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OMNI-CHANNEL DATA MANAGEMENT – SOLUTIONS OF CRM SALESFORCE

SINTESI

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Sommario

L'elaborato di tesi è basato su un tirocinio della durata di 3 mesi presso la società di consulenza Accenture S.p.A., leader mondiale. Tale tirocinio è stato svolto all'interno dell'Area Technology-Cloud First in un progetto riguardante l'utilizzo del sistema CRM Salesforce e in particolar modo della creazione e gestione di una app Salesforce, Contact Management Lightning app, che si occupa della gestione dei dati dei clienti, raccolti attraverso vari canali di contatto che il cliente mette a disposizione e della gestione dei contatti stessi da parte degli operatori di contact center. Il sistema CRM Salesforce offre sia soluzioni standard, che vengono migliorate e implementate dall'azienda stessa, sia la possibilità di sviluppare, tramite codice, soluzioni custom.

L'obiettivo principale del testo è quello di confrontare due soluzioni differenti per l'assegnazione dei cases (oggetti di lavoro Salesforce che il sistema automaticamente genera al contatto con il cliente) agli operatori di contact center, appartenenti a fornitori di tale servizio diversi, addetti alla loro lavorazione. L'analisi condotta ha come punto di partenza la descrizione di cosa è un CRM e la presentazione del sistema Salesforce.

Abstract

The master thesis is based on a 3-month internship at the world leader consulting company Accenture S.p.A.. This internship was carried out within the Technology - Cloud First Area in a project concerning the use of the Salesforce CRM system and in particular the creation and management of a Salesforce app, the Contact Management Lightning app, which deals with the management of customer data, collected through various contact channels that the customer makes available and the management of the contacts themselves by the operators of contact center.

The Salesforce CRM system offers both standard solutions, which are improved and implemented by the company itself, and the possibility of developing, through code, custom solutions.

The main objective of the text is to compare two different solutions for the cases assignment (Salesforce work items that the system automatically generates on contact with the customer) to contact center operators, belonging to different service providers, who can process them. The analysis carried out has as its starting point the description of what a CRM is and the presentation of the Salesforce system.

Alice Nardini

Introduction

During the three-months internship into Accenture S.p.A. I was insert in the Technology Business Area, in the Cloud-First subarea. In this area the employees have the goal to analyze and construe the requests of the customer.

My team was involved in Salesforce projects: own work consists on the configuration and customization of this CRM system according to the customer request. My team is in the middle of two groups: one is made by consulting people, who have a more closed relationship with the customer and their goal is to catch the customer request; the other is the developer group made by Indian people who build the designed solution. My team take the requirements taken by Consulting and design the Salesforce solution that will be built by Developers. My role is to find the best solution that meet the customer requirement, collected by Consultant team, and address the build of the solution to the Developer Team.

I work on the Contact Management project: an app used by call center operator, that automates the retrieve of the customer information from the database and allows the operator to work more efficiently and spend less time. When I started my internship, the project was already in Production Environment, so I took in charge some new change request or new request of the customer.

To explain our work is not required to specify the customer. The CRM System, in this case Salesforce, can be implemented by each type of organization. CRM is a suitable solution to be applied in all market sectors, for all organization size or business type. Some examples of Salesforce customer are: Alitalia, AmericanExpress, Boggi Milano, Cirfood, Carlo's Bakery, Columbia Business School, Euronics, Electric80, Inter, Fondazione per l'infanzia Ronald McDonald Italia, WWF, Financial Time, GE, Tecnocasa Group, Italgas, L'Oréal Americas, OVS, Pandora, Nexive, Eurostar etc. In these examples we have companies and organizations belonging to the most diverse sectors. For this reason and for the impossibility of revealing the entity of our client for reasons of corporate secrecy is not specified the client company.

In the first chapter I analyze what is a CRM System: from its definitions belonging from different purviews to his application into the company's business.

The second chapter was dedicated to explaining the operation of Salesforce: his structure, his architecture, the worked objects and tools, the provided modules and I speak about the Service module, that is the most used by us.

Finally, in the last chapter two solutions to the channel management were presented and compared: the first is a customized solution, design using code, and the second is a standard solution based on the use of a Salesforce tool, the Omni-Channel based on a simple configuration.

Alice Nardini

1. The Customer Relationship Management - CRM

1.1 Definition of CRM

A traditional definition of Customer Relationship Management, or CRM, was given by Greenberg in the 2003:

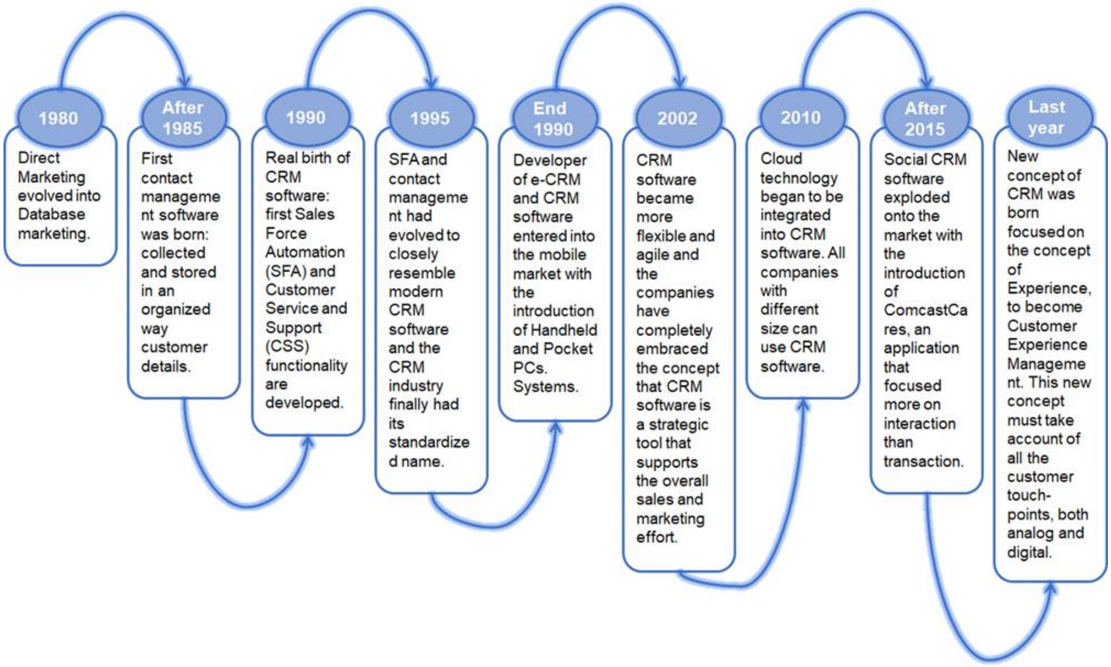
“CRM is a philosophy and a business strategy supported by a system and a technology designed to improve human interactions in a business environment.”

First, the CRM is a business strategy that places the customer at the center of its work and its business. It changes the way to see the customer within the company: each business units must consider the customer as the core of its activities and they must share all the customer data in their possession and therefore pertaining to them with the other business units.

A CRM strategy is impossible to do without software, they consist in suite that assist the customer relationships and computerize the activity flows from which customer requests arrive. For this, the technology becomes a key part of implementing this strategy.

The CRM system accelerate the transfer of information from customer to organization and vice versa into e-commerce and e-business sector and into traditional sector.

The *Figure 1* represent the steps in the evolution of CRM systems over time.



1.2 CRM Market Data

The Gartner company says that the worldwide spending on CRM software had an increase of 15.6% to reach $48.2 billion in 2018. CRM continues to be the largest and the fastest growing enterprise application software category. Worldwide revenue related to the enterprise application software totaled more than $193.6 billion in 2018 with an increase equal to 12.5% from the last years. The CRM represents almost a quarter of that revenue.

Approximately 72.9% of CRM spending is intended to the SaaS Software, that is assumed increases up to 75% in the 2019: the main drivers are agility, flexibility, requirement for remote and mobile users.

The *Table 1* shows the top five CRM software vendors accounted for more than 40% of the total market in 2018.

CRM Software Spending by Vendor, Total Software Revenue Worldwide, 2018 (Millions of U.S. Dollars)

Company	**2018 Revenue**	**2018 Market Share (%)**	**2017 Revenue**	**2017 Market Share (%)**
Salesforce	9,420.5	19.5	7,648.1	18.3
SAP	4,012.2	8.3	3,474.4	8.3
Oracle	2,669.0	5.5	2,492.9	6.0
Adobe	2,454.8	5.1	2,017.2	4.8
Microsoft	1,302.0	2.7	1,132.1	2.7
Others	28,371.7	58.8	24,962.0	59.9
Total	**48,230.2**	**100.0**	**41,726.7**	**100.0**

Table 1: CRM Data Market

All subsegments of the CRM market grew by more than 13.7%, with marketing emerging as the fastest growing segment, increasing by 18.8% and representing more than 25% of the entire CRM market. Customer service and support retains its first position, contributing 35.7% of CRM market revenue.

1.3 Channel and Data Management

The CRM into the company can have multiple functions: simple contact manager, marketing actions manager, company information collector or tool for sales forecast and for directional analysis. Each one must be equipped with a specific data section and the base of it are the information linked to Account and Contact: all the references of a company and the reference of the contacts linked to it, that allow the company to have a greater definition of the customer profile and the possibility to manage in a more structured way the history of the customers and their activities.

To collect data the company can use a lot of different channels. We can divide them into different family based on the on the interaction between company and customer: present not mediate (physical contact), present mediate (phone or email), Web (transaction portal) and correspondence (written text on a paper support, fax, SMS).

The contact center is the application of the CRM system to manage the contact with the customers and all the data that the company can retrieve using that. The customer contacts the organization by multiple channels, synchronous (phone) and asynchronous (parlay). The operators can respond to the customer requests belonging to different channels. In the *Figure 2* is reported an example of functional blocks of a Contact Center.

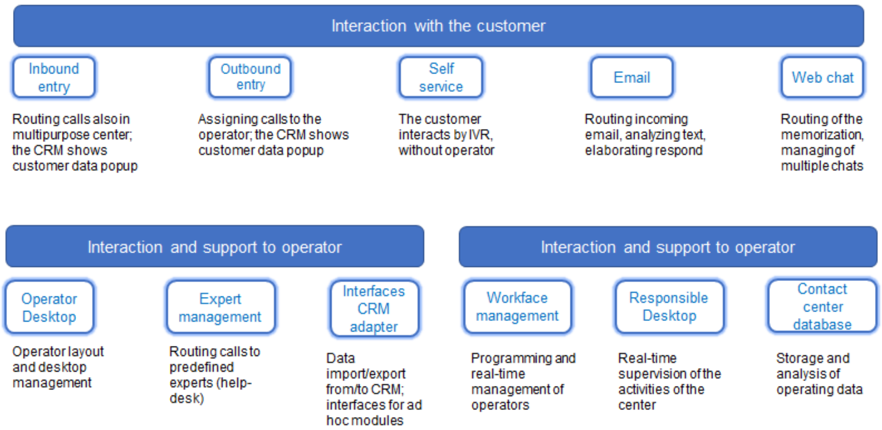


Figure 2: Functional blocks of Contact Center

1.4 Multichannel and Omnichannel strategy

In the multichannel strategy the organization makes available to the customer numerous channels to get in touch with it, so that they can choose what they prefer, but they are not integrated with the other one, each of these channels works separately, each with its own strategy and goals and the data are not shared between channels and we often think about silos, optimizing the management and performance of the individual touchpoint.

The Omnichannel strategy works with all the possible channels but remove the boundaries between different sales and marketing channels to create a unified and integrated whole. It allows marketers to create a coherent experience by communicating with each consumer based on their behavior and what those behaviors say about their preferences, thanks to technologies, such as artificial intelligence and machine learning. These technologies allow the companies to study and forecast the customer behaviors, and they can interact with consumers in a relevant, timely and personalized way.

In the *Figure 3 and 4* are represented the two different strategy.

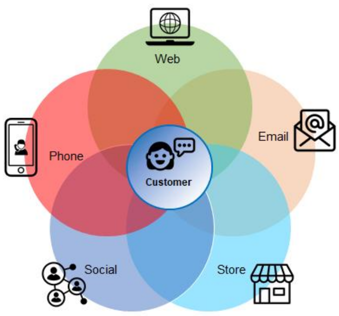


Figure 4: Omnichannel strategy

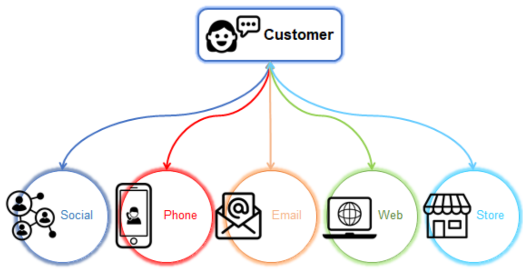


Figure 3: Multichannel strategy

The omnichannel strategy presents the advantages to ensure a seamless experience for user: the company message he viewed on his laptop are the same ones he saw while Instagramming on his phone and the same he received an email. The message is consistent, device agnostic, and most importantly, customized based on your browsing behavior.

The customer that use more than multiple channels to contact deliver a higher lifetime value than those that use just one. The more you can recognize each customer and customize their experiences to thoughtfully shepherd them through their journey, the more likely they'll be to convert many times over. This implies the establishment of a longer relationship between customer and company over time.

2. What is Salesforce

Salesforce is a Cloud Computing Technologies platform that allows to design your application to help your company to sell, service, market, analyze, and connect with your customers. We can develop with or without code, as declarative development and programmatic development. For the first type we use forms and drag-and-drop tools to perform customization tasks. For the second type we use Lightning components, Apex code and Visualforce page. It's not important to be a programmer, Salesforce gives to their customer all the possibilities, the tools and the modality to build application in the way to be the most performing for themselves.

Salesforce lives with all it offers in the multi-tenant cloud system. The multi-tenant system consists in sharing of the same structure that the provider makes available. There the same version of the CRM works, but every customer can configure the system as he wants.

The Salesforce platform is the foundation of the services: it's powered by metadata and made up of different parts (data services, artificial intelligence and APIs, but we focus on it after). The apps stay in the top of the platform. One of the most important things is that every component is integrated: also, the last advantages like Einstein predictive intelligence and Lightning system are incorporated with all the other applications and components that build the platform (*Figure 5*).

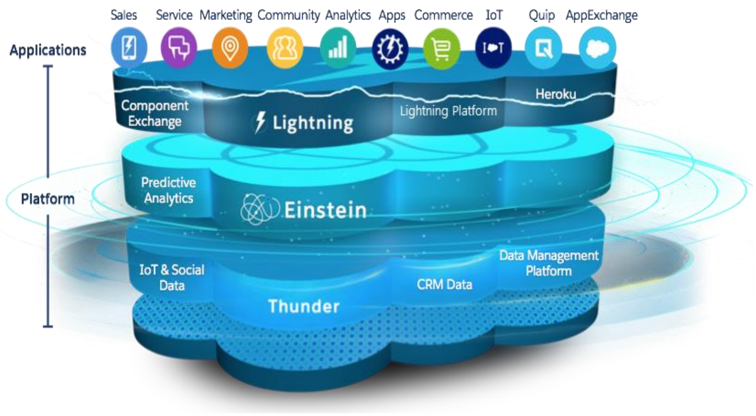


Figure 5: Salesforce architecture

The main element of Salesforce are the objects: objects are database tables that allow us to store data specific to the organization in Salesforce. It's like a spreadsheet or table with columns as fields and row as records. There are two different type of objects:

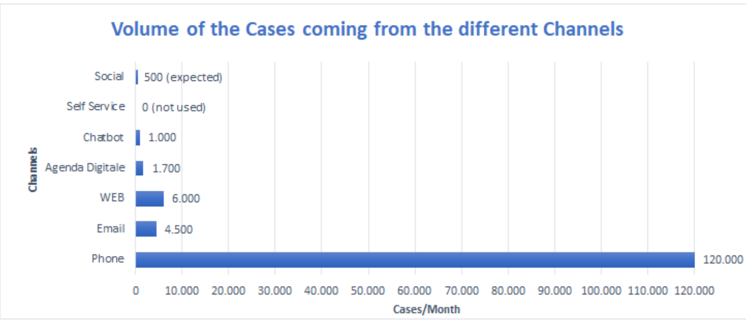
- Standard: common business objects included in Salesforce like Case (detailed description of a customer's feedback, problem, or question, used to track and solve your customers' issues) or Account and Contact;
- Custom: objects created by us that store information that is unique and important to your organization and distinguishes it from the competitors.

The most interesting application for us is the Service Cloud: a service platform with whom you can choose how your customers reach you (by email, phone, social media, online communities, chat, text, and more) and your user can manage all the data belonging to the customer. It provides all the tools that your users need to respond efficiently to customer questions and requests. Service Cloud boosts agent productivity allows communication on multiple channels and supports solving issues in the field. Among the tools offered by Service Cloud we have the Omni-channel tool: allows you to route service work intelligently balancing workloads between agents and pushing work to the most appropriate ones who have the skills and certifications required to solve the service problem.

3. Case study: presentation and comparison of two solutions for omnichannel data management

The Contact Management Lightning is a Service cloud solution to support e-d call center for commercial process using different channels shown in the *Figure 6*.

The *Graphic 1* shows the volume of the cases coming to the different channels.



Graphic 1: Volume of the case coming from different channels

Figure 6: CM Channels

Within the CM there are 2 types of operators:

- Operatore CM I Livello: in turn divided into Front Office and Back Office. For the Front Office doesn't exist a queue and exists only one role. The FO user can work only on the Case belonging to the phone call. Instead, there are a queue for each group of BO. They manage the cases that aren't worked by Front Office users during the call. These users aren't direct employees of our customer, but the service is provided by external companies.

- Operatore CM II Livello: these users work the task that require more specific processing or an on-site intervention: they are divided into different function based on the geographic area (territory) or for their specialization to work particular request or problem belonging to the clients. These users are direct employees of our customer.

The FO and BO Operators aren't employees of our customer, but this service is provided by a supplier with which our client has stipulated different supply contracts: these go to define the number of cases that each supplier will be able to work.

We call the channels mail, web, agenda, chatbot, Self Service and social channels as Back Office Cases and the assignment of the case belonging to those are in charge of Salesforce.

The BO and the Operatore CM II Livello have their specific queue used to assign the case to the specific user with specific profile which is able to work it.

The process starts when a client calls the Call Center: during the call he can decide which service to request following the path given by the phone tree. When he arrives to speak with the call center user, with the profile FO, on the user pc Salesforce opens automatically a new case. The system retrieves all the possible information by the integration with the other Systems and fills the relative fields with all the data it was able to recover.

Now you can have different scenarios:

1. The FO user can solve the problem of the client so he can close the case before the end of the call.
2. The FO user can't solve the client problem during or before the end of the call, so he closes the call and he passes the case to a BO user.
   a) The BO user can solve the problem so he can close the case.
   b) The BO user can't solve the problem so he can decide to pass the case to an II Livello user who is more qualified to work it.
   c) The II Livello user works on the case and tries to solve it with a more specific operation.
3. All the different user can close or annul the case at any time if they consider it necessary.
4. All the different user can re-assign the case to a different user profile.

3.1 Custom solution: Weight-Based Case Assignment.

This weighting solution had to be used because our customer has different supply contracts with different partners: the partners have the right to work a different number of cases based on the stipulated contract.

For this solution is crated a custom object: Fornitore, showed in the *Figure 7*.

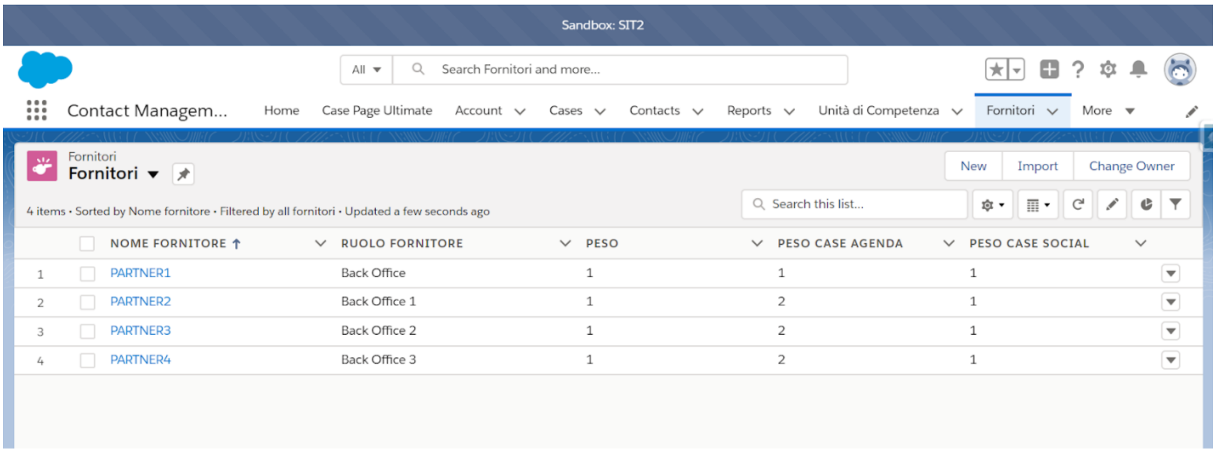


Figure 7: Fornitore Object

The fields Peso, Peso Case Agenda and Peso Case Social indicate the capacity of the partner to accept the different type of case. The Peso is the number of cases belonging to web, chatbot, app, mail; the Peso Case Agenda is the number of cases belonging to Agenda Digitale and Peso Case Social is the number of cases belonging to Social Network (now the Social Network taken into consideration are Facebook, Twitter, Instagram and YouTube).

The assignment cycle follows these steps:

1. The code checks the origin of the new case and identify the relative weight (Peso/Peso case Agenda/Peso Case Social), then it checks the relative weight of the Partner1;
2. If the Partner1 weight is more than zero, the case is assigned to Partner1 queue, else the code goes to check the weight of the next partner;
3. Every time a case is assigned to a Partner queue, the code updates the remaining weight of the Partner subtracting one unit;
4. Once the remaining weight of last partner becomes zero, the code will reset the remaining weight of all partners back to the initial weight;
5. And will start the same cycle again.

3.2 Standard Solution: Omni-channel Queue Based Routing

The Omni-Channels tool can assign in real time a new case to the first Operatore BO that is available to processing it.

When a new Back Office case arrives on Salesforce the system assigns it to the right Back Office queue and after checks if there is some available user and assigns the case to first available operator belonging to the queue. As soon as an operator switches on the status “Available case” the system sends to him the first case added to the queue. All the Back Office queues are like a buffer of Back Office cases, when an operator is available the queue starts to empty.

If the user’s total capacity is set as unit = 1 and the user accepts one case, he can’t see other case in the windows though his status is equal to Available – Case. As soon as it closes only the case it is working on, the Omni-Channel sends him a new processing case that he can see in the window.

There is also the possibility to reassign a case after a period of time: if the operator to whom it was initially assigned the case doesn’t accept it within a set time this is again sorted.

3.3 Comparison between the two solutions

Both solutions examined in the previous paragraphs have some advantages and disadvantages.

In the *Table 2*, some features are resume.

	Weight-Based Case Assignment	Omni-Channel Queue Based Routing
Allow a real time assignment of the cases to the operator	✓	✓
Increase the speed of response to the customer and consequently to improve the relationship with the client	✓	✓
Improve of user experience	✗	✓
Difficult to design and implement	↑	↓

Table 2: Comparison between the two solution

Both solutions allow a real time assignment of the cases to the operator and allows to increase the speed of response to the customer and consequently to improve the relationship with the client: is proven that both solutions can achieve the same result in terms of customer satisfaction.

The Omni-Channel solution is the best of the two for the improvement of the user experience: Salesforce improves the whole system in order to make the user’s work as simple, intuitive, efficient and effective as possible.

The major differences result from the nature of the solution: the custom solution, obviously, was more difficult to design and implement. Before arriving at this final solution, the team spend a lot of time to study and design the solution presented in this, instead the standard solution can be implemented by simple configuration and it can also customizable by code.

So now it becomes obvious to wonder why the way of a standard solution has not been chosen before:

1. The tool was developed after the beginning of the working on the custom solution: the Omni-Channels tool was introduced in Spring'16, but it took years for it to become a completer and more usable tool. Only in the last years it had a peak of development.
2. The "problem" of the supply contracts: the Weight-Based Case Assignment is based on the weight of the different cases reflects the contract's situation between our customer and his suppliers. Currently, the use of Omni-Channels Queue Routing doesn't have the possibility to reflect this particular contract situation.

The Omni-channel standard solution doesn't make improvements to cajole the customer to spend money to change a solution which at present works perfectly.

From the side of the team there is the will to bring the customer to the most standard solutions possible to simplify the design, the development and the work and create solution that can improve hand in hand with the improvement of the Salesforce system.

The only way to take this path is to present a completely different solution that revolutions the way to see this process and brings substantial improvements.

Conclusion

The evolution of the CRM system has always been linked to the evolution of the internet and customer data belong to internet. The companies can appropriate customer data and they search all the way to collect them and to study and use them to forecast the customer behaviors. It is proved that companies that have learned to exploit these data to the maximum have had an increase in their business and have established longer-lasting relationships with customers and increasing their loyalty.

The omnichannel strategy proved to be the most appropriate for the management of customer data and the different channels used by which they are collected: it offers customers what they are looking for, which is a consistent and fluid experience regardless of the touchpoint they use.

During this internship I had the possibility to observe and study one of the most important CRM System on the market, learn to configure it and find solution for the custom requirement.