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IMPLEMENTATION OF SALES MODULES USING CRM

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Abstract - With the rapid increase in the amount of information available on the Internet, it has now become common practice to use such vital pieces of information with extreme caution. Businesses frequently use such data because it allows them to keep track of their customers' data and provide them with a better experience in the future. This is where a CRM software can help. CRM is a system that allows a company to efficiently manage various types of data. This frequently deals with the difficulty of maintaining control over employees while also providing the best possible experience to customers. Our main objective in undertaking this project is to create a system that will assist organizations in increasing their customer retention rates while maintaining proper work ethics. Better management leads to a larger customer base, which leads to increased profit for the organization. This CRM system has been developed to achieve such objectives. The system is made up of distinct modules. Lead management, Product management, Quotation management and Report Management are a few of them. All these modules, will assist an organization in tracking the movement of their work. Lead, product and quotation modules work in tandem to improve efficiency, increase performance, and save resources for the organization. In contrast, report management can provide a necessary overlook on the data of the other 3 modules to improve performance. It has been observed that organizations that adapt to CRM features and capabilities are able to bridge the gap left by traditional database methods.

Key Words: crm, management module, customer experience, work ethics, data.

1.INTRODUCTION

In the early years, primarily in the late 80's, businesses across the globe were not accustomed to proper data management. As a result, it was difficult for an enterprise to work around with heavy loads of data without any database management system. As the requirement of any product in the market inflates, there is an increase in the customer rates as well. At times like these, enterprises might fail to increase their customer rates since there is no presence of a management system. As a matter of fact, in order to keep track of their business, organisations would resort to some traditional methods. Back in the day, the most common approach was to record every detail about the customer in a register or directory. This method is also known as" register entry." So, if a customer decides to return, the organization

will have spent a significant amount of time searching for their customer history. As a result, these methods were frequently time consuming and resulted in the occasional depletion of a few resources. This method is still used by a large number of small businesses today because upgrading to a powerful method is most likely out of their budget. Businesses that could afford to upgrade to better database management systems eventually switched to" excel sheets." Users had to manually enter the relevant information of a customer in an excel sheet, just like the" register entry" method. The main benefit of using this system is that any data can be easily searched by a user. The time it took to search for data was drastically reduced comparison to prior methods, and this alone prompted many businesses to switch to excel sheets. Another advantage of" excel sheets" is that it is easily accessible, as opposed to the" register entry" method, which required the user to pile up different registers based on the date. "Excel sheets" did assist many customers in building their businesses from rags to riches, but to take their businesses to the next level, a better database management system was required. The" register entry" approach did the worthwhile job for the businesses, but it clearly lacked user-friendliness. It was also difficult for businesses to carry multiple registers and keep track of them. This method was one of the most primitive methods used to date, and a change was required. When the use of" excel sheets" became public, many organizations flourished in their respective fields and eventually made significant progress. The problem with this method was that the businesses desired a more secure system. The organizations also desired a system that would assist them in determining whether or not the customer was satisfied with the experience. CRM was introduced to the world to usher in a new era of business information systems. CRM became an integral part of large corporations after its introduction to manage the high volume of customer data available to them. CRM versions introduced decades ago proved worthwhile for such large enterprises to invest in the system.

In the coming decades after the 90's, a diverse amount of CRM systems was developed in the management eco-system itself. Due to this diversity, a few enterprises reached their peak performance level in a noticeably brief period. With the introduction of innovative technologies in every era, there was a possibility that these technologies could be integrated with a CRM system that might give rise to an updated version. This miniscule change could have a bigger impact on

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the management system industry. This led the enterprises to broaden their perspective towards such systems. Each iteration of CRM brings the latest changes to the industry thus leading to more versatility and fluency of the system in the present market. In the coming years, it can be easily predicted that CRM ecosystem can bring forward the age of database handling to its peak. Due to such an immense reputation, even a newly built startup cannot underestimate the value a CRM system brings to the table.

2. THEORY

In this project, we create a CRM out of modules. In particular, we will show the Sales modules, which include a number of sub-modules such as Lead Management, Product Management, Quotation Announcement Management, Report Management. First and foremost, there would be a login page for each of the three Directors, Managers, and Executives. All three of these roles would be given their own login credentials, with the option to change them as well. The user will be directed to the Dashboard once the proper credentials have been entered. The dashboard is made up of a sidebar, a navbar, and general user information. In the sidebar, however, all of the modules mentioned can be seen. The director has access to all of the modules listed above. The manager and executive are initially denied access to any modules. The director must grant access to each user in relation to their work. The access level can be set to 'read only' or 'full access.' 'Read only' access allows users to 'view' specific modules, whereas 'Full Access' access allows users to 'view' and 'edit' the desired data. Each role has its own functionality that allows them to be granted 'Read only' or 'Full access' access.

Sales Module generally servers the purpose to understand a business' customers and to maintain an overall customer retention rate by satisfying them. This often helps to understand the nature of a customer and to provide them with a better experience every time. To achieve such results the following modules have been developed.

3. LEAD MANAGEMENT

The basic meaning of a lead would be a potential customer. This module is developed to keep a track of all the leads that are known by an organization. Basically, this lead module consists of all the basic details about a lead. It is by far the most important module in the system as all the other modules are indirectly dependent on this module. If the director wishes to view this module, he or she will be able to see the list of all the leads across all the existing firms. Since, the director is granted full access to this module, he or she can edit the details of any existing lead or add a new lead to the system. Similarly, the manager and executives will be able to see that leads that are added by them only. It is rare for a director to add a new lead but the feature has still been provided to him or her. The usual job of adding or editing a new lead is handled by the managers and then by their

respective executives in the system that will be working on different firms for the director. Once any user clicks on 'add lead' they are directed to that designated page where in a form will appear. Over here, all the details of a lead have to be manually entered by the user. Additionally, certain fields have been validated in the form so that duplication of data is not possible and the database is distinct. If a user tries to submit a lead information that consist of a duplicate data, then the form will not be submitted. After that, the user will be displayed with an alert at that respective field. Once the necessary data is properly filled by the user, the form can be submitted. This lead will now be visible on under the list section. The details of the lead can now be edited any time by

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4. PRODUCT MANAGEMENT

This module serves the purpose to manage different products categories and product that an organization puts up for retail. The access to this module can depend according to the role that has been granted by the director. Product category has been developed in the system so that all the products that will be listed can be bifurcated accordingly. Additionally, each category that has been listed here will be unique. This is to prevent duplication of multiple categories at the same time. One can also set the status of the category whether it is active or inactive. This implies whether the stock of the products is available or not. Initially, the user will be displayed a list of all the products. Keeping in mind the role of the user, he or she can add new products in the list. In order to do so, the user has to click on" Add products" and he or she will be re-directed to that page. Over here all the necessary details with regards to the product has to be filled up. Whilst doing so, the user has to mention which category the product belongs to, what is the price of the product and the price of it's packaging as well. The details can also be edited by the user so that if there is a price surge in the future, it is easy to change the price of that product. Just like product category, you can change the status of a single product to alter its availability to the consumers. So, in case, if a customer seeks out for a particular product the user can just inform them whether it is available. This entire module is inter-dependent with the quotation management module.

5. QUOTATION MANAGEMENT

Quotation is the document that an organization provides to it's leads or customers prior to them buying the products.

This document contains a stated price of the products that are requested by the leads or customers. This is generated and distributed as to let the consumers know the price of a product before they commit to it. As a result, quotation module is generally associated with the sales opportunity. In this CRM the director will be able to view all the quotation details of its consumers. Furthermore, the managers and the executives will be creating new quotations for their

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respective leads. To do so, the user has to click on 'generate quotation'. Similar to the lead form, this form also consist validation. The user has to enter the details of the customer and the details of its organization. Then he has to select the name of the product and the quantity for the same. The price and the packaging cost of the product is already displayed once you select the product name. The user can change the tag percentage with respect to the tax charges issued on that specific product. This feature is granted so that the product price can remain dynamic in the near future. Once all the required products are selected, their price will be tallied automatically.

6. CUSTOMER MANAGEMENT

As the name suggests, the customer management module deals with managing the customer's personal information.

Unlike other modules present in the system, this module is directly interconnected to the lead management module. Once a user opens up this page, he/she will be directed to a list of all the customers that they have fed into the system. There are 2 ways through which a particular user can add new customers to their list. One method is to convert any existing lead into a customer through the lead management module. This needs to be performed with utmost caution as this function can one be carried out in one direction implying that a customer cannot revert back to a lead. The second method is to click on the "Add" button on the customer management module page. Once done the user will be redirected to a form wherein the details of the customer have to be manually entered. Specific input fields are automatically validated in the form to avoid duplication of data and any marginal errors for the same. After the form is submitted the customer details will be visible to the user. Apart from the details, the user can additionally mention the interactions with customers. These include customer appointments, call logs, customer complaints and notes to remember during future interactions. All these features make up for a better customer experience and good retention rates in the company.

7. ORDER MANAGEMENT

Order management as a module serves the purpose of maintaining a record of all the orders given by a customer. As it gets difficult to organize multiple orders from multiple customers, this module is developed in such a way so that every order issued by the customer will be automatically sorted respectively. The idea behind this is to integrate this module with the customer management module. So once a specific customer wants to issue a new order, the user has to view the details of that particular customer and then create a new order under that customer. Once the user clicks on orders, he/she will be redirected to the order history of that customer. If the user clicks on a new order a form will appear. In this form the user has to enter all the details

required to initiate the order. When the details are filled in the user can submit the order and it will be visible to him/her under order history. With this method, a company can easily keep track of order history for all the customers. Since this method of entry is integrated with other modules, it becomes easy for the company to bifurcate order history with respect to their customers and keep track of the same without any hassle.

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6. REPORT MANAGEMENT

At times, there are situations where a company tries to search in for their old data in order to look up for solutions which will help them in their future business practices. Data that is fed into this system is very delicate and should be handled with precaution so that there is no margin of error in the data. So, if someone wants to trace back their old data it is advised to the users to check the reports for the same.

This is the reason why report management is introduced in the system. Once a user clicks on this module, he/she is redirected to a page where multiple report options are available to the them. This consist of Lead reports, Job sheet reports, Order reports and complaint reports. Since the data available to the company is immense, there are filters in-built in the reports section along with the suitable date ranges. The user has to mention the details in order to regenerate a new report. Once the necessary information is fed to the system, the user can easily export the report for any future references.

7. IMPLEMENTATION

7.1 Login



Fig -1: Login Page

Figure 1 shows the image of the login page. This is where the user has to enter his/her login credentials in order to get access to the system and based on his/her role the modules will be served. All the pages visible to the user here on are authenticated and cannot be seen by the user until and unless a valid token is found in the user's browser local storage. The user gets logged out as soon as the browser window is terminated.

7.2 Dashboard

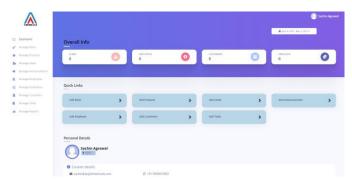


Fig -2: Dashboard view (a)

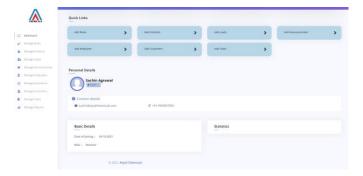
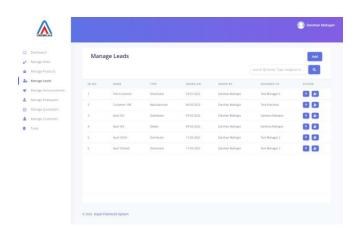


Fig -3: Dashboard view (b)

Figure 2 and 3 shows the dashboard screen where in the user will be re-directed once his/her login credentials get validated. A brief statistic of all the leads, customer, employees and products will be shown here. The statistics shown are dynamic and can be checked for any Day, Month, Year using the top right date picker

7.3 Lead Management

Lead profile: This section of the lead's module contains the details of the leads such as name, email address website information, office contact details along with its district and taluka details. We can see Figure-4 that there is a track of lead being created by labelled as "Added By" and the employee who is looking after this lead labelled as "Assigned To". The above data helps us in keeping track of lead region wise, taluka wise, district wise and also helps us understand how an employee is serving the lead.



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Fig -4: List of Leads

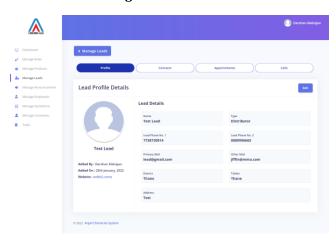


Fig -5: Lead Info

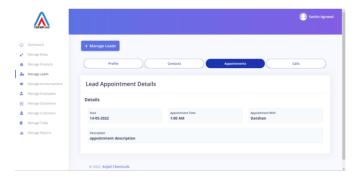


Fig -6: Lead Appointment History



Fig -7: Lead Call Details

7.4 Product Management

Product Details: In this module the list of products that are available to sell is visible in the table. The product details shown are category name, product name, price, origin, packaging and status. These Products are categorized according to categories like Pigments, Plasticizers, Molds and Machines. This table acts as a Product Catalog to the employee, so that the employee has all the information handy while he is pitching to customer or lead. This table also shows the status which helps the employee to check if the product is currently available for sale or not.

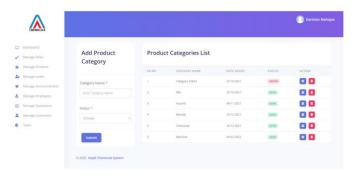


Fig -7: List of product categories

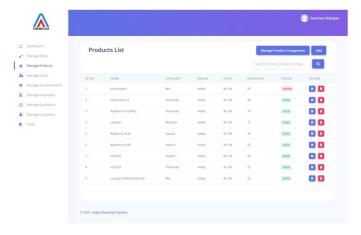
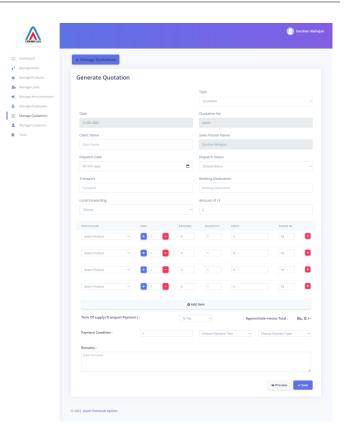


Fig -8: List of products

7.5 Sales Transactions

Figure-9. shows us how to create new quotation for an existing lead. As the quotation form is relevant to the lead, the lead information is automatically retrieved. The" Select Product" dropdown allows you to choose from a list of products to add. To reduce human error, the product price and packaging are automatically filled once the product is selected. Aside from the" Nos," the" +" and"-" buttons can be used to increase or decrease the quantity of the goods. A new product can be added by clicking the" Add Item" button, which will generate a new row for the new product. The cross button" x" beside each row can be used to eliminate the rows. The" Approximate Invoice Total," as well as the tax percentage, is calculated and displayed below



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Fig -9: Quotation Generation

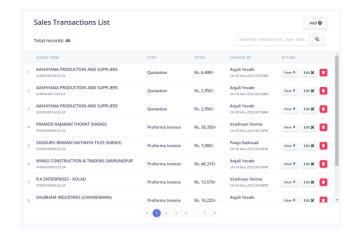


Fig -10: Sales Transactions List

7.6 Customer Management

Figure-11 shows the list of customers that have been added by a user and the general module view for customer management. Here list of all the customers is shown to the Director i.e., Super Admin and other roles get a list of their own customer assigned by the superior role or added by themselves. In this table we can also search for the customer using the search box present in the top right corner of the table. The search can be performed on all the column fields that are visible in the table

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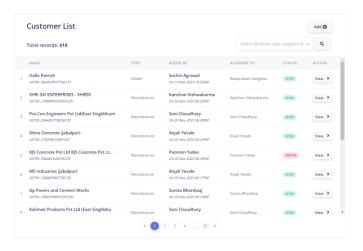


Fig -11: Customer List

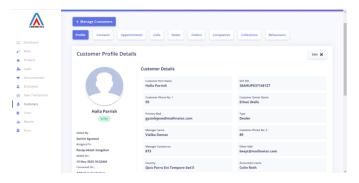


Fig -12: Customer Details

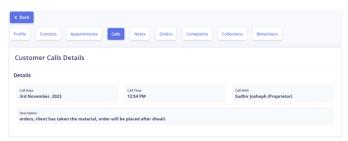


Fig -13: Customer Call Details



Fig -14: Customer Appointment Details

7.7 Order Management

This module shows the order summary of the system. Here all the orders from all the customers are shown so as to quickly access the order information. The order information

includes Employee Name, Order Date and Time, Billing Firm also Client Shipping Details like the address, contact details. The Order information also includes the Dispatch Mode that is the mode of shipment, Dispatch Date and Status of dispatch. The Payment information includes the Transport Payment, Approximate Invoice Total along with if the payment conditions.

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The Payment Condition includes the number of days, weeks or months the customer will take to pay the Approximate Invoice Total. For this there is a open field along with a drop down to select the time that is days, weeks, and months. There is also an option to select the payment type that is if the customer has purchased the order on the form of credits or if the customer has made some advance payment. This keeps a record of all the payment-related activities done with the customer so as to reduce human errors

7.8 Report Management

Figure-15 shows us the different types of reports generated in the system. The reports consist of all the data required for the decision-making process. The main parameter includes the "Lead Conversion Ratio" in the lead reports. Figure-16 shows us the lead report section and how reports can be exported. These reports not only help in tracking the company's performance but also take into integrity of getting to know the performance of each and every employee working in the company.

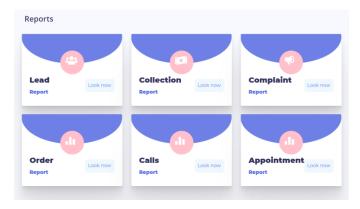


Fig -15: List of Reports

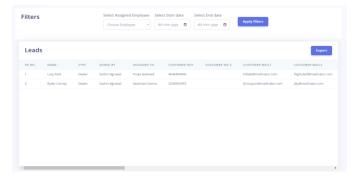


Fig -16: Lead Reports



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This helps the company to decide if the employees are working in the right direction and the decisions made on behalf of the company by the employees are accurate enough.

8. RESULTS

This CRM system follows a hierarchical pattern that comprises of the 'director' at the top most position. Then the 'manager' who further takes control over the 'executives'. Apart from these 3 roles, other roles can also be created to assist the 'director' or the 'manager'. However, this does not break the hierarchical pattern that is maintained in the system. Such a feature can help the organization to achieve versatility in the roles. Managing enterprises' leads and customers is relatively easy because of lead management and customer management. Conversion from lead to a potential customer is properly tracked and their data is readily available to the user. Product categories can be efficiently filtered to understand which product belongs to which category. Managing products can help the user to better understand the availability of stock of products as well as easily update the product details for future use. Generating a quotation in this system has proven to be hassle free. The quotation is extensively customizable and can be quickly generated. Order history is effectively structured with respect to customer management module. At the same time, new orders can be accepted at any point of time which can be further sorted out in their respective customer details. Reports can be generated for any given module.

9. FUTURE SCOPE

Since decades, CRM software as web - based applications have always been at the forefront of many businesses' database management. So, in order to prevent its extinction in the industry, many different versions of CRM have been developed to adapt to the changes that every business undergoes. This adaptability with different businesses is not only possible with CRM, but it is also highly versatile. For instance, if a business is already using a CRM system but are in desperate need for an update, developers can create new modules that adhere to the requirements of a business with consideration of existing modules available to them. Automation of modules can be one of the future additions that will impact the CRM industry to bring forth the age of new information system. Automation of modules is totally dependent on the need of the businesses.

10. CONCLUSION

Overall goal of business to manage their leads and to customize the classified work assigned to them was satisfied. For every business success partially relies upon managing the leads. In order to achieve that goal, the business should have the knowledge on how to manage their leads. With

CRM, it helps to get in-depth information from the leads regarding their experience and their requirements which in turn can be applied in business to make more successful.

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