



Project Management Portal – Webparts Implementation

Applying MOSS 2007 to Enterprise

Executive summary

The project involved the development of a MOSS 2007 project management portal to streamline the process of project creation and management of each of the project in different phases of the project life cycle based on different user level permissions.

About our client

Client Industrial Water makers | **Location** USA | **Industry** Industrial Engineering

Business situation

The business requirement was to develop an extranet project management portal in MOSS 2007 which could be easily used by different Agents across the globe for creating and managing different project phases. Each of these Agents need to be assigned with unique permissions by which they can only view/manage their own items (the items to which they have permissions to). The administrative users of the organization were supposed to have Full Control rights where in they can view/edit any project items. Extra options should be available to the agents to send out alert emails, assign additional project level permissions and toggle the visibility of different project phases within a specific project. The Agents should also have an easy option for uploading and attaching multiple documents for a Project. The administrative users will have the option of generating different financial reports and customer reports across multiple projects. Finally, there was a requirement to automate the entire deployment process for the solution and/or features which needs to be carried out on the production server.

Solution details

The Mindfire Solution

After complete and through analysis of the requirements and a couple of round of discussion with the customer we came up with a data model to accomplish all the needs and / or requirement as outlined. Broadly the data model consists of the following entities.

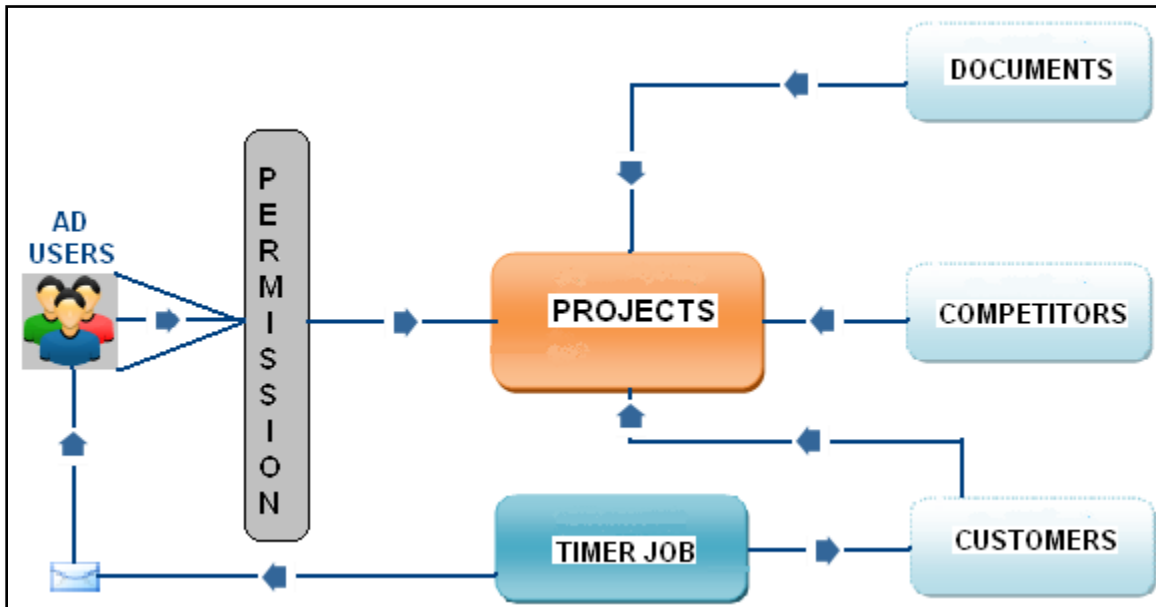
1. **Projects** – a centralized repository to hold all the projects. Each project is stored within the repository with a mapping to the requisite permission set. Data gets pushed into the Projects repository from different phases within a project life cycle.
2. **Documents** – a centralized document repository to hold all the Project specific documents.
3. **Competitors** – each of the projects can have multiple competitors associated to it. So, a Competitor repository needs to be in place to hold all the Project specific competitor data.
4. **Customers** - as Competitor, each of the projects can have multiple customers associated to it. So, a Customer repository needs to be in place to hold all the Project specific customers data.

We proposed the Customer on creating a custom web part solution for implementing all these modules. The main reason for opting to webpart solution is to cater to all the design / branding needs which need to be achieved within





the project modules. Also, the webpart solution was the best option for implementing all the complex business logics as per the Customer requirement(s).



The application is based on a Security model which mainly revolves around 2 kinds of AD users.

1. **Agents** – Each of the Agents have their own group based on their location. They have a permission to only view / edit the projects created by them. Additionally they can also grant project permissions to an agent belonging to other location.
2. **Admin** – The users belonging to the Admin group has permissions on all the projects i.e. they can view / edit any project belonging to any location. Apart from all the tasks which can be done by an Agent the Admin also has the permissions to permanently delete a project.

Achievements

A number of custom webparts were developed to achieve the various functionalities of the project management portal. This includes the following.

Add Project Webpart – Used to create a new project by filling out relevant data within the Identification phase. Assigns administrative permission and agent specific permission to the newly created project based on the user who is creating it.

Edit Project Webpart – Used to edit different phases of an existing project within a project life cycle. The webpart is mainly comprised of 6 phases (each categorized into individual tabs).

- Identification
- Value Selling
- Follow Up
- Qualification
- Quotation
- Final Phase

Phase Management Webpart – Use to toggle the visibility of different phases for a specific project. It does not allow



to toggle the view for the Identification and Final phase as these 2 phases are considered mandatory while creating and closing a project.

Project List Webpart – Used to list out all the agent specific project items or the items on which the current logged in user is having permissions. It also helps the logged in user to customize the Project List view by selecting the desired set of information which they want to be displayed within the list. Using this webpart Agents can also generate a Delete request for a specific project item and then the administrative user can perform an actual delete on all the project items which were requested to be deleted. Custom search was also integrated for filtering out the Project list based on different filter criteria.

Report Webpart – Used to generate different financial and customer reports. Also, has options to export the report data into excel and / or PDF formats.

We also created a **Custom Timer Job** which runs as a service in the background and is used to send out daily notification emails to the responsible users based on the Follow Up date.

WSP Builder was used to generate the **WSP** package for the Project Management web part solution and the Custom Timer Job feature. Then the WSP package was wrapped within the **Solution Installer** to be finally sent out to the customer for deployment on their production server.

Technologies

MOSS 2007, ASP.Net 2.0 & 3.5, C#.Net, ASP AJAX 2.0, Ajax Toolkit, CSS, JavaScript, SQL 2005, WSP Builder, Solution Installer and Telerik RAD Controls.

Final results

Software system

The screenshot displays two main components of the software interface:

- Project List Table:** A table with columns for Project Name, Ref No, Project Phase, Project Status, Project Starting Date, Project Closing Date, Sales Manager, Project Region, Project Stage, Estimated Value Of The Project, and Delete. It lists several projects with their respective details.
- Manage Project Phases Panel:** A configuration area with a list of phases and checkboxes to toggle them on or off. The phases listed are Identification Phases, Qualification Phase, Value Selling Phase, Quotation Phase, Follow Up Phase, and Final Phases. A 'Save' button is located below the list.



Reference Number: **R79v2** Identification

Project / Opportunity Name: Surya's Project

Project Phase: Identification

Project Starting Date: 08/06/2010

Project / Opportunity Status: Open

Project Starting Date: 17/06/2010

Project Identification Source: asasa

Expected Delivery Date: 23/06/2010

Requested Quotation Date: 30/06/2010

Estimated Value (Of The Project) (USD): 10000000

No. Of Vessels: 121222

Hull Number: 1212121212

Product Name: Technical Features Quantity Product Information

Customer Type: Engineering Company, Naval Architecture

Customer Name: Anna Hathway, Liza Connelly

Country: Australia

Address: [Address]

Contact Person: [Name]

Contact No.: [Number]

Email ID: [Email]

Other Builders (Who Have Bid): [List]

Reference number: **R79v2** Qualification

Project Name: Surya's Project

Project Priority: High

Requested Quotation Date: 30/06/2010

Project stage: [Dropdown]

Est. Value (Of The Project) (USD): 10000000

Action Required: [Dropdown]

Influencing Factors

| Customer type | Contact Person | Country | Contact No. | Role | Decision Power | Influence Power | Relation with SRE | Needs / Decision Criteria |
|---------------------|----------------|-----------|------------------|----------------|----------------|-----------------|-------------------|---------------------------|
| Engineering Company | ahadajadajadja | Australia | 1212212121212121 | Operator | High | High | Prefer | 1 2 3 4 |
| Naval Architecture | adadajadajadja | Australia | 1212212121212121 | Decision maker | High | High | Prefer | 1 2 3 4 |

Alert Details

Alert History

Permission Details

Reference number: **R34v1** Value Selling

Project Name: Project Australia 1

Value Proposition (Functional/Process/Relationship): [Text]

Project Status: Open

Project Phase: Identification

Customer type: Engineering Company, Consultant Company

Contact Person: Anna Hathway, Liza Connelly

Role: Operator, Decision maker

Needs / Decision Criteria: Needs or decision criteria 1, criteria 2

| Competitor | Product | Lowest Price Offering (USD) | Published Price Offering (USD) | SWOT |
|----------------|-----------|-----------------------------|--------------------------------|-----------------------|
| Hune Groups | Product 1 | 200 | 195 | swot for competitor 1 |
| Paris Pvt. Ltd | Product 2 | 235 | 211 | swot for competitor 2 |

Alert Details

Permission Details

Reference number: **R79v2** Qualification

Project Name: Surya's Project

Project Priority: High

Requested Quotation Date: 30/06/2010

Project stage: [Dropdown]

Est. Value (Of The Project) (USD): 10000000

Action Required: [Dropdown]

Influencing Factors

| Customer type | Contact Person | Country | Contact No. | Role | Decision Power | Influence Power | Relation with SRE | Needs / Decision Criteria |
|---------------------|----------------|-----------|------------------|----------------|----------------|-----------------|-------------------|---------------------------|
| Engineering Company | ahadajadajadja | Australia | 1212212121212121 | Operator | High | High | Prefer | 1 2 3 4 |
| Naval Architecture | adadajadajadja | Australia | 1212212121212121 | Decision maker | High | High | Prefer | 1 2 3 4 |

Alert Details

Alert History

Permission Details

Reference Number: **R79v2** Follow Up

Project Name: Surya's Project

Probability Of Winning (%): [Dropdown]

| Contact Person | Required Action | Email (Responsible Person) | Follow Up Date | Comments |
|----------------|-----------------|----------------------------|----------------|----------|
| ahadajadajadja | [Dropdown] | [Text] | [Date] | [Text] |
| adadajadajadja | [Dropdown] | [Text] | [Date] | [Text] |

Alert Details

Alert History

Permission Details

Reference Number: **R34v3** Final Phase

Project Name: Project Australia 1

Project Phase: Identification

Project Status: Won

Final Order Value (USD): 2345

Won Against (NBA): won against next best alternative

Price Difference (USD): 925

Reason 1: Reason description 1

Reason 2: Reason description 2

Additional Comments: [Text]

Alert Details

Permission Details



Customer benefits

This helped the customer in streamlining a lot of their project management work into a single portal. As the data is now residing in one centralized SharePoint portal, it helped in easy maintenance of the customer / agent specific data from different location across the globe. More over it also helped the users in receiving automated notification about different activities which needs their attentions. The administrative users can now easily generate different financial and customer reports with a lot of ease which indeed helped them in taking crucial project related decisions.

Future relationship

Since this solution helped in streamlining a lot of project management stuffs, the customer was quite happy on using this portal. The customer was also satisfied with our approach towards the work and appreciated a lot about our regular suggestions and feedbacks which we provided while deciding on the final flow for this solution as well as during the real time implementations. Looking at all these things, the customer decided to continue with us on this project for all future enhancements and modifications.