Sales Management Portal

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ABSTRACT

Sales management is the main operand in company’s profit and success. It is usually noted as the medium between the company, client and user. Every company or a business has a sales pipeline which helps it monitor the amount business done in recent period of time. This way it helps in growth of the company even if there is a downfall outside.

Every sales management has a sales pipeline that describes the operation of the company. The sales management team handles the progress of the projects. Information regarding contacts and the activities of the clients, present-future opportunities and proposals, details regarding the projects. With the details on the portal, management can check the activity on the project and also work on it. The portal keeps the company management up-to-date and helps in an effectiveness in the productivity of the sales. In the portal, the sales team keeps the general information and contacts of the clients. Information of the clients with their project details is also mentioned in the portal. The interface is user friendly with effective features like any user can check in and browse through the projects progress and have a note of it. It also enables the user to get the details of the client and his project details.
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1 Project Description

Sales management plays a key role in every company’s profit and success. For every business company has a pipeline that monitors the amount of business is done in recent period of time. Pipeline of a company depends upon the profit and loss of the previous year. The growth of a company is determined with the growth in the sales. Here the growth in the sales is determined with the sales pipeline.

A company’s sales pipeline is handled and managed by a sales team. In the sales management portal, the sales team handles the activities of a company or an organization. Sales management portal is designed using the sales pipeline with all the information regarding the company or an organization. The sales portal is used to store the information of the clients. Add the personal information of the prospects to the database. The sales management portal tracks the up to date progress of the prospect and follow-up them with daily notes activity. Using this notes activity, the manager can also give the announcements to staff. once the prospect become client he is going to give us an opportunity. Once the sales staff add the opportunity information and propose to the manager review. Before to the manager review sales staff once go through the opportunity information and review the opportunity budget and after that review propose to the manager review.

In sales management portal the manager acts as the administrator. The manager has the rights to give privileges to staff. he also has rights to add, delete & update the sales staff accounts at any time. the manager can accept or reject the proposals depending on their requirements. He gives the guidance to the sales staff and track the up-to-date details and give the announcements in the notes. Once the proposal has been accepted that becomes the project. Based on the client requirement we deliver the project certain point of time. each project that has different stages after the manager approval if it needs any changes it goes back to the sales staff and the client can add extra requirements. In future if the client wants same project and he need to update the project the sales management portal has that functionality.
1.1 Competitive Information

Every project has a competitor because the project may be a substitute or an alternator to the existing project. In order to deliver our project successfully we have developed criteria where a series of steps will be followed. Those are:

- Conducting Research: Where a group of research team provides us all the information regarding competitors
- Gathering all the information
- Analyze Competition: After gathering all the information a descriptive analysis is performed.
- Determine own competition position

1.2 Relationship to Other Applications/Projects

Sales Logic is one of the application similar to this sales management portal. The only difference between these two applications is to forecast the sales. In sales Logic depending on the detailed report of projects completed and projects in cycle forecasting is done. And also client can register and add an opportunity by himself.

1.3 Assumptions and Dependencies

- We made an assumption that we have an active lead for every opportunity created.
- And the status of the client and his details were genuine
- Also the response from the manager should be quick regarding the acceptance of the project.

1.4 Future Enhancements

In future we will create an interface where a staff can make an online client meeting depending on the time schedule. This additional requirement is completed in the third phase of the project. Initially the project is deployed fulfilling first and second phases.
1.5 Definitions and Acronyms

Lead:

They are qualified prospects. An individual who given contact details for the potential sales opportunity and a lead is a prospect that needs to be qualified as a real sales opportunity. Once qualified, you can alter the lead and the lead becomes an Account and Opportunity and Contact.

Prospect:

Prospect is a not our current buyer. A lead can be from a prospect or existing buyer and a person regarded as likely to succeed or as a probable customer or client and a person who has financial capacity and preparedness to buy called prospect. If we accept the deal or project of the prospect, then they are going to be our client.

Project:

Projects are successfully approved opportunities. It is an estimation or of overall cost of the project and set of interconnected tasks to be performed over a fixed period and within certain cost and other restrictions and it is a pre-planned action finally good teamwork and hard work leads to successful project.

Opportunities:

These are incomplete deals that we want to track. An Opportunity is not a business or a person, but it is a probable future sale and these are something related to revenue. An opportunity follows a projected Close date; a projected amount of revenue. These are requirements specified by prospects.

Client:

Client is a person who is receiving services from us. If we complete the project of company, then that company is going to be client to us. All the previous costumers for us are clients. Every company profits and the goodwill depends on the clients of the only.
2  **Project Technical Description**

Design of the webpages and required user interface is performed using Bootstrap classes and HTML5. At first the required page design is completed and then the complete database is constructed with tables and required stored procedures. After that using C#.NET code is written to connect to database and perform the required operations with respect to this website. All these are done in a sequence. We have used form design for this project. In future we can also change this project to MVC type application. Once we implement MVC then handling this project by the developers will be easy.

2.1  **Application Architecture**
Relations:

Employee – Roles (Many to One)

Many employees can come under one role. Every employee has a role

Employee – Client (One to Many)

One employee can add many clients

Employee – Opportunity (One to Many)

One employee can add many opportunities

Client – Opportunity (One to Many)

One client can add many opportunities

Opportunity – Proposal (One to Many)

One opportunity can have many proposals

Proposal – Project (One to One)

One proposal becomes one project
2.2 Application Information flows

2.3 Interactions with other Projects (if Any)

There are no interactions with any projects
2.4 Interactions with other Applications

Sales Logic is one of the applications similar to this sales management portal. The only difference between these two applications is to forecast the sales. In Sales Logic depending on the detailed report of projects completed and projects in cycle forecasting is done. And also client can register and add an opportunity by himself.

We can extend our application with this sales logic by generating reports and using them to forecast the future sales.

2.5 Capabilities

Capabilities of sales staff:

- Add/delete/update the client information
- Add/delete/update opportunities
- Setup meetings with the client and make notes on progress
- Make proposals

Capabilities of manager:

- Add/delete/update the staff information
- Add/delete/update the client information
- Approve/deny projects

2.6 Risk Assessment and Management

Risk: Misleading information or an opportunity

Mitigation: A clear background check of the client should be performed before creating an opportunity

Risk: Technical hardware failure of server

Mitigation: 24/7 server maintenance
3  Project Requirements

3.1  Identification of Requirements

<GSU-SalesManagementPortal_FA-2016 Employee- 01 >

Using this requirement allow us to add the personal details of an employee by giving the attributes emp_id, emp_name, emp_phone, emp_email, emp_address, emp_role, emp_doj, emp_username & emp_password.

This functionality in database that can add the details to the database and we can retrieve at any point of time.

<GSU-SalesManagementPortal_FA-2016 Employee- 02 >

Using this requirement allow us to delete the details of an employee by giving the attributes emp_id

This functionality in database that can delete the details from the database and we can retrieve at any point of time.

<GSU-SalesManagementPortal_FA-2016 Employee- 03 >

Using this requirement allow us to update the employee details of an employee by giving the attributes emp_id, emp_name, emp_phone, emp_email, emp_address, emp_role, emp_doj, emp_username & emp_password.

This functionality in database that can update the details to the database and we can retrieve at any point of time.

<GSU-SalesManagementPortal_FA-2016 Employee- 04 >

Using this requirement allow us to change the employee username and password by giving the attributes emp_username & emp_password.

This functionality in database that can change the user data in database and we can retrieve at any point of time.
Using this requirement allow us to add the client details to the end user by giving the attributes
client_ID, F. Name, L. Name, email, phone, address, Zipcode, DateOfEntry, isClient, addedBy
This functionality in database that can store the details of the data and we can retrieve the data at
any point of time

Using this requirement allow us to delete the client details by giving the attributes client_ID
This functionality in database that can delete the stored details of the data and we can retrieve the
data at any point of time

Using this requirement allow us to update the client details to the end user by giving the attributes
client_ID, F. Name, L. Name, email, phone, address, Zipcode, DateOfEntry, isClient, addedBy
This functionality in database that can store the details of the data and we can update and retrieve the data
at any point of time

Using this requirement allow us to track the client date of entry details by giving the attributes
client_ID, DateOfEntry
This functionality in database that can store the details of the date of entry of the client and we can
retrieve the data at any point of time

Using this requirement allow us to find the client is active or not by giving the attributes is_Client
& Client_ID
This functionality in database that can store the details of the data and we can retrieve the data at any point of time.

<GSU-SalesManagementPortal_FA-2016 Client-10>

Using this requirement allow us to find who added client by giving the attributes Client_ID & addedBy

This functionality in database that can store the details of the data and we can retrieve the data at any point of time.

<GSU-SalesManagementPortal_FA-2016 Opportunity-11>

Using this requirement allow us to add the details of the opportunity by giving the attributes opportunity_ID, client_ID, opportunity_Name, opportunity_description, notes, status, entryDate, expirationDate, budget, addedBy

This functionality in database that can add the details into database and we can retrieve at any point of time.

<GSU-SalesManagementPortal_FA-2016 Opportunity-12>

Using this requirement allow us to delete the details of the opportunity by giving the attributes opportunity_ID

This functionality in database that can delete the stored details into database and we can retrieve at any point of time.

<GSU-SalesManagementPortal_FA-2016 Opportunity-13>

Using this requirement allow us to update the details of the opportunity by giving the attributes opportunity_ID, client_ID, opportunity_Name, opportunity_description, notes, status, entryDate, expirationDate, budget, addedBy

This functionality in database that can update the new details into database and we can retrieve at any point of time.
Using this requirement allow us to track the status of the opportunity by giving the attributes opportunity_ID, status
This functionality in database that can track the status details into database and we can retrieve at any point of time.

Using this requirement allow us to view opportunity added date by giving the attributes opportunity_ID, client_ID, opportunity_Name, opportunity_description, notes, status, entryDate, expirationDate, budget, addedBy
This functionality in database that can view the details into database and we can retrieve at any point of time.

Using this requirement allow us to update the details of the notes description by giving the attributes opportunity_ID, notes
This functionality in database that can add the details into database and we can retrieve at any point of time.

Using this requirement allow us to find the details of the sales staff who added the opportunity by giving the attributes opportunity_ID, addedBy & clientID
This functionality in database that can track the details into database and we can retrieve at any point of time.
Using this requirement allow us to add the details of proposal by giving the attributes proposal_ID, opportunity_ID, project_cost, estimated_revenue, status, notes
This functionality in database that add the details of the proposal in database and we can retrieve at any point of time

<GSU- SalesManagementPortal_FA-2016 Proposal- 19 >

Using this requirement allow us to delete the details of proposal by giving the attributes proposal_ID
This functionality in database that delete the data in database and we can retrieve at any point of time

<GSU- SalesManagementPortal_FA-2016 Proposal- 20 >

Using this requirement allow us to update the details of proposal by giving the attributes proposal_ID, opportunity_ID, project_cost, estimated_revenue, status, notes
This functionality in database that update the details of new data in database and we can retrieve at any point of time

<GSU- SalesManagementPortal_FA-2016 Proposal- 21 >

Using this requirement allow us track status of proposal by giving the attributes proposal_ID, opportunity_ID, status
This functionality in database that track the details in database and we can retrieve at any point of time

<GSU- SalesManagementPortal_FA-2016 Proposal- 22 >

Using this requirement allow us to check the proposals which gives the maximum revenue of project by giving the attributes proposal_ID, estimated_revenue
This functionality in database that use the database and we can detail of data and we can retrieve at any point of time
Using this requirement allow us to update the details of notes by giving the attributes proposal_ID, opportunity_ID, notes.
This functionality in database that update the details of the notes in database and we can retrieve at any point of time.

Using this requirement allow us to add the details of project by giving the attributes project_id, prospect_id and result.
This functionality in database that can add the details of the data and we can retrieve the data at any point of time.

Using this requirement allow us to delete the details of project by giving the attributes project_id.
This functionality in database that can delete the details of the data and we can retrieve the data at any point of time.

Using this requirement allow us to update the details of project by giving the attributes project_id, prospect_id and result.
This functionality in database that can add the details of the data and we can retrieve the data at any point of time.
Using this requirement allow us to add the details of the roles by giving the attributes role_id and role_name.
This functionality in database that can add the details to the database we can retrieve the data at any point of time.

<GSU-SalesManagementPortal_FA-2016 Roles-29>

Using this requirement allow us to update the details of the roles by giving the attributes role_id and role_name.
This functionality in database that can update the details to the database we can retrieve the data at any point of time.

<GSU-SalesManagementPortal_FA-2016 Roles-30>

Using this requirement allow us with the role id we can differentiate weather the login user is a staff or an administrator by giving the attributes role_id and emp_id.
This functionality in database that we can get the details to the database we can retrieve the data at any point of time.

3.2 Operations, Administration, Maintenance and Provisioning (OAM&P)
3.3 Security and Fraud Prevention

Though we take many precautions it has become a quite common for many projects like us to have an effect from the security aspect. We have developed a plan to avoid any Security and Fraud Prevention.

- Choose a Secure Network Connection.
- Always use authentication while accessing website.
- Any time we should not save any sensitive data like passwords or payment details.
- Providing sufficient training to all staff as well as managers.
- We should able to track any opportunity as well as any proposal made by the staff
- Background check of the client should be done before accepting any opportunity.
- Monitor all the work done by the staff with respective to client
- Regular inspection should be done in the company where we deploy this project.
- Make sure we have back service from a third party or any other company when our servers crash.
- Whoever is hosting the website should back up the data now and then.
3.4 Release and Transition Plan

Initially this project will follow the following phases to achieve a successful hosting

- Checking whether the client has a domain name or not, if not we will buy a new domain name for the client which will be well suited with the project.
- Maintaining the DNS server and credentials to login and setup all the network related functions.
- Then we will set up a Live Testing site in order to check all the functionality of the project.
- Set up emails for the clients so that they can have their own email access to the verifying changes made by the developers.
- Backup and Go live.

4 Project Design Description

- This is the common interface for manager and staff login.
- Prospect is a potential customer, once the qualification criteria is met he becomes client.
- Requirement specified by the prospects.
- Successfully approved opportunities.
4.1 Login Page

Design Description:

Login Page is the authentication interface with the portal. We used Bootstrap resources to design the login page. We have asp Textboxes accepting the username and password and one server control button to handle the event.

Code Behind Description:

Login is event is handled behind the code where a stored procedure called “Check Customer“ is called which accepts the login username and password as inputs and returns the parameter’s id and name of the respective login user. These two output parameters are saved in session. Verifying the existence of the user and role he is redirected to staff page or administrator page.

Login Web Form model:
4.2 **Index Page**

Design Description:

Index page is the home page for the staff. Generally, the tasks for the staff work is divided into three modules

- Tasks Regarding Prospects
- Tasks Regarding Opportunities
- Tasks Regarding Proposals

**Prospect Module:**

I have taken the advantage of bootstrap panel classes to design each module in the Staff home page. We have panel footer in module 1 where the page is redirected to the prospect page. Below is the picture of the staff home page where we can see the panel for prospects. When we click on panel footer, we are redirected to the prospect page where we can find the prospect in grid view. The session is holding the name of the login user so that we can display the welcome message along with the name we store in the session. If we want to see the details of a particular prospect, we can select from the grid view and can redirect to the prospect details page. In the prospect detail page, we can see the complete details of the prospect including the date of entry of the prospect. We can change the status of the prospect accordingly to Active prospect or Active Client. We can also add new prospect and save in the client table. We can also update as well as delete a respective selected prospect. We have used the stored procedures “insert client” and “update clients” for insert, update & delete operations.

**Index Web Form Model:**

![Index Web Form Model](image-url)
4.3 Prospect page

Design Description:

Here we can find all the details of the prospect including the opportunities he owns. We can make any changes if any and update those values in the database. On the top right corner, we can find the add contact to enter the details of the new prospect.

Code Description:

In the code, behind the prospect page, the server controlled button in the grid view redirects to prospect details page. On Prospect detail page load if it is not a post back, with the help of prospect ID which we have saved in the session is given as the parameter to the SQL data source to get the details of prospect of the respective ID. These values are inserted into the text-box controllers. We have stored a procedure update client which accepts all the details of prospect including IsClient value as an input and updates the value in the database. After the update is done the page is redirected to prospect page. In our project, we have taken the relation between the staff and the prospect as: One staff can add many prospects.

Prospect Web Form model:
4.4  Add Prospect Page

Design Description:

Index page is the home page for the staff Generally the tasks for the staff work is divided into three modules

Prospect Module:

I have taken the advantage of bootstrap panel classes to design each module in the Staff home page. We have panel footer in module1 where the page is redirected to prospect Page. Below is the picture of staff home page where we can see the panel for prospects. When we click on panel footer we are redirected to the prospect page where we can find the prospect in grid view. The session is holding the name of the login user so that we can display the welcome message along with the name we store in the session. If we want to see the details of a particular prospect, we can select from the grid view and can redirect to prospect details page. In prospect detail page we can the complete details of the prospect including the date of entry of the prospect. We can change the status of the prospect accordingly to Active prospect or Active Client. We can also add new prospect and save in client table. We can also update as well as deleted a respective selected prospect. We have used the stored procedures “insert client” and “update clients” for insert, update & delete operations.
4.5 Opportunity Page

The second module the staff handles is regarding the opportunities. In the index page, another bootstrap panel is designed for opportunities. On the panel footer with help of anchor tab the page is redirected to opportunities page.

In opportunities page the staff has an option for creating opportunities for existing clients as well as new clients. By using JQuery we have implemented the visibility of DIVS of existing and new client depending on the drop down selection. If the staff has to add opp for new client, he must first register the client details. On the other hand, if the staff need to add for an existing client he can chose the client in the drop selection and add an opportunity.

The added opportunities are automating updated in the grid view in the same page. The status of the project is shown in the grid view as created. If the staff needs to update the details of created opportunities he can select from the grid view and redirect to opportunities details page, where he can update the details of the opportunities including the status.

With the help of the client ID in the session and the SQL data source the opportunities are displayed in the grid view. For every opportunity, there is an added by column so that we can differentiate the staff adding the opportunities. In opportunities details page if the page is not post back the textbox value are updated with selected opportunities values. We have used update opportunities, insert opportunities as our stored procedures.
4.6 *Add opportunity Page*

**Design Description:**

Using asynchronous JavaScript, we can show or hide a div in bootstrap with the help of div_id. In add opportunity we have used this ajax for this purpose, because the staff member has an option of adding an opportunity to existing or new client, so depending upon his selection we can show the respective div. The sample code for this is as:

![Add Opportunity Form](image)

4.7 *Proposal Page*

**Design Description:**

The third module the staff deals with is the proposal, where the staff can propose the existing opportunities to the manager adding addition details like cost of project, estimated revenue and expiration date of opportunities. If the staff, the want to change the details of the proposals made before he can do that by selecting the proposal and changing the status. He can also change the status of the opportunities to roll back stage.
4.8 **Admin Home**

The administrator can perform all the operations the sales can do. Additionally, the main task that concerns with admin is approval of the proposals. Admin can view the proposed opportunity and their details and if all the proposal is good with max revenue to the company he accepts the proposals and change the statue to projected. Otherwise, he simply denies. If the status of the opportunities is changed to projected, then the respective client status is changed to active client.

Administrator also have access to view staff details as well as add new staff. In the admin home page, all the staff details are displayed in a grid view. The updating or deletion of a respective staff can also be done in the same grid view.
Both staff and admin can view their details in this page with the help of SQL data they can update their details and can change passwords.
4.10 Projects Page

Here the admin can view all the proposal as well as in cycle projects. He can accept or deny a proposal.

5 Design Units Impacts

- In Sales management portal we have used java script, JQuery & Ajax which will have an impact on design. The below script is used to hide or show depending on the drop down selection of the sales staff in opportunity page.

- For authentication and validation purposes we have used Jquery.

- We also have implemented site map source to apply ‘breadcrumbs’ which are useful in navigation purposes.
5.1 **Functional Area of an Employee**

5.1.1 **Functional Overview**

The Design of the functional area of staff and manager are same, the manager have only two modules more which the staff cannot be done. So there are no any huge differences if we consider functional area.

5.1.2 **Impacts**

There are no much impacts on the project if there are changes in the functional area. The only care should be taken is in the database and adding relevant data. And also appropriate status should be added without fail for every client and opportunity, because this will have an impact on functions we defined in the project, so care should be taken while updating any status. Depending on the status we will differentiate both the clients or projects.

6 **Open Issues**

There are no much noted Issues in this project

7 **References**

