme. When identifying a potential new client, it should be determined to which group the prospect it resembles the most and then should be assigned to that group. This will provide an estimate of the prospect's probable worth. From the standpoint of analytics, the current hierarchy is a well-defined training set made up of pre-classified instances. Whereas classification is concerned with discrete categories, estimation is concerned with continuous ones. Customers are run through an estimating model and assigned a score between 0 and 1 based on their likelihood of responding favorably to an offer. Estimates like this imply that clients can be ranked for the campaign, with certain customers falling below a certain threshold not getting the offer.

Prediction is a particular utilization of classification or estimate depending on whether the variable getting predicted is categorical or continuous. Prediction

works by utilizing training instances in which the value of the variable to be predicted is already known and there are a large number of records in which this action has previously occurred. Based on previous data, a model is created and applied to the consumers whose behaviors are expected.

Affinity is used to group items in order to determine which ones belong together. Finding connections between data is the basis of affinity grouping. Shopping basket studies are commonly performed by CRM practitioners in retail. Affinity groups can be used to find cross-selling opportunities or to arrange shop layouts such that related goods are close to one another. Whereas shopping basket studies frequently depend on cross-sectional data (data obtained at a single moment in time), another type of affinity grouping takes into account the concordance between data over time so that analysts can detect sequential patterns. If/then logic is intrinsic to consumer behavior analytics.

Clustering is the process of taking a varied dataset and identifying naturally existing clusters within it. Cluster analysis does not try to fit new instances into a pre-defined model, as in the classification approach mentioned above. The overarching goal of clustering is to reduce disparities between cluster members while enhancing differences between clusters. In other words, the clustering approach aims to maximize both within-group analogies and between-group divergence.

2.4.2 What data to collect

The answer to the question of which data users should be extracting, could easily be “depends on who is asking”. Even if the answer seems trivial it does not mean it is not true. A direct marketer planning an e-mail campaign would want to know past campaign open and clickthrough rates, as well as click-to-open rates (CTOR), divided by the target audience, offer, and execution, but also information like e-mail addresses, e-mail preferences and desired greeting form. Structured and unstructured data can be equally useful in the assessment of a single relationship (Structured data are those that can be classified in either a hierarchical, relational or network system, and unstructured ones are data that do not fit a pre-defined data model). Such operational and analytical requirements aid in defining the needed contents of customer-related databases.

Senior executives assessing a company's strategic CRM choices will need a totally separate collection of data. To them information like: How is the market divided? Who are our current clients? What do they purchase? Who else do they purchase from? What is our financial share? represent more relevant pieces of information.

Just as important as “who is asking” is “what” it is being asked from the decision support system, hence what data must be fed to it in order for the system to return useful information. Jackson (2005) proposes the following tables indicating the data required for different stages in the relation with the customer:

CRM process	DSS analytics	DSS data requirements
Customer acquisition. Develop selection criteria that will elicit responses from customers with high profitability and acceptable risk profiles	• Profitability behaviour • Customer profiling — product share — bundling — market share/conjoint • Customer segmentation • Market testing	• *Internal*: profitability data; transactional behaviours; purchase history patterns; product groupings; account information; product attributes; other bank account data; historical performance data; FICO scores • *External*: demographic attributes; economic census information; geodemographic and lifestyle factors; credit bureau attributes
Customer qualification. Make approval decision and determine optimal risk base pricing for multiple products	• Origination modelling — Demographic patterns — Purchase patterns — Financials — Market research • Risk-based pricing	• *Internal*: see above • *External*: see above • *Other*: FICO scores; financial data; credit and deposit history; borrowing capacity; leverage potential; secondary repayment sources; leverages; debt-servicing; debt/income ratios; discretionary income; net worth; liquidity factors; outstanding loans; loan types; product attributes
Customer conversion. Develop right product attributes to overcome consumer-initiated rejection of offer	• Booking rate analysis — timing — bundling — product shares — market share/conjoint	• *Internal*: profitability data; transactional behaviours; purchase history patterns; product groupings account information on product attributes; financial data • *External*: demographic attributes; economic census information; geodemographic and lifestyle factors; channel preference; points of entry

Figure 12: CRM/DSS requirements in the customer acquisition stage - CRM: From 'art to science' T.W. Jackson

CRM process	DSS analytics	DSS data requirements
Customer retention. Minimise defection of profitable customers	• Weighted preference model for competitive offers • Survival analysis • Root cause analysis • Switching models — bundling behaviour — purchase patterns — market research — market testing	• *Internal*: profitability data; transactional behaviours; purchase history patterns; product groupings; account information on product attributes; financial data • *External*: data (other lending relationships, lifestyle factors), customer need to migrate to other customer products
Customer reacquisition. Create inducement to recapture profitable customers	• Time–purchase patterns • Market research • Loyalty models	• *Internal*: profitability data; transactional behaviours; purchase history patterns; product groupings; account information on product attributes; financial data; root cause information • *External*: (lifestyle factors), customer need to migrate to other customer products

Figure 13: CRM/DSS requirements at the customer retention stage - CRM: From 'art to science' T.W. Jackson

In light of the case study of chapter 3 regarding Lechler (a mainly Business to Business company) it is important to notice that in a B2B environment there are

some aspects to consider in order to have a better picture of how a CRM should be managed.

Firms are beginning to recognize that they now have access to far richer sources of data specific to B2B customer needs, information gathering, interaction and other behavior than ever before and are investing heavily in internal databases to link marketing efforts to financial outcomes. Yet some firms don't know what data to collect and what to do with the data they have. (Lilen 2016) The intense pressure to improve the efficiency and effectiveness of marketing efforts in B2B markets requires new approaches to old problems (Cannon and Perreault, 1999). It is obvious that the information to gather about customer changes greatly whether it is a business or an individual, and the same is true for the relationship approach. B2B markets have fewer partners, closer buyer-seller relationships, better technology, and better information exchange than B2C markets (Hutt and Speh, 1998). Shaw et al. (2001) present a list of useful knowledge to develop a customer profile (which they define as a model of the customer, based on which the marketer decides on the choice of the right strategies and tactics to meet the needs of that customer). Noori & Salimi (2005) deemed this list fit for the B2B contest

- *Frequency of purchases*. How often does the customer buy your product or visit your shop? By knowing this, the marketer can build targeted promotions such as “frequent buyer programs”.
- *Size of purchases.* How much does the customer spend on a typical transaction? This information helps the marketer devote appropriate resources to the customer who spends more.
- *Recency of purchases*. How long has it been since this customer last placed an order? The marketer may investigate the reasons a customer or a group has not purchased over a long period of time and take appropriate steps. Many times, this could be due to the customer having moved from that location or having shifted loyalty.

- *Identifying typical customer groups*. The characteristics of each group can be obtained by class identification or concept description. For example, a profile indicating that the customer has purchased a new house may lead to the marketer offering a special deal for home furnishings. Knowing the customer and targeting the right deal gets a far better response rate than a general message.
- *Computing customer lifetime values*. With customer profiling supported by data mining and knowledge discovery systems, a number of marketing activities can be enhanced, such as computing customer lifetime values, prospecting, and success/failure of marketing programs. Customer lifetime values, a measure to understand what is happening to the size and value of a customer base, can be computed by using the customer profile information combined with the product and promotional statistics. Customer lifetime values are asset measures that can help marketers judge their expenditures by measuring a plan's efficiency in producing assets.
- *Prospecting*. Customer profiles, especially their buying patterns, give clues to the marketer on prospective customers. A marketer who has knowledge about the patterns of his customers can easily identify prospective ones.
- *Success/failure of marketing programs*. Customer databases provide accurate information on the results of marketing programs. The marketer can use the patterns of purchase discovered from the database and the related marketing programs to measure the short-term and long-term effects of the programs.

2.5 Development of customer related databases

To adopt a CRM strategy, it is necessary to create customer-related databases. Strategic CRM then aims to acquire and keep profitable customers. Operational CRM provides the automation of the activities aimed at selling, marketing and customer serving. Those databases are employed by the firm, but are also made available to the customers, who get from them information on the firm's products, solutions, and service issues, as well as to market research outfits, to credit scoring agencies and to certain social media.

Structured and unstructured data can be equally useful in the assessment of each and every relationship. Structured data are those that can be classified in either a hierarchical, relational or network system, where it is clear how that data should be recorded (alphanumeric codes or literal text, usually) and how the fields are related to each other. The corresponding data models are normally predefined in commercial CRM applications, but are customized to better fit the actual sector, business, and customer context. Unstructured data are those that do not fit a pre-defined data model. They may include: textual corporate data, emails, PowerPoint presentations, SMSs, PDFs, spread sheets, faxes, agents notes, social media, and so on. It is generally more costly, voluminous and presents challenges to privacy and confidentiality, but nonetheless is still a very usable resource for companies. This kind of data has become known as Big Data: a set treated by CRM practitioners also with advanced technologies, like voice recognition, predictive analytics, social media monitoring and text analytics, which provide data integration, data warehousing and, in general, knowledge management – as it will be presented in the next sections.

Such operational and analytical requirements aid in defining the needed contents of customer-related databases, which are the standard architecture for CRM applications. These databases contain files; each file is a table which holds information on a single topic (e.g. a customer or a product). Each row has a

unique identifier; each column is headed with a data category. The standard user and application program Interface (API) is the Structural Query Language.

While unstructured data presents some major problems and possibilities for CRM practitioners, the relational database remains a paramount asset for CRM. Therefore, the development and management of a customer related database should still be explored. Buttle (2015) proposes six key steps to properly do so:

1. Identifying the database functions and the customers to be targeted for acquisition, retention, and development, also singling out the value propositions and experiences to offer them.
2. Defining the information requirements. These include obviously coordinates of customers and of all concerned (email, address, past history) and possible preferences in approaches and formats of exchanges. Choices of this type are made easier by features of CRM modularized software. Salesforce automation applications normally propose options on contacts, opportunities, cases, activities, and other issues.
3. Identifying information sources is essential. Internal data may be extracted by existing files from Marketing, Sales and Customer Service. External data are obtained by compiled list data (from bureau and vendors), census data for regions, municipalities, etc. (median income, average household size, average monthly mortgage, percentage ethnic breakdown, percentage college educated, marital status). Some CRM applications contain pre-integrated external data sources.
4. Database technology (usually: Oracle, MySQL, or SQL Server) and operating systems (usually UNIX or Microsoft) are normally built in the chosen CRM application software.
5. Data are to be obtained and inserted in the database. Data have to be verified, validated, merged and purged from more than one source. Duplicate entries have to be corrected.

6. The data base has to be maintained: taking care that new transactions are promptly inserted, new duplications are avoided, purging out customers inactive for given long periods of time, urging customers to update their own records so that they can be:
    - *Shareable* - because several users may require access to the same data at the same time.
    - *Transportable* - from storage location to user. Data need to be made available wherever and whenever users require
    - *Accurate* - any or all of these processes may be the source of inaccuracy.
    - *Timely* - data are data that are available as and when needed. Data that become available only after a decision is made are unhelpful.
    - *Secure* - particularly data about customers, are a major resource and a source of competitive advantage

2.5.1 Data integration and warehousing

As anticipated above, Big Data are originated from wide geographical sources often extending over different continents. Companies recur to text analytics so as to be able to access and process these huge volumes of data collected in a centralized database tracing back all the information relative to single customers. This causes a major integration challenge as data from several diverse sources needs to create a coherent, unified and clear to all view of the customer. Anomalies between the records in different databases have to be identified and composed as failure to integrate data can result in costly operational inefficiencies, duplication of efforts, a bad customer experience, and tense customer relationships. Solutions to this requirement are offered by CRM vendors. E.g. SAP provides to this end an efficient Master Data Management system which helps standardizing data. This process also

eliminates meaningless duplications trivially due to certain companies appearing in different entries by different names or acronyms.

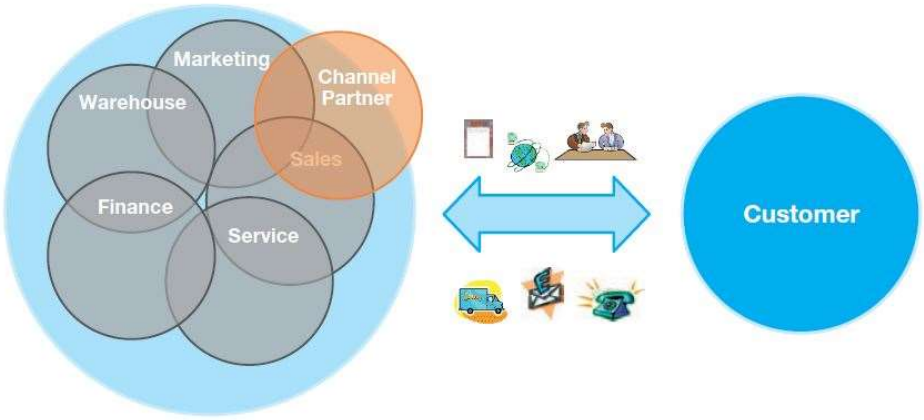


Figure 14: integrated single view of the customer by each sector of a company - Buttle, Customer Relationship Management

The general solution to these problems may be implemented creating "data warehouses". i.e. repositories of operational and historical customer related data imported from other databases. Warehouses organize data around customers and products, the essential subjects of business, and not around general headings as inventory management or order processing. Time coordinates are clearly stated and consistently used to refresh the data (daily or weekly). Scaled down versions of data warehouses, termed "data marts", are specialized for use in departments – e.g. marketing or sales. Knowledge stored in data warehouses includes product features and benefits, price lists, competitors' offers, market data, service issues, business processes and company policies.

Buttle defines kind of "all around" knowledge of a customer as knowledge management which he summarizes as "the practice of gathering, organizing, storing, interpreting, distributing and applying knowledge to fulfil customer management goals and objectives."

2.6 Following practically the theoretical funnels

Business and economics analyses often have to consider funnels, and while the arguments for their importance were compelling and the reasons for their usefulness were clear, the practical aspect for how they can be implemented is often opaque and overlooked. Sales and marketing funnels must not be thought of just as theoretical structures with difficult if not impossible possibilities to be translated into practical tools. Before demonstrating how funnels can be implemented let's give a brief explanation of what they are and what they consist of. Throughout the years, the terminology "marketing funnel" has not been completely consolidated with a single model. There are numerous models of the marketing funnel, each with a different number of phases and names for distinct types of organizations. The sales and marketing funnels are used to lay out the series of stages that a potential customer moves through until, eventually, he becomes a buyer. There are scarce differences between the two funnels as, in other words, they both represent the sequence of events that occurs before a consumer purchasing a desired product or service. Each funnel has its path map that defines a customer's or prospective customer's progression.

A funnel assists prospects in becoming acquainted with a brand. It is also well-known for allowing organizations to envision their buyer's journey and develop a sales support marketing plan in a controlled environment. The marketing funnel is separated into two parts:

Lead generation. It entails developing marketing strategies to raise brand recognition. Trade exhibitions, inbound marketing, content marketing, viral campaigns, internet advertisements, direct email, whitepapers, and other methods are employed to sell the brand.

Lead nurturing. After a prospect expresses interest in a brand, the following step is to nurture the lead. This is the stage at which a company attempts to establish a fruitful connection with a prospect. The prospect is exposed to the

product or service with personalized information that encourages them to make a purchase.

A sales funnel may help you understand what potential customers are thinking and doing at each stage of the buying process. These insights enable you to invest in the most appropriate marketing activities and channels, develop the most relevant content at each step and convert more prospects into paying customers.

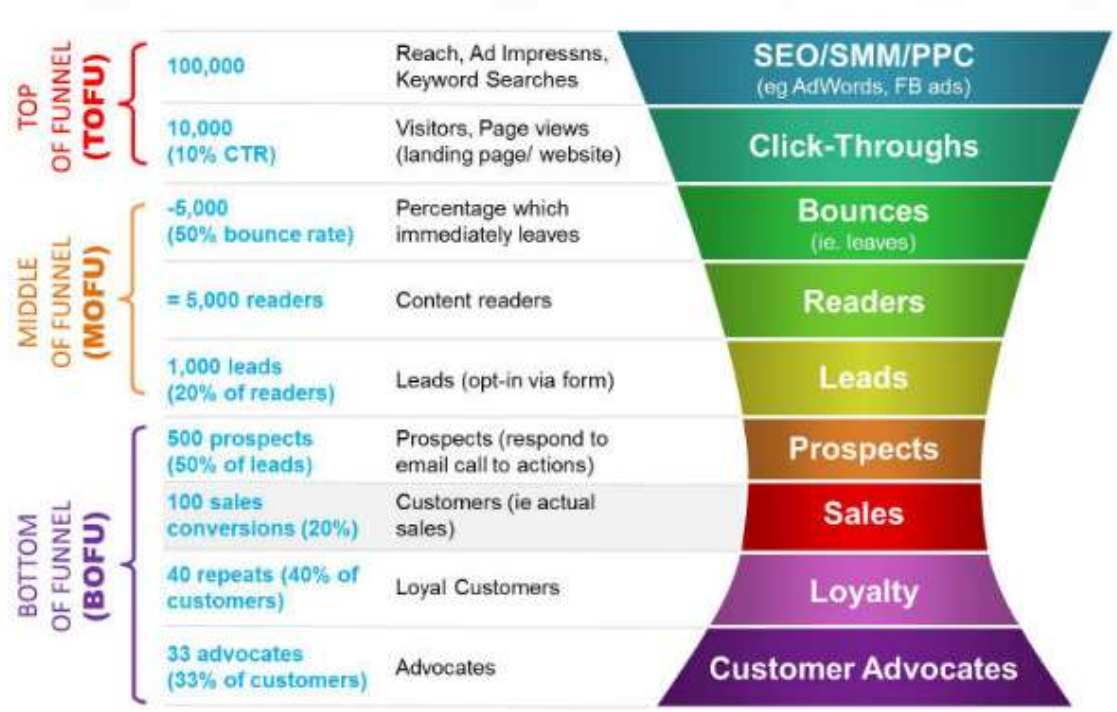


Figure 15: A detailed representation of a marketing funnel

A CRM solution allows companies to address clearly in which section of a funnel a consumer is, keeping a lean record of how they respond to stimuli and marketing activities. This can help marketers develop a roadmap of how to behave based on the collected data, and even get to a point where the whole marketing process becomes automated if a clear pipeline of what is the most fruitful step is after every customer action is taken into consideration.

The above excursus on the various stages of customer handling, on market analytics and on decision support systems, has established a defining scheme for the many facets of Customer Relationship Management.

Although the steps of this structure follow each other in a sequence that hopefully satisfies common sense expectations, it may be felt that the subject matter is presented in excessive abstraction. The following chapter describes a CRM platform has been implemented in the concrete case of the Lechler company.

3 The implementation of a CRM platform: The case study of Lechler

To supply a more concrete view of the contents of the thesis I present a case study on Lechler S.p.A., a paints and coatings manufacturer located in Como (IT) where I had the opportunity to conduct an internship. Lechler is a leader company in its sector, and with more than 150 years of history. It was founded in Germany, but its Italian branch become independent in the first years of the 20th century, maintaining its original name. In the last 30 years Lechler saw a rapid expansion on an international level opening branches in England (1995), Spain (1998), France (1998) and Germany (1999). Today operates also in Russia, Brazil and Poland and in over 60 other countries. The company divides its business in 5 main sectors:

1. *Refinish* - This is the automotive sector which is the main and most profitable one for Lechler. It caters primarily to reselling customers, but also by actual body shops with which Lechler strikes deals that include loans for use of painting equipment.
2. *Industry* - Consisting of Painting systems and products for industrial companies. In this sector as well, retailing distributors play the central role through the individuation, planning, implementation, and maintenance of partnerships.
3. Yachting - The boat coating industry is handled by Lechler through the Stoppani brand.
4. *Habitat* - IVE is Lechler's brand for furniture, with over 70 years of experience developed in Brianza, the cradle of the Made in Italy furniture industry.
5. *Decorative* - Chrèon is the Lechler brand dedicated specifically for painting houses and buildings.

(source Lechler.eu)

In 2017 Lechler had €96.7M in turnovers and 600 employees making it a very significant company in Italy's industrial landscape. (reportaziende.it & ncscolour.it)

During the period of my internship, the company's Italian branch was one year into the adoption of Salesforce an archetypical CRM solution, and it was just starting to do the rollout for the Spanish and French ones. These were perfect conditions to get precious insights of how the Salesforce adoption process played out at different stages. Business analyst Stefano Zulian provided precious perspective of the inner workings of the analytical activity of the company, the changes that Salesforce adoption brought to the company by demonstrating how many of the tasks now covered by the software used to be carried out before its implementation, and the basic workings of a CRM solution in a practical context complementing the theoretical knowledge previously presented.

3.1 What is Salesforce and what did it bring to the table

Before the introduction of Salesforce Lechler's data storage and collection was based exclusively on SAP an Enterprise Resource Planning outfit that provided mainly a descriptive analysis of the company's activities, hence somewhat lacking predictive analysis, and a completely inexistent prescriptive one. The database was analyzed through a Business Intelligence internally developed by Lechler and consulted through an excel extension; consulting and updating the data was hard and slow and it only allowed to report figures of past sales with little or no comparison with the expected outcomes for those results. This happened because the reporting of potential opportunities occurred only once a month through report sheets often overseen and recording long expired opportunities. The introduction of Salesforce standardized most of the processes that users previously had the freedom to carry out on their own

terms and schedule. The integrated structure for recording and consulting data is one of the most important features that Salesforce provided for the company dramatically reshaping Lechler's analytical capabilities.

Salesforce is the most used and popular CRM system in the world at the moment, where users can find information on Leads, Prospects, Customers, Opportunities and Marketing Campaigns. Other information relating to Materials, Revenues, Orders, commissions deriving from SAP are available as well. This wide array of types of information that can be accessed by Lechler's employees are updated in real time and accessible from any device, both for consulting and uploading data. But what is salesforce? By its own definition "Salesforce is a customer relationship management solution that brings companies and customers together. It's one integrated CRM platform that gives all your departments — including marketing, sales, commerce, and service — a single, shared view of every customer." (Salesforce.com). But the main features that made Salesforce so successful are the reliability, security, adaptability, and scalability it offers through its cloud computing services:

- Software as a Service (SaaS), meaning that the Salesforce software is licensed on a subscription basis and is centrally hosted, and no installations and downloads are required, it is sufficient to log in and use the software across the cloud.
- Platform as a Service (PaaS), this means that users are able to create and execute apps on a consistent ready-to-go platform.
- Infrastructure as a Service (IaaS) implies no server installations hence no costs on hardware maintenance. All data is secured, backed up, and kept on the cloud.

Through the creation of dashboards where the gathered data is displayed on several visual components, Lechler was able to provide readable and synthetic presentation of records. data filtering is used to provide insightful information

regarding many aspects of the sales process, forecasting future figures and analyzing old ones. Table 16 displays one of Lechler's dashboards created in salesforce that show easily quickly and with clarity information previously presented in humongous excel sheets.

Figure 16: One of the dashboards representing Lechler's activities

Most of the reporting practices are standardized so that data could be presented in a homogeneous way across sectors and areas, but with acumen, freedom, and a basic knowledge of how to consult the system one can easily extract very specific information and answer to particularly specific questions.

As previously mentioned, my internship at Lechler took place during the rollout of Salesforce for the French and Spanish branches, this is how it was presented to the area sales managers of those countries:

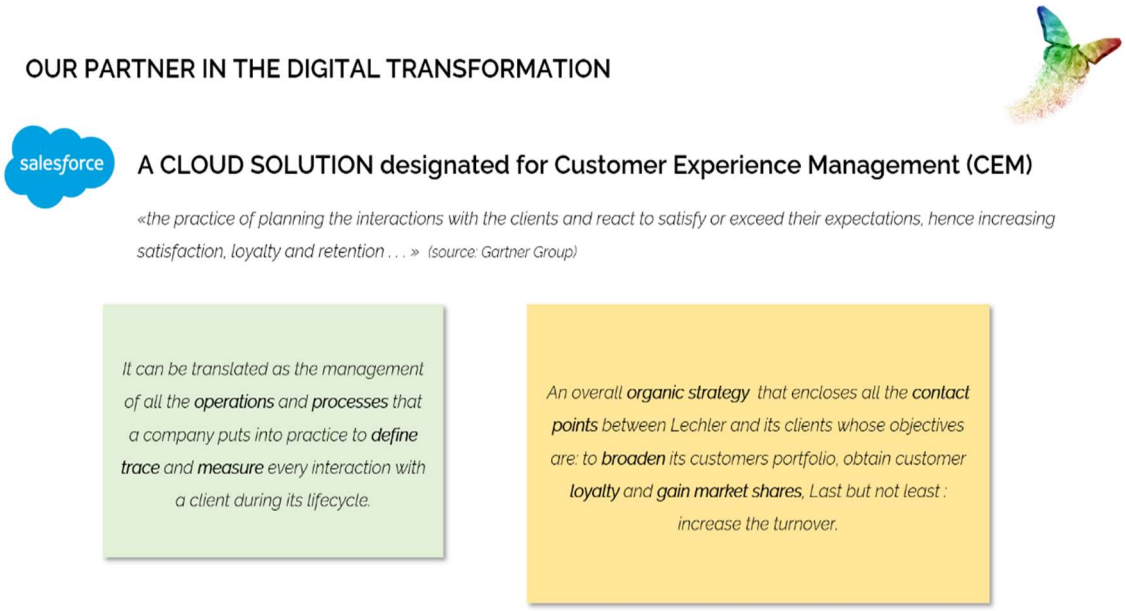


Figure 17: The presentation of Salesforce in Lechler to its management

3.2 Salesforce's process overview in Lechler

By adopting Salesforce, Lechler provided its employees (to different degrees depending on their position) with an interface to analyze the CRM and find information on leads, prospects, customers, opportunities, campaigns, and activities (technical and sales based) Along with more detailed information regarding the data within those categories. All objects analyzed in the following sections are linked to each other, allowing users to easily see the connections for example between an account and all the opportunities related to it, a campaign and all the accounts that adhere to it, and so on. Salesforce provides a wide plethora of information related to each object, so as to make it easy and accessible to managers that want to quickly retrieve specifics about an account, of how a campaign is doing, or reasons why an opportunity did not give its fruits yet. It is important to mention that many of the following processes before the introduction of the CRM were dealt with in much more rudimentary way or did not even exist since they are used to analyze KPIs that were impossible to extract before.

3.2.1 Lead Management

Leads for Lechler are potential clients who might be interested in acquiring products or services from the company but were not contacted by Lechler to explore the possibility yet. To generate a lead, it can be imported by a list generally provided by marketing through channels such as social media or e-mails or is manually created by a vendor. When generating a lead it is necessary to specify at least its name and surname or the business name, a contact for the lead such as e-mail or phone number and source of it. The Lead can then be managed by a salesman through the phases presented in table 18:

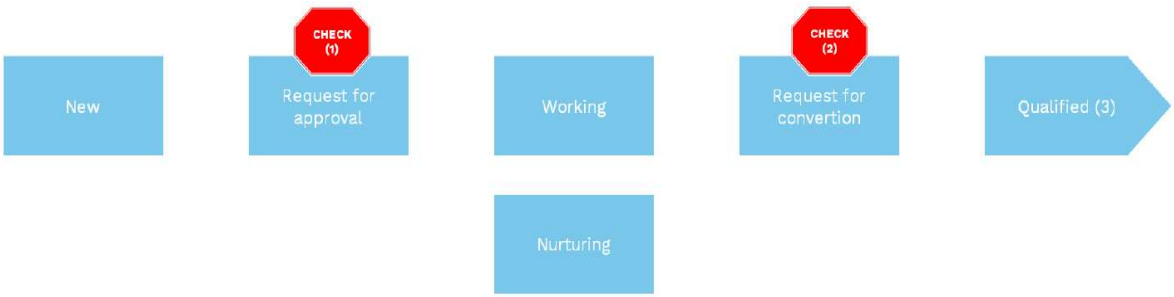


Figure 18: A map of lead management process

New: This is the default state of a lead when it is generated. It automatically gets assigned to the user who generated it or imported it or created it. The record for now is just a draft but it contains at least some information to get in touch with the lead.

Request for approval: The salesmen must make sure that the lead falls under their competence hence requesting an approval from the Sales Manager. To do so the system will oblige the user to specify the primary business of the lead, its sector, segment, and the primary province of its activities. On the basis of this information the lead is automatically assigned to a Sales manager to whom the system will suggest the new owner for the assignment of the account.

Working: Once the lead is approved and assigned the new owner can start working on the lead in order to identify a selling opportunity.

Request for conversion: The lead owner, once spotted a selling opportunity, can request for the lead to be converted into an account prospect. In Salesforce opportunity objects can be generated only for an account and not for a lead. To ask for the conversion the system will oblige the salesmen to specify:

- The potential monetary value of the lead
- A technological profiling of the lead
- The product category the lead showed interest in

The Sales manager in charge of the lead is notified of the request so that he can, together with the salesman, evaluate the actual existence of a selling opportunity. If that is the case the request is approved, and the customer service will convert the lead into an account prospect.

Converted: The customer service is the only figure who can convert a lead into an account, and together with National sales managers and upper management they are the only ones to have access to all the lead records. This way they can realize if the account for which the conversion is requested already exists, but is handled by another business (e.g., a company that is a lead for the wood business could be already a customer for the decorative one) and hence check for duplicates.

Nurturing: The nurturing state for a lead can be selected by its owner and it implies that in spite of the work that was carried out on the lead it is still not interested to Lechler products. The marketing team and the sales force can act upon the leads in this state at any time so to try and generate an interest.

This step-by-step process is a recurring one in all of the processes in Lechler that are operated through salesforce. This standardization in carrying out operations is what allows the integrated structure to collect and consult data mentioned at

the beginning of the chapter. Without a system that channels users into a series of mandatory steps to complete tasks, the quality and consistency of the customer data is subject to human error and inattention. Since data are the coursing blood of a CRM it makes sense that to ensure that they are updated in real time and maintained with high quality standards. Lechler adopted the very meticulous processes such as the one presented above and those that will be described in the rest of the chapter.

3.2.2 Accounts Management

The account entities are divided in two macro categories: Customer and Prospect. An account prospect is the qualification of a customer that has shown interest in buying a product or service with a related opportunity of a new customer acquisition. In the Lechler terminology is important to note the difference between a lead and an account prospect since the first is not necessarily interested in doing business with Lechler. Salesmen must take action to inquire on whether a lead has an interest in Lechler, and only then, if that is the case, convert the lead to account prospect. Before a lead is actually converted in prospect though the credit control manager conducts a financial audit. This is to avoid that time and resources are uselessly spent prospects that are not financially viable.

An account customer is the status that comes after account prospect, and the switch happens only when the first sale of a product or service form Lechler is completed, once that happens the client qualifies as an account customer.

The accounts are further classified as: B2B, Trade, Bodyshop and End user as previously mentioned in the leads management section, but accounts contemplate also physical persons that can be labelled as Professional (a physical person that buys from a retailer, usually a house painter) and Influencer (a physical person that can affect the buying choices of other clients, like an

architect or designer). Also, competitors are defined as a type of account. Salesforce allows to gather information based on the type of account and manage that information through lists describing many aspects of the account such as: the segmentation, the invoicing, the market share and more. The relationship between different accounts is also specified in order to improve and strengthen the knowledge of the market. In the following diagram are represented the relationships of Lechler with all the possible accounts and their mutual relationships; in the red boxes are those relationships directly between the company and the account, in the blue ones are those relationships that might be indirect (managed through an intermediary entity) or a competitor.

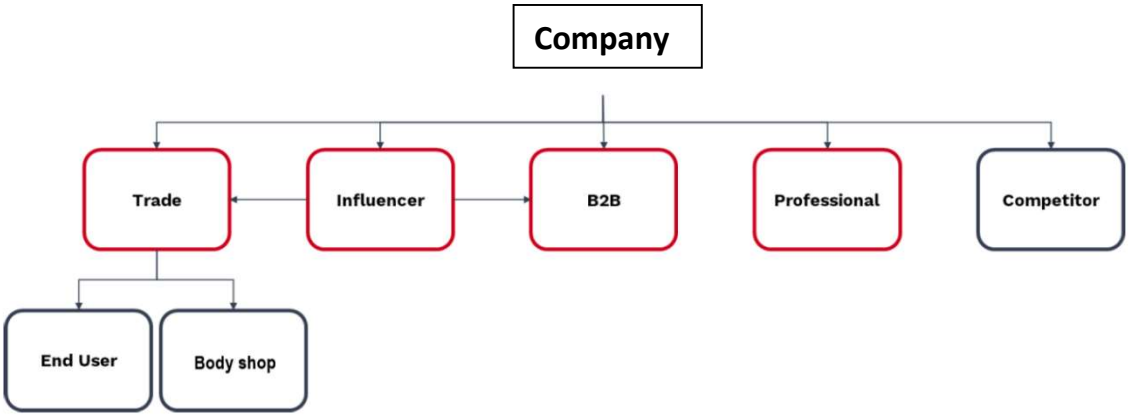


Figure 19: The visualization of accounts structure in Salesforce for Lechler

3.2.3 Opportunity Management

The Opportunity object serves to create and monitor sales dealings and also to classify them in view of a specific sales endeavor keeping into account objectives and customer type.

Four sales processes can be managed as Opportunities:

- *Acquisition of new clients*: this holds only for clients formerly classed as Prospects. This process is available for accounts B2B, Trade, End User and Bodyshop.

- *Penetration increase*: this process consists in expanding the range of products or services already purchased by an existing customer. It is available for accounts B2B, Trade, End User and Bodyshop.
- *Launch of new products*: available for accounts B2B, Trade, End User and Bodyshop.
- *Cross-selling*: this is the acquisition of a sales lead internally obtained from another business of the Firm. Also available for accounts B2B, Trade and End User.
- *Threats*: threats are considered as opportunities but are actually the opposite, hence referred to as negative opportunities. In order to keep track of the possible causes that might snatch a customer away from the company.

Salesforce formalizes and supports the management of the stages composing a sales process: initial approach, needs identification, in depth analysis, proposal presentation, return on investment evaluation, achieved (when financial verification or ROI evaluation have a negative outcome), Offer, trial at customer's, negotiation, won but order has yet to happen, and won if that is the e case.

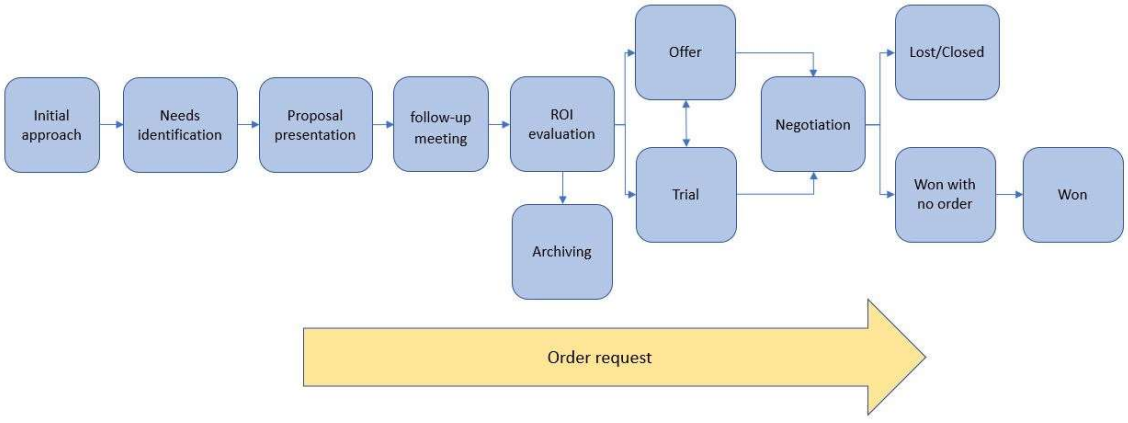


Figure 20: Visual representation for the management of an opportunity

Initial approach: The initial approach is the first time an account is contacted by the sales team since it was converted from being a lead. This step is obviously skipped when the account in question is already a customer and is being contacted for say a penetration increase or the launch of a new product.

Needs identification: In this phase the salesman tries to offer to the client a product deemed appropriate for his needs of which they may have already some idea from when it was just a lead.

Proposal presentation: Once the needs of the client are pinned down the selected product is presented to the client.

Follow up meeting: In this phase an in-depth analysis of the specifics of offer and product is carried out in person and with the presence of a technician either at Lechler's or in house for the client

ROI evaluation: Here the opportunity gets examined to verify that there is a substantial enough return on investment for the offer.

Archived: This phased must be distinguished from a lost opportunity as it is reached only in two instances: when the financial check has a negative outcome (KO) and when the ROI evaluation was deemed unsatisfactory.

Offer: A commercial offer is presented to the client; it is managed outside of Salesforce, but it can be attached as a file to the opportunity object to keep track of it. The salesman that wants to create an offer on SAP generates a task to do so for the customer service and once available it will link it to the corresponding offer.

Trial: A trial of the offered product or products is carried out at the client premises.

Negotiation: In this phase there is a negotiation of the offer between the salesman and the client. It is useful to understand how much time passes between the offer presentation and the conclusion of the deal, regardless of if it is positive or negative.

Won with no order: this phase occurs when the offer is accepted by the client but the order is yet to be issued.

Won: It is the closing phase of the deal. As the order corresponding to the opportunity is issued the status automatically switches to Won.

Lost: Alternatively, the opportunity can be closed as lost one. It is possible to specify the causes of this outcome.

This tedious procedure as already displayed allows managers to keep a close inspection of how the available opportunities are going, but at the same time it is inevitably providing a bird's eye view of how the salesmen are performing. A desultory employment of this system on the part of the salesmen when the process was still in the testing and its early stages, temporarily shielded them from the constant monitoring they are subject to when Salesforce became the only medium to carry out their business. Instead, an irregular use when the CRM is fully operational could only denote a drop in performance.

Here is an example of how opportunities get managed and monitored through Salesforce's dashboards:

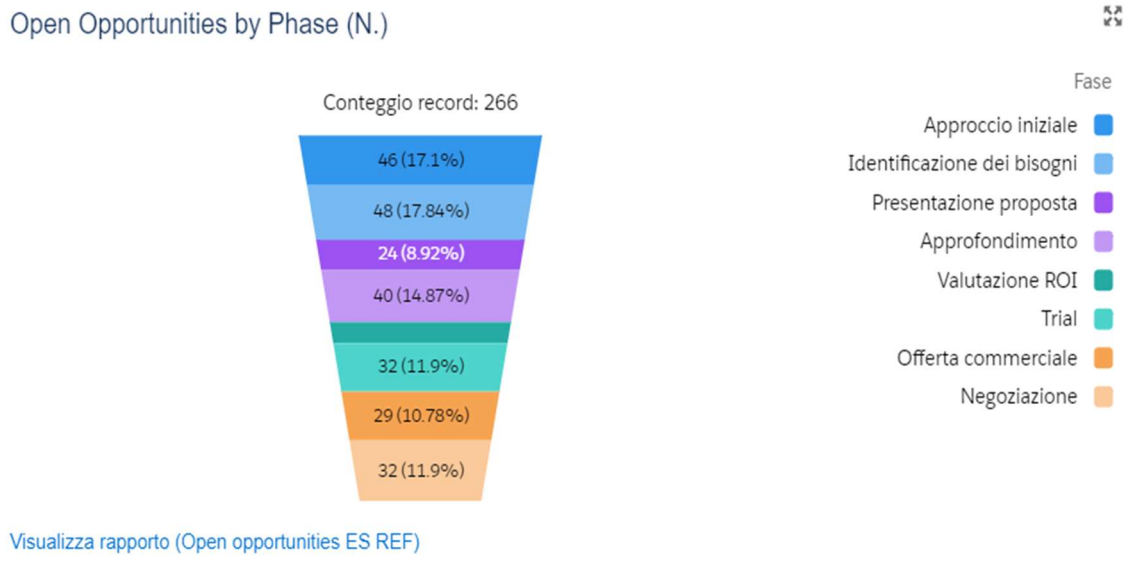


Figure 21: Funnel representing the number of opportunities divided by phase

The graph above does not simply show how many opportunity objects are in every phase. Each phase can be clicked on to display what opportunities there

are, referring to which customer or prospect, and showing which salesman is in charge of it.

3.2.4 Campaign Management

A campaign is the CRM practice used to manage in Salesforce Marketing initiatives, as publicity, e-mail campaigns, newsletters, launching a new product, fairs, formation/popularization events. The aim of a campaign may be generating new leads, promoting their conversion into prospects, fidelizing existing customers, increasing brand awareness. A campaign activity is used at Lechler to manage sales processes and commercial events involving a set of leads and/or customers aiming at: penetration increase, launching new products, fidelization, fairs.

Fidelization

The main method used by the firm for fidelization is the creation of a network, the participants to which have access to a formation program. This includes the direct sale of a training program – a service which the firm may invoice or supply at no cost. Recourse is also made to events of communication, information and popularization of a value proposal carried out at points of sale or offered to existing and potential customers or to influencers.

End users are offered a Bodyshop Efficiency Program subdivided in the following phases: Selection, Formation, Consulting, Workshop Technology.

Campaign Process

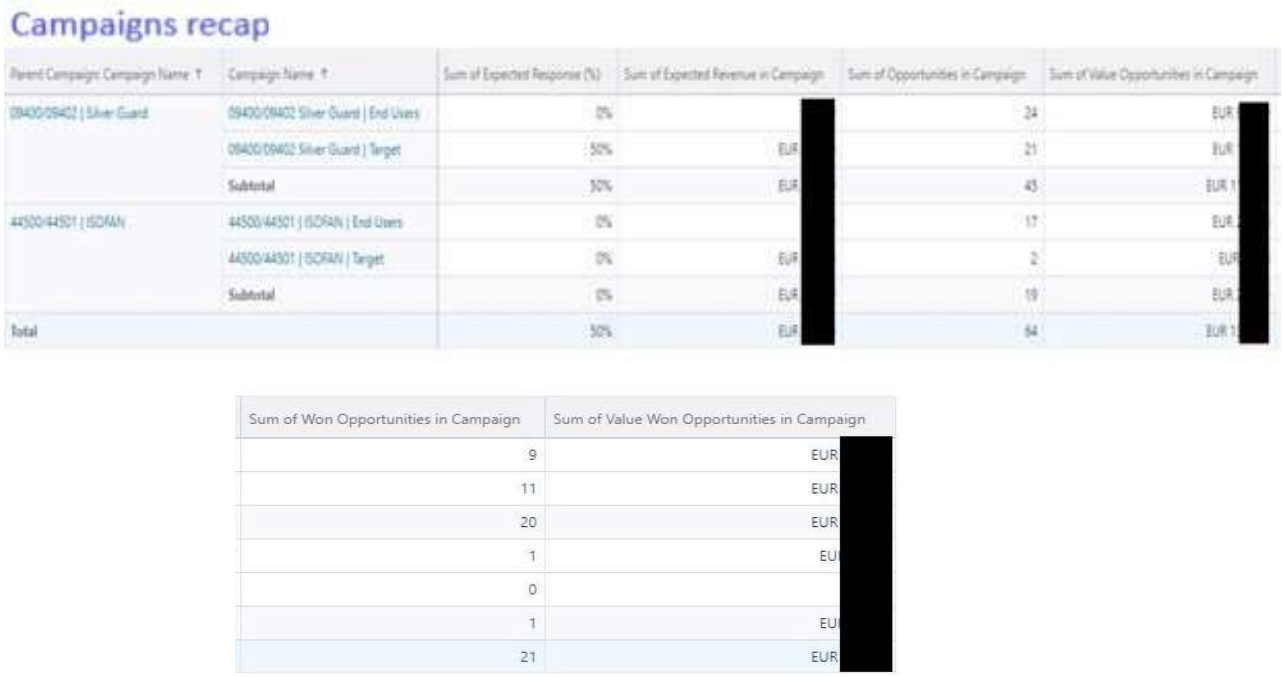
A campaign may be created by Marketing or by the Sales Manager. Standard Campaigns are: Advertising, Direct, Email, Telemarketing, Banner Ads, Seminar/Conference, Public Relations, Partners, Referral Programs, and are used for unique objectives such as: increase in market penetration, launch of new products, and fidelization events. Then the members of the campaign have

to be chosen either Leads or Referents of an Account. This can be done manually or collectively: the latter permits to import lists of Leads or Contacts.
Once members have been imported, they can be processed, and a list of leads and contacts is generated to keep track of the activities and tasks that can be carried out for each member.
In each campaign, specific states of members may be defined in order to specify the phases through which members go through, such as “Sent” and “Responded”. Each Campaign is usually linked to a primary Campaign Source, and it is possible to track back which opportunities are generated thanks to a campaign.
The effectiveness of a campaign is verified through reports and statistics supplied by Salesforce:

- The ROI Analysis Report monitors the return on investment
- Statistics, automatically recomputed every time a campaign is updated, show the total number of answers, the number of opportunities generated and other data.
- Statistics on the campaign Hierarchies show how campaigns are performing compared to the main campaign.
- Salesmen activities are traced so that results can be analyzed.

The main objective of a campaign though, is that of generating profitable opportunities on which a predictive analysis can be conducted. Evaluating the number of opportunities generated and estimating the potential value of those opportunities, the plausible profit of the campaign can be calculated.
As mentioned above, campaigns are layered in a hierarchical model where a main “Parent Campaign” establishes what is the main objective and the so called “Child campaign” are related to the specific actions undertaken to achieve the main objective. In table 22 is shown an example of the recap of a campaign representing Parent and Child campaign, an estimate of the response rate to it, the consequent expected revenue from it, the opportunities that it

generated, the value of those opportunities and how many of those were won and with what profit.



Campaigns recap

Parent Campaign: Campaign Name	Campaign Name	Sum of Expected Response (%)	Sum of Expected Revenue in Campaign	Sum of Opportunities in Campaign	Sum of Value Opportunities in Campaign
09400/09402 | Silver Guard	09400/09402 Silver Guard | End Users	0%		24	EUR
	09400/09402 Silver Guard | Target	50%	EUR	21	EUR
	Subtotal	50%	EUR	45	EUR
44500/44501 | ISOFAN	44500/44501 | ISOFAN | End Users	0%		17	EUR
	44500/44501 | ISOFAN | Target	0%	EUR	2	EUR
	Subtotal	0%	EUR	19	EUR
Total		50%	EUR	64	EUR

Sum of Won Opportunities in Campaign	Sum of Value Won Opportunities in Campaign
9	EUR
11	EUR
20	EUR
1	EU
0	
1	EU
21	EUR

Figure 22: Display of data recapping the management of a campaign

A campaign can be directed to leads to increase the customer acquisition or to an existing account aiming customer to increase retention, but most importantly it is a way for Lechler to coordinate the marketing efforts with its retailers and reach even the end users. The relationship between Lechler and the end users, with which it does not have a direct connection, is better examined later in the thesis but it is important to note that it represents a valuable source of information useful to make more accurate analysis that Lechler can access only through cooperation with its retailers.

3.3 The edge Lechler gained

Over the next section the main competitive and practical advantages that Lechler gained form the Salesforce adoption will be discussed.

3.3.1 Analytical forecasting and performance tracking

Until the adoption of salesforce, the analytics of Lechler were mainly descriptive ones, which used historical data from previous client interactions, to paint a picture of the dynamics of particular sales that occurred in the past. These historical datasets contain information on sales, products, team members or services, and accounts. They can be transformed into potentially meaningful metrics and hence provide the company with a deep understanding of what happened in previous iterations. But using the gathered data exclusively for a descriptive analysis only gets so far as it answers questions regarding the past or the present at best. But as described by Rosenbröijer 2014 analytics aim at reaching business objectives through reporting data and analyzing trends, creating predictive models to foresee future problems and opportunities, as well as analyzing or optimizing business processes to improve performance. Demirkan and Delen (2012) suggest a scheme that helps understand the perks and improvements Lechler aimed at when adopting CRM:

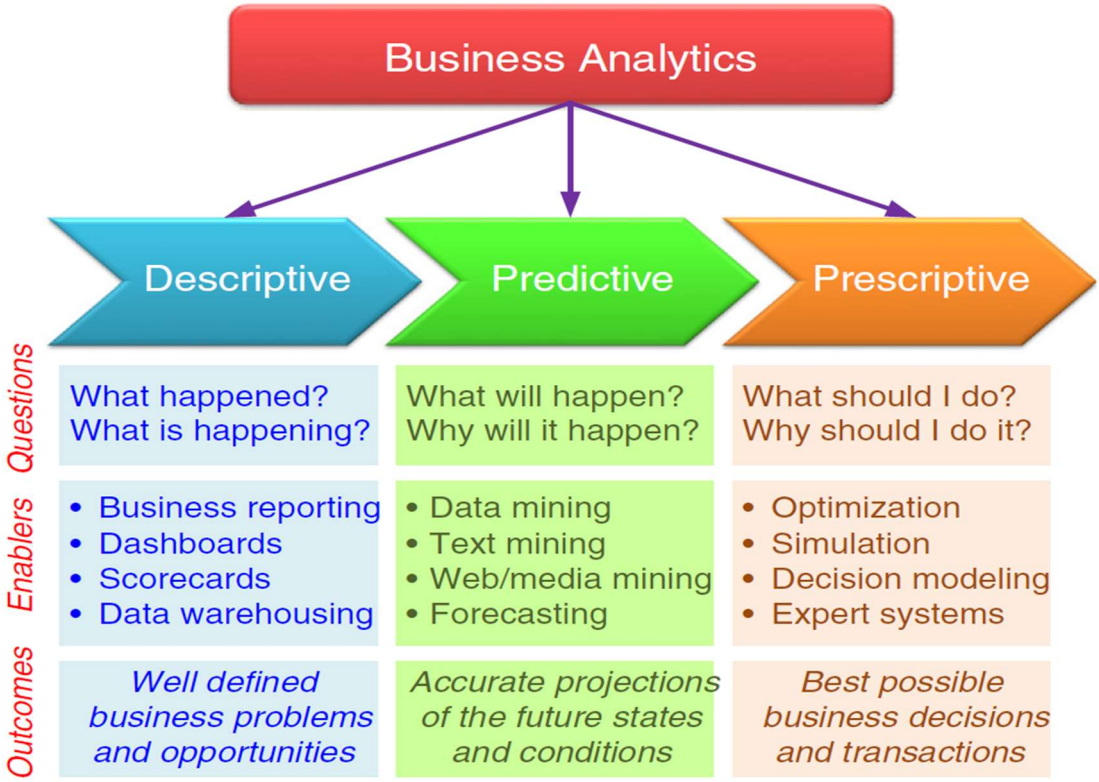


Figure 23: taxonomy of business analytics - Data, information, and analytics as services, Demirkan & Delen

Predictive analytics are used to predict the future using data from the past and the present. A large amount of data and its high descriptivity allow Lechler to use CRM to try and predict the future behavior of its clients. Usually, the more detailed is the data the more accurate are the predictions of the sales results. To fully harness the potential of analytics though, Lechler also had to implement a prescriptive analysis to better understand which is the best course of action for the company after a prediction is made. This analytical feature is probably the hardest one to present to sales teams. The first two categories represented helpful tools for the salespeople while this last one puts them on rails that in a way inhibit their decision-making freedom. Granted that it did not represent a popular introduction, predictive analytics serves as the basis for a more efficient sales team, reducing their autonomy as it reduces how flexible they can be when interacting with a client. This system though ensures that to each action of a customer corresponds the best possible reaction according to what the prescriptive analysis suggests based on the analysis of the historical

interactions. This transition is best explained by the title alone of Tyrone W. Jackson “From art to Science” (2005), the standardization of sales processes is one of the central features and reasons of the adoption of Salesforce by Lechler; the ability to obtain a detailed register of the interaction between customers and Lechler salespeople allowed the implementation of prescriptive analytics, hence better performances, and a unified and consistent approach to the clients.

Lechler stress considerably the importance of their processes and of having the staff members following them, so much so that the analytics tools are used also to measure the proper adoption of Salesforce by the internal users involved. The monitored statistics on the user’s adoption are:

- The percentage of completed activities
- The history of the opportunities they had
- The number of leads converted to account prospects and from prospect to customers
- The average time passed for an activity to be carried out

These Key Performance Indicators are used by managers to keep track of the efficiency and of the correct application of Salesforce.

3.3.2 Structured data gathering

The data-gathering ability needed to achieve the analytical goals mentioned above has not been a trivial one for Lechler. Before the Salesforce introduction, Lechler had its data scattered through multiple platforms, which made it difficult for the users to find and consult the desired information let alone analyze it. This clunky mechanism used to be only the tip of the iceberg for Lechler’s data management: the uploading of and updating of data was left to the discretion of each individual user who obtained the information. The inefficiencies of this system are evident, and a considerable amount of effort is

required to patch up an incomplete set of data which was hence unusable, or worse would have yielded incorrect and misleading information if used. By integrating and intertwining every process in the salesforce environment the possibility of such mismatches was reduced. Users have to follow a step by step process so that the instances of obsolete or incorrect data are less likely to occur since they simply would not be able to proceed with their work if they did not follow the predetermined series of tasks that forces them into updating the system in real time. It is obvious that without feeding correct and timely data to the CRM the quality of the output it returns would be deeply affected. A good way to visualize the issue is represented by a recurring expression regarding the matter (which I will refine): “crap in, crap out”.

When it comes to data gathering though, Lechler's aim extends to more than just collecting information about its clients. As previously mentioned, resellers represent a large share of the companies’ customers. For Lechler, this means that there are more customers, the actual end user of their products, whose data can be obtained and analyzed to get a more extensive understanding of the market. In order to get access to the end user information, Lechler needs the cooperation of the retailing companies who not always are willing to give away their client’s information for obvious reasons.

A collaboration with its resellers would not only give Lechler a broader knowledge about its customer base behavior, but thorough campaigns coordinated with the reseller and designed with Lechler’s large CRM infrastructure could help both partners see bigger profits.

3.3.3 Efficiency in marketing and sales

As mentioned earlier, Salesforce allows Lechler to keep a close eye on sales and technical activities executed in order to lead the activity owner towards the objectives that are deemed to be more important or more achievable. Lechler

follows a model called RAC (Results – Activity – Competence) in order to have a better knowledge of what activities salesmen are carrying out and with which results. This supplies a better view of where it is best to focus the sales efforts. Based on recorded and documented experiences managers can establish which clients or leads are worth pursuing and with how much effort.

While the sales process is carefully monitored by the CRM solution, even if still handled in the Salesforce environment, Lechler uses slightly different terminology to define the management of the marketing activities of the company, the Customer Experience Management (CEM).

The definition adopted by Lechler to define CEM is the one given by the Gartner Group: *"Customer experience management is the discipline of understanding customers and deploying strategic plans that enable cross functional efforts and customer-centric culture to improve satisfaction, loyalty and advocacy."*

In other words, managing all the processes that the company uses to track, measure, and organize every interaction with a client during his entire lifecycle. Here is Lechler's representation of the differences between CRM and CEM in effect and purpose:

	CRM	CEM
Focus	Sales	Sales + Marketing
What is its purpuse	Manage and standardize the sales pipeline, memorize interactions with potential clients	Fully understand the customer life cycle and offer a personalized experience for every touchpoint
Effect on customer	Increase the customer satisfaction offering a better sales service	Increase loyalty, advocacy and ROI while reducing defection
Customer information	Provides a particular way to see the customer: the custimer data sheet	Provides a comprehensive view of the customer's value during its whole life cycle

Figure 24: The distinction that Lechler makes between CRM and CEM

3.4 A practical example

To better display the functionalities of Salesforce in Lechler, I bring the example of the internal monitoring of Salesforce adoption by the salesmen involved in the refinish business of the French and Spanish branches (that I looked over personally). These statistics are used by the National Sales Manager in order to have regular meetings with salesmen and marketers to promote behaviors that increase the degree of adoption of Salesforce in daily use and consequently inspect more closely the team activities. By analyzing this example, I will highlight the three subjects discussed above in an empirical way.

A specific adoption dashboard was developed to intuitively show the Key Performance Indicators developed for the following areas:

Area	**Key Performance Indicator**
Activities	Activities completed & not completed (last 30 days)
	Activities not Planned (last 30 days)
Opportunities	Opportunity history (Current year)
	Expired opportunities (Current year)
Leads	Leads converted (to prospects) & won (to customers)
	Number of leads & average time per phase

The activities metric receives particular attention, specifically the Quantity, Quality and Purpose of the activities planned and then carried out as it represents the foundations on which business opportunities are generated. So, being able to properly monitor the activities and their efficiency (based on Quantity, Quality and Purpose) leads to better predictions on the generation of opportunities whose monetary value can be easily estimated hence yielding superior forecasting capabilities indicating a more effective predictive analysis. Before the introduction of Salesforce there was no way to gather data about activities carried out by salesmen nor to have a structured control over them (as explained in the 3.3.2 section about structured data gathering). By adhering to the structured process inherently contained in the CRM it's possible to gather

data on activities, opportunities and leads. This drives the efficiency increment and a superior control on marketing and sales projects.

Activities completed & not completed

The activities KPI shows, for each user, what tasks were completed within the Salesforce environment against the number of activities that were planned in advance by each user. In tables 25 and 26 is represented a dashboard, available to the managers, that keeps track of this information. The names of the users were left out for privacy reasons.

Number of activities	Percentage of completed activities
33	12%
32	81%
31	39%
26	15%
24	63%
23	30%
21	0%
20	80%
14	100%
12	92%
11	73%
8	63%
8	0%
8	0%
6	100%
6	0%
4	75%
4	0%
4	0%
3	100%
1	100%

Figure 25: percentage of activities completed per user

Figure 26: general overview of activities

In this particular scenario, from the early days of the French and Spanish Salesforce rollout, 299 activities have been planned by 21 users, and in the last 30 days more than half of those activities were not completed (55%) - with 10 users who did not carry out even a single one of their tasks.

Activities not Planned

The objective of this KPI is to measure those activities that are registered by the user only after they have been carried out. This metric highlights the incorrect

use of the system, since if an activity is not planned in in advance it cannot be properly monitored.

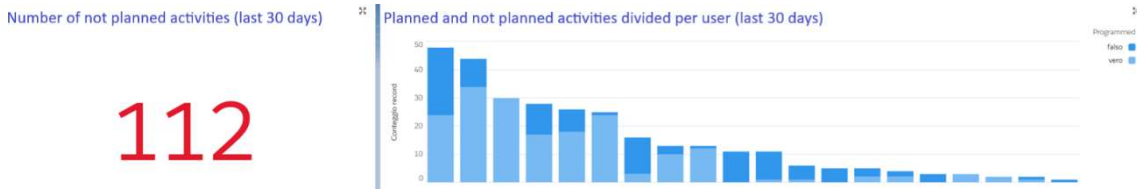


Figure 27: Salesforce interface displaying user's activities

In the case at hand 112 of the 299 activities were not planned.

Opportunity history

The Objective of this metric is to monitor the number of changes of phase (mentioned in the opportunity management section) for opportunities in the current year and for how long they have been in each phase so that the manager can advise Salesmen on whether to keep pursuing any given opportunity or focus their efforts elsewhere.

Sum of opportunity count	Average amount	Average number of phase progression	Average time per phase (in days)
69	EUR [redacted]	6	33
57	EUR [redacted]	9	42
43	EUR [redacted]	8	22
38	EUR [redacted]	10	35
37	EUR [redacted]	5	39
37	EUR [redacted]	5	76
29	EUR [redacted]	9	9
26	EUR [redacted]	5	29
21	EUR [redacted]	6	75
19	EUR [redacted]	5	40
19	EUR [redacted]	8	38
17	EUR [redacted]	7	9
14	EUR [redacted]	6	48
13	EUR [redacted]	7	65
13	EUR [redacted]	7	52
4	EUR [redacted]	3	23
1	EUR [redacted]	7	63
1	EUR [redacted]	4	6
458	EUR [redacted]		

Figure 28: Salesforce interface displaying user's activities details

In the proposed scenario 458 opportunities were managed during the current year and their average duration from initial approach to close is around 37 days. For each user it is also possible to monitor the number of opportunities, the average amount, the average number of phases' changes and the average duration of each phase. The value of the opportunities is left out of the figure as it represents sensitive information.

Expired opportunities

Expired opportunities are expressed in quantity, monetary value, and how long ago they expired. An expired opportunity is deemed so when it is still open but with a predicted closing date earlier than the current date. The higher the difference between the dates, the more inadequate the user's management of the timing of the opportunities will be considered.

Sum of opportunity count	Sum of amount	Average expiration time
16	EUR [redacted]	204
5	EUR [redacted]	312
2	EUR [redacted]	117
1	EUR [redacted]	488
1	EUR [redacted]	91
25	EUR [redacted]	48

Figure 29: Salesforce display of expired opportunities per user

5 users had 25 opportunities expire for a monetary loss that cannot be disclosed and by 48 days on average

Leads converted to prospects & prospects to customers

This KPI allows to measure, per user, how many leads have been generated, how many of them have been converted into account prospects, and how many of the latter have been won. In line with the structure presented in section 3.2.1.

Sum of won	Sum of converted	Lead count
22	71	74
37	69	69
8	52	52
16	52	52
11	25	51
16	37	40
24	37	38
14	31	35
3	23	26
12	24	25
1	20	22
9	18	20
2	17	19
1	12	14
3	6	9
1	9	9
1	2	4
0	1	1
0	0	1
0	0	1
0	1	1
181	507	563

Figure 30: Salesforce display of lead management and monitoring

Out of 563 leads inserted by 21 users, 507 were converted to prospects and 181 of those were won. The performance by user can be monitored in table 30 but more details can be monitored in the next KPI.

Number of leads

This KPI is used to measure how long it takes each user to convert a lead into an account prospect, and in particular how long each phase of the process takes. In accordance with the lead management system of the company presented in the customer acquisition section of the thesis.

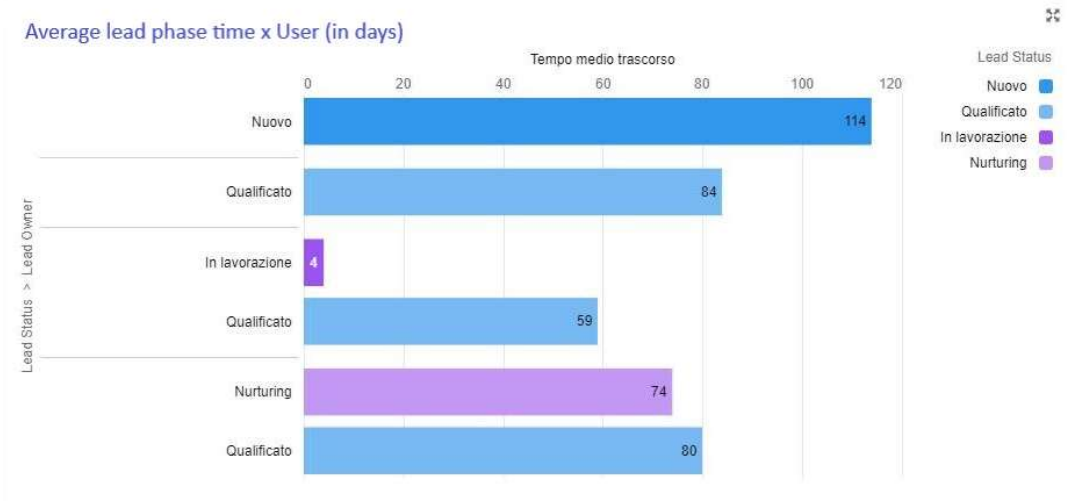


Figure 31: Salesforce display of lead management and monitoring

The figures shown are from the early stages of the adoption when salesmen were still getting to know the system and the transition to working exclusively with Salesforce was not complete.

Conducting this array of processes before the implementation of Salesforce not only was unachievable, but not even on the radar of Lechler. The descriptive data analysis was incomplete and the predictive one was almost aleatory making impossible any kind of prescriptive analysis. As a result, it was not possible to structure and standardize the marketing and sales processes, which today is the most important value-creating practice for Lechler. Yet there remains the problem of the quality of the input data as previously described the adoption of the new process is not exactly appreciated by the Lechler users

since it greatly reduces the independence of users. It is straightforward that users, being the ones responsible for providing data used to keep an inquisitive and judging eye on themselves, are not eager to upload the system regularly and consistently, especially since they are not eager to take advantage of the beneficial insights this practice entails. A desultory application of the system though can invalidate the usefulness and purpose of a CRM and if this complication spreads up to the data collection it can lead to detrimental outcomes for the company.

CONCLUSIONS

This dissertation sheds light on many facets of Customer Relationship Management and how it essentially reshaped many aspects of business processes that for decades remained unchanged. The case study on Lechler showcased a mostly administrative advantage more than an economic one: having a unified view of customers, a consistent way to carry out processes, and the creation of a "firm consciousness" that aims to converge the collective knowledge of the company members, is not trivial and its value is indisputable. That being said, in the purchase of this asset Lechler invested a substantial amount of time, resources, and money. A very quantifiable amount. But while the management side of the advantages that CRM brought to Lechler is glaring, as far as I know the monetary return on investment of the endeavor is rather fuzzy. This might be due to the fact that the CRM has been fully operational for relatively a short time (just about a year), or that quantifying the returns of a venture of this nature is no easy task, but to the best of my knowledge estimates of ROI have not been formulated, which is quite in opposition to what the literature suggests.

Some gap between theory and practice though, is normal and expected. While theory provides a clear view of how the transition to these new models of doing business should be performed, it is apparent that the on-field application proves to be more complex than what would appear from the literature. The companywide mindset shift from a product-centric to a customer-centric culture of doing business is challenging to present to agents that have been used to different practices their whole life, and as it emerged from the case study of Lechler, is sometimes hard to be fully grasped even by the upper management that called for such transformation. From what I could observe the company uses the adopted CRM solution with a more user-centric function, as one of its core aspects for Lechler is more accurate monitoring of the

activities and behavior of its salesmen through close control over the quality, quantity, and objectives of their sales efforts. Even though the name of the CRM employed is Salesforce, it appears that making such use of the system only marginally helps the sales team who have to swap their well-established and tested habits with imposed, alien, standardized procedures that put an ever-watching eye over their every action. It is obvious that these factors are not very favorable for the acceptance of a tool that has to enter into the routine of salesmen, as they have to experience many mandatory hassles, without probably seeing immediate benefits, and not knowing of the likely performance improvements on the long term. In my opinion it is of paramount importance to properly demonstrate all the perks that all these changes would entail to the salesmen that could initially see it as a yoke. Making the benefits of the analytical results of the CRM more palpable to the salesmen could help clarify why the tool is so important, why is worth all the effort it requires, and that on the long term, when accepted and normalized, it will serve as a compass. When the situation is painted from the point of view of management though, a much different picture appears: the control it can exert over the salesforce is unprecedented, efficiency can be quantified and categorized down to each single executed action. This kind of detailed reporting only a few years ago would have exceeded managers' wildest dreams. These considerations on how the CRM adoption is received by management and salesforce raise some questions: Is there a level of standardization of processes that allows for managers to keep a close look at salesmen operations without inhibiting their freedom of action? Is there a sweet spot that prevents salesmen from becoming little more than executors of an instruction manual? Does this complete standardization of processes limit the possibility of finding better ones by suppressing the natural process of trial and error?

Many conceptual doubts can arise from the subject, and even if it is debatable wheather is right to look for a way to mitigate and handle conscientiously the

CRM tool, it is clearly the way forward for companies with a sizable customer base. If there is one thing that this work was aiming to point out, it is the competitive advantage that a company utilizing a CRM has over one that does not. As a final point, it is important to state that the conclusions presented above are spawned by a research based on my limited personal experience and from what I could understand on the subject. By any means it does not aim to cast a judgement on how Salesforce or Lechler operate, but to analyze and open a discourse on how the powerful tool of CRM can be used.

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