Fall 2018

Customized CRM Solution for Improving Product Sales and Customer Support

Allan Kishore Kumar Francis
Iowa State University, alfra@iastate.edu

Follow this and additional works at: https://lib.dr.iastate.edu/creativecomponents

Part of the Sales and Merchandising Commons

Recommended Citation
https://lib.dr.iastate.edu/creativecomponents/59

This Creative Component is brought to you for free and open access by the Iowa State University Capstones, Theses and Dissertations at Iowa State University Digital Repository. It has been accepted for inclusion in Creative Components by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
Customized CRM Solution for Improving Product Sales and Customer Support

Creative Component Project Report

By
Allan Kishore Kumar Francis

Master of Science in Information Systems
College of Business
Iowa State University

Submitted in fulfillment for the requirements for the degree of
Master of Science in Information Systems

Date of Submission: 13th November 2018

Creative Component Committee
Dr. Sree Nilakanta, Major Professor
Dr. Russ Lacznik, Co-Major Professor
Dr. Zhengrui Jiang, Committee Member
Table of Contents

1. Abstract .......................................................................................................................... 3
2. Introduction ..................................................................................................................... 4
3. Problem Statement ........................................................................................................ 5
4. Literature Review .......................................................................................................... 6
5. Benchmarking ................................................................................................................ 8
6. Methodology and Design .............................................................................................. 9
7. Framework .................................................................................................................... 12
8. Results ........................................................................................................................ 16
9. Limitations ................................................................................................................... 18
10. Conclusion .................................................................................................................... 19
11. Recommendation ........................................................................................................ 19
12. Scope for future research ............................................................................................ 20
13. Reference ..................................................................................................................... 20
1. Abstract

This creative component paper focuses on capturing all data related to customer communication both before and after selling the product. The project is a customized salesforce application that helps the sales team in the company to effectively capture various data points during customer interaction. The two main areas of focus of this project are contacts and cases. The main objective of this project is to identify and convert prospective customers to actual customers. Another main portion of the project is to analyze how the customers came to know about the company which will help us identify the line of marketing to focus on in order to attract more customers. Emails can be easily sent to multiple customers directly from the application, and every email will be tagged to the corresponding customer to track all form of contacts made with the customer. Call logs can also be captured along with detailed descriptions and events can be scheduled with the customers such as customer visits with date, time, agenda, and other parameters. Cases help us capture the reasons as to why customers reach out to the company. Each customer may have multiple cases tagged to them. Reports are generated by performing data analysis on the case information to identify the most commonly occurring product issues, number of cases that are currently open, and many other such results. This information can be used to improve the current product, increase customer satisfaction, maintain better customer relationships, understand customers better, and perform data analytics on the captured information to identify patterns and trends.
2. Introduction

This creative component project is developed for a startup company that sells a unique agricultural product to farmers to help them grow crops efficiently. Currently the startup uses a manual method to capture all customer interactions and it is in the starting stages of identifying potential customers and converting them to actual customers. On analyzing the customer interactions logs, customer behaviors, product features, value proposition, marketing strategies, and future plans of the company, I found that in order to acquire more customers, it is necessary to capture all customer interactions on to a customer relationship management (CRM) application and perform data analytics on the captured data to identify trends and patterns. Now a days there are a number of CRM platforms available in the market and I began by benchmarking Salesforce platform, the World’s number one CRM platform in the market with other CRM tools. On analysis I found that it is best to implement a CRM solution on the Salesforce platform due to several factors which are discussed in detail in Table 1. Hence a basic application was designed, and the detailed project plan was discussed with the company and once it was approved by them, I went ahead with developing the application. I had scheduled several one-to-one meetings with the company to understand the current functioning of the sales framework. This helped me to further research Salesforce solutions that would help solve the current issues faced by the company. I needed access to several key customer information in order to identify gaps and issues, so that solutions can be created and implemented in Salesforce. I was granted access and one of the key findings was the grouping of critical customer information. If this information can be broken down into categories, then data analytics can be performed on them to identify trends. Thus, I designed several parameters in
the contacts and cases pages, to capture this information which in later stages was used in the homepage, reports, and dashboards to analyze captured data.

3. Problem Statement

The company currently faces several issues at several stages during the customer interaction.

A. The initial stage of converting potential customers to actual customers
B. The second stage of handling customer queries
C. The final stage of retaining customers

At every stage of customer interaction, decisions are made randomly by the company and no standard approach is followed. The initial phases of customer interaction are very crucial in understanding the customer and capturing required information in the system. Currently all customer information is logged in manually and no system is in place. Looking into the various issues faced, the issues can be categorized as follows.

a. Identifying potential customers
b. Logging customer interactions
c. Communicating easily with customers
d. Scheduling meeting events with customers
e. Perform data analytics on data collected
f. Creating cases for issues faced by customers
g. Identifying which channel is effective for marketing

Customer interactions are currently not tracked systematically, nor is it tagged to the customer for easy reference. Also, customer visits are handled manually, and this is not tagged with the customer profile as well. Communications with customers occur in three ways currently via
phone, email, or in person. It is difficult to select a group of customers and send out an email to them quickly. These email chains are not monitored and hence customer emails tend to get buried in the inbox among other emails. These emails, phone, and in person conversations are not tagged to the customer profile as well. After product sales, customers often reach out to the company regarding various product issues. The after-sales support system is currently not in place and is handled currently on a case by case basis. Thus, there is no data being captured so as to identify any patterns or trends in problems occurring.

4. Literature Review

The research paper by Annie H. Liu., Mark P. Leach., Richa Chugn. (2015) talks about the development of a sales framework to help businesses in reacquiring customers. This is an important aspect of business but one which is still neglected by many companies. A study was conducted on 108 incidents and the four-step sales process was implemented, segmenting lost customers, analyzing the loss reasons, creating strategy for reacquiring customer, and implementing the strategy. The four-step process provides a standardized approach to reacquire customers and helps in increasing the efficiency of customer reacquisition. The paper published by Luciano Thome Castro., Marcos Fava Neves. (2007) talks about the proposition of an innovative sales and management framework. In their research they considered three sales organizations and documented their sales details for over two years. From their analysis they developed a framework which listed a sequential list of steps on how to plan sales management. The gaps that they identified among the three organizations were communication management, conflict management, sales policies, and influence of marketing. From this paper I found out that the influence of marketing should be captured in the project in
order to identify the most effective means of marketing for the company. Barton A. Weitz. (1981) talks about how a salesperson can be most effective when trying to make a sale. He talks about the various sales behaviors such as familiarizing with customers, identifying factors that would influence the customers, identifying techniques that would change the customers’ minds, and ways of controlling the customer sales interaction. The sales person has various resources at his disposal such as customer information, analytical skills, product information, and interpersonal skills. The author goes on to talk about how the quality of relationship is very important for making a sale as well as customers’ interest in having future interactions. The paper by Zoltners, A., Sinha, P., & Lorimer, S. (2008) talks about the effectiveness of a sales force framework. This framework can be utilized to identify sales force issues and create corresponding solutions. This framework is best used when the organization is looking for ways to improve their sales figures. Ferrell, O., Johnston, M., & Ferrell, L. (2007) in his journal talks about the framework for personal selling and the ethical decision making in sales management. The author considered both individual and business factors and developed a framework that accommodates ethical issue handling, organizational culture, intensity of issues faced, and sales team structure. All these factors are shown to influence any sales related decisions within the organization.
5. Benchmarking

### Salesforce VS Hubspot

<table>
<thead>
<tr>
<th></th>
<th>Salesforce</th>
<th>Hubspot</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost</strong></td>
<td>Paid. Starts at $25 per month for each user.</td>
<td>Free for basic functionalities. Paid for advanced functionalities. Basic plan starts at $50 per month.</td>
</tr>
<tr>
<td><strong>Customization</strong></td>
<td>Salesforce has almost infinite number of customization options.</td>
<td>Even paid version has limited customization options.</td>
</tr>
<tr>
<td><strong>Integrations</strong></td>
<td>Large number of products and integrations can be found on App exchange.</td>
<td>Hubspot offers limited integrations and few plug-and-play options.</td>
</tr>
<tr>
<td><strong>Credibility</strong></td>
<td>Salesforce is World’s number 1 CRM application with 4 million users.</td>
<td>Hubspot is less widely used and is estimated to have only around 18000 users worldwide.</td>
</tr>
<tr>
<td><strong>Features</strong></td>
<td>Salesforce has a lot of features that Hubspot does not have such as forecasting, sandbox environment, internationalization, and Customer Contract Management.</td>
<td>Hubspot has very limited features as compared to Salesforce.</td>
</tr>
</tbody>
</table>

Table 1 – Salesforce VS Hubspot

From the above detailed comparison between Salesforce and Hubspot we can clearly see conclude the following. Hubspot is in its initial stages of CRM and has a long way to go.

Salesforce is the World’s number one Customer Relationship Management platform and is
implemented by four million users including many Fortune 500 companies. The initial investment in Salesforce is higher than that of Hubspot, but the long-term benefits outweigh the higher costs. The large number of customization and integration options along with the features that Salesforce offers, I concluded that it is best to implement the CRM solution for this startup company using Salesforce platform.

6. Methodology and Design

In developing a custom application for the startup company there are two approaches that I had, one was to go with creating custom objects and the other one was to make use of standard objects and creating customized page layouts to modify the standard objects to function according to the business needs of the startup. I went with the second approach as it provides more flexibility to create page layouts and within the timeframe of one semester for my creative component, I could add more functionalities to the project and provide more tools and dashboards that would improve customer relationships, identify frequent product issues, and perform data analytics on the various information captured on customer interaction. Figure 1 Shows a screenshot of the Contact Page from the application. Here we have captured all the customer information including personal address and farm address which might be different as in most of the cases. The “Level” field captures whether this contact is a Primary contact who can make purchasing decisions or whether this contact is Secondary and reports to a Primary contact. In case of a Secondary contact, the name of the person to whom he is reporting to is captured in the “Reports to” field. This helps us to capture the hierarchy in the customer’s organization and helps us tailor our sales approach accordingly. The “Lead Source” field captures how the contact found out about the company and this helps us to identify the
marketing channel that would be most beneficial for the company to invest in. The “Description” field at the end of the contact page can be used to capture any information about the customer that cannot be captured in any of the above attributes.

The design of cases page can be seen in Figure 2. In this page we capture the cases, which is nothing but the issues for which the customer reaches out to the company. This is often related to issues with the product, maintenance issues, and queries regarding the product. Every case that is created in the salesforce application has a unique case number that is auto generated by the application. The status of the case is displayed in the “Status” field which can be “Open”, “Closed”, or “In Progress”.

Figure 1 – Contact Page
Each case has a priority field which will display the various priorities of the cases such as high, medium, and low. Each priority will have a defined SLA agreement that will have to be met. For example, a high-level case will have to be addressed within twenty-four hours, and a medium level case will have to be addressed within 72 hours, and so on. The contact name who owns the product is captured in this page, so that it can be tagged along in his contact page. Several other information such as product id, case reason, case category, and timestamps of opening and closing the cases are captured in the application. Based on the timestamp, the age of each case will be calculated, and thus the cases which do not meet the SLAs can be escalated.
7. Framework

We clearly saw in the previous section how contact information and case information are captured and stored in the system. In this section we will focus on how the information stored in the system can be used by the startup company. In Figure 3 we can see a screenshot of the dashboard that has a collection of charts developed from various reports that were created from the data collected in the salesforce application.

![Dashboard Design](image)

Figure 3 – Dashboard Design

The case reason funnel chart is the first chart on the dashboard and it shows the breakdown of various cases based on reasons. I picked this chart for the dashboard because the product is still in its research and development phase and monitoring the reasons for which customers are reaching out to the company is essential to track how the product is performing in the field. For example, if more and more customers are reaching out for a performance issue, this information can be used to tweak the performance of the product and thus reduce this issue from reoccurring in the future. If more customers report installation failure, then the company
can focus more on installations to reduce such issues. The second chart is the case priority donut chart which shows the various cases according to its priorities. I picked this chart for the dashboard because it is very important for the sales team to know the number of high, and medium cases being recorded every day. This will help them track whether the product is having any critical system failures and help prevent customers from leaving the company due to product dissatisfaction. This information will also help the sales team members to prioritize their work for the day as different priority cases have different service level agreements (SLAs) to meet. For example, high priority cases have an SLA of twenty-four hours, medium priority cases have an SLA of two to three days and low priority cases have an SLA of five to six days. This is very useful for the sales team to assign various cases based on priorities to sales team executives and also helps the company to track whether SLAs are being met. The case status donut chart shows the number of new, in progress, and closed cases. I picked this chart because it is very important for the sales team to constantly handle customer issues with due diligence to keep up customer trust and loyalty. If the number of new cases keep piling up, it’s a very important flag to the sales team, saying that the team must work faster, or even that it is time to expand the sales team in the organization to handle more cases. This will enable the sales team to closely follow the number of cases that are open and in progress and prioritize their daily tasks accordingly. This would also help the sales team manager to identify and track how many cases are handled by various sales team members and even assign bonuses based on the number of cases being closed by each member.

Figure 4 shows the four methods of customer interactions that are captured in the salesforce CRM. The first part is the creation of a new task with the customer which can be any task such
as sending a quote, showing a demo, and so on. Such random tasks can now be captured in the salesforce system and this will be tagged to the customer profile, along with due date and status of the new task. The second activity is the creation of a new events that happen with the client such as business dinners and farm visits. These events can be scheduled with start and end dates, and location. This event can also be tagged to a specific customer and then can be assigned to any of the sales agent. The third activity is the call log wherein every call with the customer is logged into the system along with subject of the conversation, comments, and which sales executive made the customer call. These call logs are attached to the customer profile as well. The final activity is the email functionality wherein emails can directly be sent to one or multiple customers and every email will be tagged to the corresponding customer profile. Thus, all these activities will be tracked in salesforce so that every customer interaction can be used for analysis.
Figure 4 – Logging customer interactions
8. Results

The Home page consists of Case Dashboard, Lead source and Categories charts, Recent Records, and Contacts and Cases objects. This Home page would be displayed to the sales team who will reach out to potential customers. When the sales team representative log into salesforce, he will be able to see a snapshot of the status of cases, and contacts. The first chart on the report shows a funnel chart representing the various case reasons for which the customers have been contacted. This chart will help the user understand the recurring case reasons and can help identify any patterns or trends in the issue. For example, if the product is constantly having a performance issue, the user can clearly see an increased number of cases in the Performance reason. This can be communicated to the product development team which can investigate this recurring issue and prioritize research and development activities. The second chart on the case dashboard is the case priority chart. This priority is assigned by the sales user who communicates with potential customers via email or phone. Some cases require immediate attention from the company and hence will be marked as High. Lower priority cases can be marked as medium or low based on the criticality of the issue. This chart will help the user prioritize how much attention he needs to give to the various cases. High priority cases will often need to be addressed within a short span of time and will need to be closed as soon as possible. Various SLAs can be established for the various case priorities as desired by the organization. The third chart on the case dashboard is the case status, wherein the sales person can see number of cases which are currently open, closed, and in progress. This helps the user to immediately jump on to open and in progress cases and close those cases soon. This would be very helpful to the organization as well, because there is an age parameter for all cases,
which shows how long a case has been open. Hence if an open case, or an in-progress case is in the same status for a long time, it clearly indicates that there is a major issue for which the solution has not yet been identified. This is quite important in case of this unique product company as not all problems have solutions yet and the final product is still in the research and development phase. Lead source chart shows how the potential customer came to know about the company. This chart shows the most effective ways of reaching out to customers and it helps to easily identify mediums that work in which the company can invest in marketing. For example, if most customers find the company online and reach out to us, we can focus on investing in an online ad campaign on social media to multiply the chances of reaching out to more customers. The final chart displays the various categories of cases that have been created. The recent records section provides the list of recently accessed contacts and cases. This is very useful to the sales user especially if he had logged out of salesforce and logs in again after a while. This section helps him to quickly resume the work from where he left off. The contact and case objects provide an easy access for the sales user to quickly access contacts list and create cases right from the home page. A detailed view of both these pages can be found in Figures 1 and 2. Thus the company will be having the following benefits:

i. Improved customer service

ii. Increased customer satisfaction

iii. Higher customer retention

iv. Higher product sales

v. Trend / pattern identification

vi. Increase marketing efficiency
9. Limitations

Although this application helps solve various problems faced by the company, there are certain limitations to the proposed solution. The first limitation would be the volume of data currently available with the company. Since this is a startup company, the number of customers is currently very limited, and the dashboards and reports work best with a large volume of data.
This limitation would however be minimized as the company grows and caters to many customers. The second limitation would be the cost of maintaining the created salesforce solution on the salesforce platform. As the sales team of the company grows, the number of licenses needed for the authorized users would increase. This means that a greater number of user access should be purchased from salesforce that would eventually increase the monthly subscription fee for the company.

10. Conclusion

This creative component project will help the startup company handle customers who could be lost to competitor’s better pricing, better value, better customer service, and better marketing strategy. The contact and case objects would increase the level of customer satisfaction and would capture as much as information possible regarding the customer and customer interactions, in order to deepen our understanding about the customer and to perform data analytics on the captured data. The data analysis helps us to generate reports and dashboards, from which the information collected could be analyzed thoroughly to identify any patterns or trends. Recurring problems can be identified easily, areas of improvement for the product can be found, potential customers can be identified, cases can be prioritized based on its criticality, and all customer communications can be captured and tagged to the customer contact page.

11. Recommendation

Based on the detailed analysis of the startup, findings in this research, and the project developed in this creative component, I would like to make the following recommendations to the startup. It is mandatory for the company to invest in salesforce, which is the best suited CRM application for the company. This customized CRM solution developed in this project
should be implemented in the company to document every customer interaction and track 
every communication made with the customer. This will help the company to better 
understand the customer and be very close to the customer in terms of understanding. The 
marketing channels should also be focused on as the next phase for the growing startup would 
be to multiply its customer base by attracting more customers. Hence various tools available in 
salesforce for improving marketing should be utilized. By implementing this solution in the 
startup, the company can convert more prospective customers to actual customers, perform 
data analysis on the information captured in contact and cases and identify patterns, trends, 
and areas of improvement, and perform various activities to improve customer interaction, 
product sales, and after sales support.

12. Scope for future research

Einstein AI is a new business intelligence feature in salesforce framework that uses artificial 
intelligence in the organization’s dataset. It can be implemented in the project as an extension 
to the existing work to improve data analytics and get more accurate forecasts and predictions. 
Einstein AI works best with a large volume of data and hence it is best for the organization only 
after it has obtained a large volume of data.

13. Reference

- Luciano Thome e Castro., Marcos Fava Neves. (2007). Innovative Sales Planning and 


