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PROJECT   
PROPOSAL

**Enterprise Management Application**

|  |  |
| --- | --- |
| **Prepared for:**  Client Rep | **Submission Date:**  30 Jan 2018  **Proposal ID:** AD/BP/30012018/1343/1 |

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Project Contacts

|  |  |
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| Client Information | |
| Project Name | Enterprise Management |
| Client Name | POM Holdings |
| Client Address | Buheira Corniche Road - Sharjah - United Arab Emirates |
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| Project Information | |
| Proposed Technology/Methodology | Entity Framework, ASP.net, MSSQL, IIS, MVC |
| Anticipate Start Date | NA |
| Proposal Valid For | 30 Calendar days from the submission of the proposal |

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# Scope of Work

POM Holdings (Hereafter referred to as the “Client”) has requested Verbat to submit a proposal to develop an internal portal with an embedded workflow engine.

The primary objectives of the application are

1. Organization Brief
2. Brand Asset Management
3. Policy Management
4. Employee affairs Center
5. Web Content Management
6. Enterprise Business Intelligence
7. Health and safety Management
8. Contract Lifecycle management
9. Training management
10. Meeting Organizer
11. Project Management
12. Gate Pass System
13. Survey Management
14. Document Management
15. Client Item Requisition

The project will developed in a phase wise manner. Client has requested that only a few selected modules be developed in phase one. This proposal includes the effort estimate for completing Phase one of the project. Phase two will be taken up as a continued effort following the development of phase one. The following modules shall be developed in Phase one

1. Organization Brief
2. Brand Asset Management
3. Policy Management
4. Employee Affairs Center
5. Meeting Organizer
6. Gate Pass System
7. Survey Management
8. Document Management
9. Web Content Management

Common Features like Authentication, Authorization, Logging, Auditing, File and Folder management shall be baked into the phase one delivery. Please see detailed functional specification for more details.

Verbat is pleased to submit the proposal and values it as a great opportunity to have a long term & mutually beneficial association with the client. Verbat has gone through the requirement and presents a proposal for the requested system.

## Proposed Solution Model

**Stand-Alone Fixed Bid**

Verbat will be following a stand–alone fixed bid solution delivery model wherein the required solution would be devised and a suitable pricing would be offered.

## Solution Objective

Verbat intends to build an application that takes into consideration the overall objective of the application. Hence even though the project shall be split into several phases, Verbat’ s business analyst and application architects shall assess the future requirements of the project and will design the application so that future requirements can be accommodated. By future proofing the application, Verbat will ensure that the project can move forward without a major overhaul, should the client decide to pursue future developments with a different partner.

Verbat shall develop the following requirements cited by the client

### Organization Brief

App should allow the achievement of the following functions:

* CEO/Director/Head of Department Message
* Organization Vision, Mission, Values, etc.
* Events with Gallery (video and photo)
* Announcement; including general, news, awards, health tips, insurance, promotions, birthdays, work anniversary, new born, death (depends on social preference of employee in his/her profile)
* Communication facilitation Online/offline chat capabilities between members.
* Corporate document repository of Trade License, Establishment Card, Lease Agreement, etc. (See 2.1.12).

### Brand Asset Management

The asset library stores branded corporate assets such as logos, artwork, and other digital assets, and workflows and policies help manage the content. Creative teams can submit digital assets to the asset library where they are reviewed and published. Content stewards manage and edit the digital assets to make sure that they are correctly tagged and organized. Teams and extranet partners who want corporate logos or brand assets use the library to find the content they require.

App should allow the achievement of the following functions:

* Record the metadata to provide for each kind of asset.
* Store of assets at each stage of the life cycle of an asset.
* Control access to an asset at each stage of its life cycle.
* Apply policies to assets so that asset-related actions are audited, assets are retained or disposed of correctly, and assets that are important to the organization are protected.

### Policy Management

App should allow the achievement of the following functions:

* Create, review, approve, revise, auto-publish, distribute and control versions of individual policies and procedures
* Notify users of changes to policies and procedures or when an assigned task has been completed.
* Send policy expiration notifications regarding renewal, revision or retirement
* Add custom meta-data to policies and procedures
* Create and send quizzes to employees
* Track employee acknowledgement of policies and procedures
* Restrict access to policies and procedures by role, department, city, etc.
* Use advanced search functionality to find policies and procedures easily
* Create custom workflows to assign policy related tasks to the right people
* Create a custom dashboard to view the most important policy information quickly.

### Employee Affairs Center

App should allow the achievement of the following functions

* New Joiner process (Recruitment request workflow, following phone screening, personal data collection including photo, interview, on/off boarding, exit, etc.
* Performance Management; which includes goal management and regular performance’s feedback recording.
* Self Service forms with workflow; expense, passport/Emirates ID/Visa renewal, Travel, leave, insurance, claims, innovation, ideas, complaints, attendance, feedback etc...
* Profile; like photo, hoppy, skills, latest certificate, emirates id, passport, visa, labor, company, vehicle registration card, etc…

### Meeting Organizer

App should allow the achievement of the following functions:

* Allow and simplify organizing meetings as well as minute keeping/publishing in a user friendly manner.
* Display a wizard to simplify meeting organization and follow below steps to enhance user experience.
* Allow user to specify meeting details (e.g. agenda, preliminary attachments) and select attendees (internal attendees as users in the system, and non-users of the system attendees from email).
* Maintain room calendars as well as internal attendee calendars should be visible at a glance to simplify date and timing arrangement.
* Create a meeting workspace automatically for further pre-meeting and post meeting collaboration. When meeting details and attendee list are finalized, system should send invitations in Outlook and make bookings in calendars of attendees and meeting rooms as necessary. A link to the meeting workspace should be available in Outlook invitations and calendar items. When a meeting workspace is created.
* All internal attendees should be given access to meeting workspace.
* Meeting organizer should be specified as host of the meeting workspace and should be able to manage users and their privileges for this workspace.
* Allow assigning action items (tasks) for attendees with a possibility of specifying deadlines and remind organizer and responsible on deadline.
* Entire content of a meeting workspace should be downloadable to editable format using a standard template provided.
* Allow specifying many-to-many relations between a meeting with other entities such as departments and/or projects. In such a case, system should also place a link to the meeting workspace within the entity content (e.g. a meeting related to multiple projects and multiple departments).

### Gate Pass System

App should allow the achievement of the following functions:

* Enable role-based system for app users (requestor, officer, property admin)
* Gather/Verify documents existence from existing corporate repository or employee profile.
* Allow external user to register by invitation, and being approved, to upload document required and receive access information.
* Request for access form (where, when, why), embedded with documents and workflow to approve, reject, reschedule.
* Keep track for all requests and status.
* Notification of user of status of request.
* Ability to integrate Emirates ID readers

### Survey Management

App should allow the achievement of the following functions:

* A Trigger-based surveys at the right time to maximize engagement.
* B Comprehensive statistics of answers
* C Different answers types, text, and multiple choice, photo/video by upload or camera.
* D Support nested branching to skip/add questions based on responses.
* E Should be accessed directly by link or mobile app.

### Languages

* English

Detailed requirements will be covered in the section titled “Functional Specifications”

Verbat’ s Solution architects have conducted a thorough research on the requirements and have come to the conclusion that our proposed solution, which is detailed further in this document, will meet the requirements put forth by the client. And the proposed solution will be delivered in a phased approach as per Verbat’ s stand-alone fixed bid solution model.

**Strong and Scalable platform:** The platform proposed will be strong and scalable enough to accommodate future enhancements.

**Accelerated solution:** The framework would act as a solution accelerator. It would provide the basic building blocks which could be reused in future for building new components and features.

**High performance:** The light weight framework used consumes fewer system resources thereby making the application perform faster.

**Security:** The application will be developed considering various aspects of security.

## Advantages of Proposed Solution



01

Agile development offering reliable, secure solution

02

Smooth transition and quicker completion of processes

03

User friendly interfaces enabling easy navigation between screens

## Why Verbat



## Key Differentiators

Delivered digital transformation expertise to global customers for over a decade by following industry best practices to maximize ROI for client

Keen technology intelligence combined with aggressive market research to deliver solutions that achieve results with measurable value

Enable access to global consulting expertise with strong local market and business knowledge

Commercial Model that is customizable for your business needs

Services that are designed to optimize applications for improved performance and overall efficiency

1,000,000 plus man-hours of expertise in technology frameworks spanning Microsoft, Open Source, mobility platforms and other proprietary IT technology

Partners top technology vendors to bring in the latest and best services in integration, collaboration, and development

Commercial Model that is customizable for your business needs

Proven Methodologies & Processes

Investment in R & D

Strong Local Presence

Flexible commercial Models

Technology Associations

Software Development Experience

Offshore Development Centre

Quality Assurance & Testing

## Technology & Services



Technology  
&  
Services

Cloud/Traditional Hosting

User Interface & Design

Digital Marketing

Mobility Solutions

Testing Services

Application  
Development

# Functional Specification

|  |
| --- |
| **Organization Brief (Web Content Management Based)** |
| Dynamic Page Updates( Insurance, Promotions, Birthdays, Health Tips) |
| Common Static Pages (Vision, mission, values etc.) |
| Personal Update Pages (Anniversary, birth, death etc.) |
| Frequently Updated pages (Announcements, News, CXO's Messages, Awards, Events) |
| Manage Employee profiles |
| Manage Video & Photo Gallery (upload, tag & front end display) |
| Online Chat Facility |
| Corporate document repository (Trade License, Establishment card, Lease agreements etc.) |
| Meta data, Tagging & Categories for video, photos, documents |
| **Brand Asset Management** |
| Upload assets |
| Tag, Categorize assets |
| Approval workflow for assets |
| Access control for assets |
| **Policy Managent** |
| Policy management approval workflow |
| Create policy revisions |
| Automatic notifications for policy expiration and policy renewal or amendments |
| Policy access controls and entitlements |
| Custom metadata for policies |
| Dashboard for policies (waiting for approval pending, expired etc.) |
| Employee acknowledgment of policies |
| Access control for policies |
| Advanced search |
| **Employee Affairs Center** |
| **Employee recruitment workflow** |
| Requirement Request |
| Phone screening |
| Personal data collection |
| Interview results |
| Onboarding |
| Off boarding |
| **Performance Management** |
| Goal Management (create and manage goals based on employee tiers) |
| Goal Assessments |
| Performance feedbacks |
| Self-service forms with workflow |
| Expensing |
| Passports, Emirates ID, Visa Renewal |
| Travel reimbursements |
| Leave requests |
| Apply for Insurance and insurance claims |
| Attendance register |
| Claims, Feedback, complaints |
| Employee profile self management |
| passport, Photo, personal details, vehicle registration, insurance cards etc. |
| **Meeting Management** |
| **Meeting Organizer** |
| Subject, Agenda, preliminary attachments |
| Select Attendees (LDAP, Active directory, external users) |
| Meeting Workspace (dashboard with meeting details) |
| Schedule Meeting (send emails, outlook invites) |
| **Calendars** |
| Maintain room calendars |
| Invitee calendars |
| Downloadable meeting details in predefined templates |
| Updateable meeting tags which link the meeting to other entities (Departments, projects, other meetings etc.) |
| **Gate Pass System** |
| Integrate Emirates ID reader |
| External User Access |
| User Invitation email |
| Approval Link and verify identity |
| Upload Documents |
| Assign Entitlements and system access |
| Request access for forms, documents with approval workflow |
| Track requests with access logs |
| Notification of request status to requesters |
| **Survey Management (Web Based)** |
| Create complex Surveys with radio buttons & checkboxes and dropdowns |
| Schedule surveys to be triggered |
| manage survey results |
| Upload images and video for survey |
| **Web Content Management** |
| Upload content from various media |
| Approval workflow for content to be published |
| Versioning of content |
| **System Features** |
| Advanced document search (by name, subject, category, meta tags, date etc.) |
| Authentication & authorization |
| Auditing & logging |
| Exception handling |
| Manage files and folders |
| Generate thumbnail for videos and images |
| User management (create, update, delete) |
| Add New user attributes |
| Create User roles (CxO's, Gate pass, Survey & Asset managers, admins etc.) |
| Entitlements |
| manage meeting locations |
| manage Departments |
| manage Projects |
| manage Performance Goals |
| Document and asset management framework |
| meta tag management |
| Survey question management |

# Functional Architecture

The proposed application is an MVC based application that is technology agnostic. The functional architecture depicted above broadly classifies the features of the proposed implementation into “Application” and “System” level features.

System level features are what Verbat considers as non functional requirements while the application level features are functional requirements that were stipulated by the client. Below you will find a run down of the various features that the proposed application will have.

**User's interface**

Users can access the application through a browser. Verbat implements a Web 2.0 user interface framework based on GWT (Google Web Toolkit) that supports Firefox, Internet Explorer, Safari, Chromium and Google Chrome and the latest versions of Opera. Also available, a user interface adapted for mobile devices based on JQuery Mobile

**Security layer**

Verbat shall build a security layer that centralizes management of access allowed to users based on their credentials. The security control rests with an Access Manager module that implements the logic of safety assessment in the application. Authentication process can be carried out by a CAS service (Authentication Centralized Service), LDAP, or via a database where users are registered.

**Core**

The application’s Core centralizes and implements the management and processing logic for different types of objects that are stored in the repository. These objects are nodes of type document, folder, emails and records as well as the combination of metadata structures.

**Workflow engine**

Verbat intends to create a general purpose workflow engine. Extensions can be build on top of the general purpose architecture to fit the needs of a specific workflow. This will be accomplished by lending wellknown opensource workflow engines.

**Storage**

Verbat uses Hibernate for OMR (Object Relation Mapping) data mapping and supports different relational databases (DBMS) such as PostgreSQL, MySQL, Oracle, MS SQL Server, DB2 and others. The entire metadata layer is stored in a DBMS database, while the binary objects (documents), based on the selected type are DBMS, these stored either on the file system, in a database or in a specific implementation of DataStore.

**Search engine**

Verbat shall use the Lucene.Net as search engine. All objects that are contained by the application whether binary or not, are indexed by the search engine. In the case of binary objects such as Microsoft Office documents, PDFs or images, etc., are added to a queue of indexing.

**Catalog and metadata**

Vaerbat can be integrated with open source text extractors like Tesseract or Cuneiform to extract text from physical documents and extend the functionality of the application.

Scripting - Shell Bean - combined with events system, smart tasks, task scheduler (Crontab) and reports (MS Reports) allow plan, implement and control the process of automatic metadata capture in a completely transparent way for the user.

**Document security**

In order to ensure the security of the application Verbat can integrate with antiviruse applications. Binary objects can be processed by the antivirus engine, ensuring the integrity of the repository and the safety of users in daily use documentation.

## System Level Features

* Authentication and Authorization: The system will validate the identity of the user and then authorize the user and assign a specific role that they have been mapped to by the admin
* Auditing and Logging: The system will log the activity of the logged in user so that it can be tracked for security purposes. The system will also log the actions being performed by the system so that it can identify issues caused by systemic application failures
* Scheduled Jobs: The system will have scheduled jobs running at specific intervals. The scheduled jobs makes it possible to identify permit holders with expiring licenses. These jobs can also be used to automatically disable access for expired licenses as well as send out notifications and alerts to permit holders and TSD staff. Another use would be to archive old documents
* Workflow Management: The application maintains different queue for different roles. When an applicant has fulfilled his application requirements, the system will move the application to the concerned TSD staff. The system will also be smart enough to (Re) assign the application to the TSD manager or inspector based on the action taken by the TSD staff. Workflow will keep track of the different states that the application has gone through so that it can easily be queried by the concerned user
* Exception Handling: As a part of managing user expectations, exceptions or inadvertent application failures will be handled by providing user friendly and contextual error messages. All exceptions will be logged for future reference so that it can be handled better.
* Document Archival: An application that must handle a large amount of documents for its various users, must find a way to archive documents that are no longer used or documents that belong to expired accounts. Archival provides a means by which these documents can be securely stored on a resource dedicated for it. Verbat will provide the mechanism for archival, but the client will have to provide hardware or software necessary to fulfil this requirement
* Security: Security of the site is managed through a combination of the logs maintained by the system as well as additional functions such as
  + Secure communication using SSL (If requested)
  + Password salting
  + Provision to secure the site against Cross Site Scripting attacks (and reflected XSS), SQL Injection attacks, Code Injection , buffer overflow vulnerability

# High Level Solution

## High Level Architecture

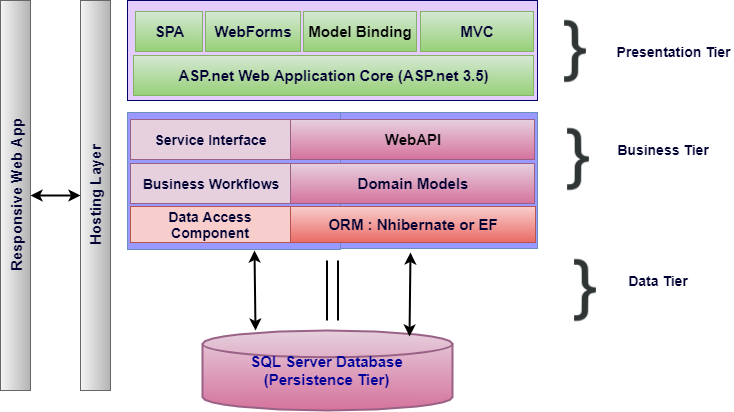


Figure High Level Technical Architecture

The proposed architecture combines the classic MVC architecture along with elements drawn from Service Oriented Architecture (SOA). SOA compliments the requirement where the client’s needs to extend the functionality of the application by retrofitting add-on services in the future.

The business layer represented in the figure above is a service layer that is modelled by the business domain. Hence it becomes easy to contain and isolate workflows. Each service layer results from the culmination of a broad range of granular micro services that work in concert to deliver the desired functionality. If there is a future need for adding new services, this can easily be accommodated by building a parallel pipeline.

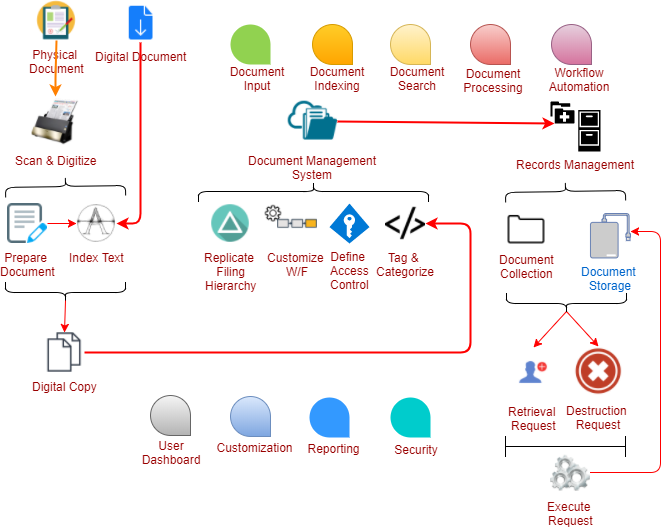
MSSQL is preferred relational database, as per the client. For Rapid Application Development (RAD), most application frameworks employ Object Relational Mappers (ORM). .Net supports both nHibernate as well as Entity framework, both of which are ORM’s. ORM’s support rapid application development by side stepping the work related to managing the intricacies of a relational database. ORM’s also make the application agnostic to database technologies (Such as Oracle, MySql, MSsql etc.).

## Survey Management Workflow

Figure Overall Workflow

## Meeting Organizer

## Digital Assets Management



## Web Content Management Workflow

Figure System Workflow

## Policy Management Workflow

# Nonfunctional Requirement (Others)

|  |  |
| --- | --- |
| **Requirement** | **Details** |
| User Experience and  UI Design | * The application will be developed only in English * The layout and graphical components will be created considering the usability factors |
| Performance | * Application will allow users to have smooth and quick access to the information or services they require. |
| Security | * The system will be protected against attempts of security breaching that may arise. * Web security standards will be followed. |

# Assumptions

The project solution and technology is created from the initial understanding of the requirement shared with Verbat through mails and meetings. The proposed solution is based on the following assumptions:

* Client to provide Verbat with the branding guidelines.
* The proposed application front end and backend would be in English
* Client will purchase the necessary templates needed for development
* Client shall provide licensed images and logos in specified size & format
* Super Admin can manage all the users within the application.
* Requirements should be well defined, agreed and signed-off by the client
* Internet connectivity is required for the functioning of the web application.
* UI development effort is 4-8 hrs. per screen for all screens not covered in the proposal
* Reporting and analytics may require external tools. Current assumption is that analytics will be minimal and simple.
* Testing will be done in latest versions of Google Chrome, Mozilla Firefox & IE web browsers only
* Development Contingent upon timely feedback from client
* Emirates ID scanners to be provided by client
* Recommended OCR devices and API’s to be provided by client for document scanning and digitizing
* Recommended Chat Plugins to be provided by client
* All Printable artifacts will be based on a predefined template decided during application design
* Access to LDAP, Active Directory etc. to be provided by the client
* Application Installation will be done remotely using RDP
* Verbat will advise the client on server hardware requirements after assessing the potential load on the server based on client base, data requirements, etc.

# Out of Scope

With the ever evolving digital market, the requirement needs should be clear to both the parties involved, hence the importance of mentioning the out of scope details of the project. Following are considered to be out of scope while creating this proposal.

* Purchase of images, fonts
* Adding new features to the application other than mentioned in the functional specification.
* Any language other than English
* Manual data entry
* Hardware Integrations / procurement and purchase
* Database migration
* Content writing
* Content or image procurement or uploading or editing.
* Hosting Infrastructure and Maintenance
* Annual Maintenance of the application (Bug fixing, debugging) - For AMC details, please refer section titled “Maintenance and Support”
* Physical deployment at client’s site
* Backup solution and Disaster recovery

# Technology Solution

## Proposed System Environment



HTML / CSS3 /

JQuery

IIS..Net 4.5  
MSSQL

Angular/C#

**MS SQL2012  
Windows 8/10  
Web Services**

## Technical Configurations

### Development Tools

* Visual Studio, MVC, c#, Angular
* MSSQL
* HTML / CSS 3
* Ajax, JavaScript, JQuery

### Recommended Web Hosting Package

* CPU 2 cores
* RAM 4 GB
* Disk Space 200 GB
* Data Transfer 200 GB
* OS Windows server 2012
* Database MSSQL
* Backup 200 GB
* Web site Server Software – IIS 8.0

### Browser Compatibility

* Chrome version: 56
* Firefox version: 51
* Edge version: 39

### Hardware Interface

**Desktop**

The application is reliant on hardware interfaces to provide a seamless automated user experience.

* Computer with Windows 8 or 10 OS
* Compatible Browsers as specified in section 7.2.3

# Commercials

## Web Application

|  |  |  |
| --- | --- | --- |
| **No** | **Description** | **Amount (USD)** |
| 01. | Responsive Intranet application | 00,000.00 |
| 02. |  | 00,000.00 |
|  |  |  |

*Note:*

* *The above cost does not include Application hosting, integration, Project Management or deployment*
* *For change management cost, please refer to section 10 titled Change Management*

## Payment Terms

* Payment terms
* Payment terms
* Payment terms

*Note: Payment should be made within 7 days from the date of the invoice*

## Mode of Payment

By Cheque / DD to Verbanet Technologies LLC

OR

Wire transfer to our bank account

Bank Name : Emirates NBD

Account Name : Verbanet Technologies LLC

Account Number : 1011492858201

IBAN Number : AE61 0260 0010 1149 2858 201

Swift Code : EBILAEAD

Bank Address : Mamzar Branch, Dubai

*Note: Bank charges incurred during wire transfer to be borne by the client. Any local taxes applicable to be borne by the client*

# Delivery Management

## Project Management

The Verbat development center strictly follows industry standards on quality. The project management is process governed by the Verbat Quality Management system and is put to verification through internal audit programs that happen from time to time.

Verbat will dedicate a project manager for the proposed implementation. Verbat proposes Client to identify one project manager who will be driving activities to be undertaken by Client to be the single point of contact for Verbat.

## Roles and Responsibilities

Verbat will assign a dedicated Project Manager/Project Lead to lead the project, who will be the first point contact for Client. He/she will be responsible for planning and managing the various activities within the project. He/she will work closely with Client Project Manager, to give periodic status updates and ensure high level of visibility and comfort on the progress of the project.

The Project Manager/Project Lead will lead the co-ordination between Verbat and Client, thus enabling smooth transitioning of Client requirements to the Verbat’s offshore delivery team, and provide visibility as well as comfort on the progress of the services to Client.

He/she will have periodic meetings with Verbat’s Senior Management, thus ensuring Verbat’s Management commitment and focus on Client initiatives.

## Delivery Activity Summary

|  |  |
| --- | --- |
| Activities | Description |
| Detailed requirement Analysis | Verbat team to conduct detailed study of requirement for the phase. If clarification is required, team will reach out to Client for more information and/or time for discussions. |
| DB Design | DB design for central and test DB. |
| Software Requirement Specification document (SRS) | Once the requirement analysis is completed, Verbat team will submit the SRS document for approval |
| UI/UX Design, Prototyping | Based on the SRS, Verbat UX/UI team will work on the UI/UX of the screens and submit a prototype for approval |
| Functional Specification Document (FS) | Once the Prototype. UI/UX is approved, Verbat shall submit an FS document for approval. |
| Development | Actual system development starts based on the FS. This involves detailed design and software development of Web Application. |
| Testing | Test Planning, test plan creations, internal, integration testing and user acceptance testing. |
| Deployment | Deploying the latest built in the Verbat Test Server. |

## Project Implementation Plan

Verbat will be providing the solution in a stand-alone fixed bid approach which ensures minimum viable solution for quick wins with core focus on the long-term business objective and outcome. Once the implementation is over, Verbat will initiate the application maintenance process (once the maintenance contract is signed) which continues to extend after the implementation.

## Deliverables

* Scope Document
* Project Plan
* Presentation for SCTDA Management
* Functional Specification Document
* System Analysis & User Specification Document
* Design Specification Document
* Prototype of the application
* Test Plan Document
* User Manual
* Source Code
* Fully Developed & Tested Application

## Estimated Delivery Time

**UAE working days for prototype from the date of Approval of the project (LPO/Signed proposal) with advance payment: 15 working man days**

**UAE Working days for the development of the application from the Date of Approval of the Prototype: 3 working man months**

| **Activity** | **Deliverables** | **Timeline** |
| --- | --- | --- |
| Project Initiation | Scope Document, Project plan, Presentation to SCTDA Management | 2 days |
| Requirement Specification & System Design | System Analysis & User Specification, Updated project plan, Design Specification document, prototype | 15 days |
| Prototype  (parallel stream ) | Working prototype | Month 1 |
| Development | Test Plan Document | Month 1 - 3 |
| Testing | User Manuals | Month 2 - 3 |
| Deployment | Tested Web, Tablet & Mobile  Application in IOS, Source Code | Month 3 |

## Deployment Details (at Clients Behest)

* Client can opt for hosting the application at Verbat’s Server.
* If deployment is at the client’s server, responsibility of deploying the application onto the production environment after conducting the necessary acceptance testing will lie with the client unless and until Verbat’s support is contracted for deployment.

***Note****: Hosting the application at Verbat’s server will incur additional charges.*

## Release Planning

* Client will be informed about the release date and time through email.
* Client performs the UAT

## Risk and Contingency Planning

Verbat has identified various risk factors associated with this assignment and understands the impact of these risk factors on the project schedules. The objective of this section is to highlight for both Verbat and client, the risk factors, to analyze the impact of the risks on project execution, and to propose strategies to control and reduce the impact of the risk factor.

These various risks, which could arise during the project, are tabulated below along with mitigation implementation.

| Type of risk | Impact | Risk Mitigation | Risk Handling |
| --- | --- | --- | --- |
| Scope Creep | H | Functions and features will be detailed in system requirement documents and will go through client approval. Once this document is approved, any change to requirement will go through change management review for possible impact assessment. | Proper change management procedure will be implemented. |
| Delay in customer feedback | H | The plan is prepared with enough lead-time for customer reviews and approvals.  The customer is indicated with the dates when the document is expected after review and approval. | The request for feedback will be escalated if not attended at the right time so that the schedules are not affected. Deemed acceptance criterion is set up front and will be followed. |
| Non-availability of necessary software’s, frameworks, database instances and infrastructure at client’s hosting environment(If hosting support is provided by Verbat) | M | Client will be informed in advance on these requirements. | Possible impact to schedule. |
| Manpower attrition | L | All efforts would be made to ensure process dependence rather than being person dependent. As a risk mitigation plan Verbat will train backups. | A new person will be identified as early as possible, provided the required project-specific training and mentored by the senior members of the team to minimise impact of attrition on the project. |

*H-High, M-Medium, L-Low, NA-Not Applicable*

# Change Management

Any addition which comes out of the project scope, upon and after the launch of the tool will be considered as change management. Verbat recommends the following change management procedure for the same.

* Any change which comes out of the project scope, which was discussed, documented, and mutually approved by both the parties in the requirement stage, will be carried out only through raising a change request.
* Change request will be studied and an impact analysis on the existing work flow will be performed.
* On finalizing the impact, effort estimation for the change will be calculated and raised as additional requirement.
* Verbat will initiate the change request only after getting a formal approval from the client for the additional changes raised.
* Any change from the scope will be charged at **USD ----- per man day effort** and approval from the clients will be availed before commencing on any change management.



# Miscellaneous

## Acceptance Criteria

* UAT sign off should happen within 7 Days from the release of the application/ Phase and the acceptance confirmation needs to be mailed to Verbat failing which Verbat will consider the project as approved by the client.
* Any comments or reason for rejection need to be documented and the same needs to be sent as an email from the official mail id of client to Verbat.

## General Terms and Conditions

* An average of 20 working days are assumed in a month
* All the projects activities will be carried out from our off-shore development center in India
* The scope of the project is to develop the Application as detailed in the scope of the project and mentioned in this proposal. Any changes or additions will have to go through change management.
* This proposal and all technical/ functional specifications have been derived or concluded from the data shared via email / information's transferred during the initial requirement analysis meetings and conversations. Verbat reserves the right to amend the terms of this proposal, should the SOW terms, functional features and functionalities change during the course of the project
* Application will be best viewed only in the environment mentioned in the section 7.2.3
* All the documentation will be provided in English.
* Third party components may be used to develop this application.
* All Source Code and other project artefacts would adhere to the Verbat document templates and internal coding standards
* Acceptance criteria shall be based on the clauses which were mutually discussed between Verbat and client at the Requirement Analysis phase and the same will be documented and approved by both parties through official emails
* In case Client requires any extension of the proposed acceptance schedule, the associated effort and cost of such extension can be mutually reviewed.
* For any circumstances if project needs to be put on Hold / Stop it requires minimum request notice period of 1 week along with duration for which request will be addressed by management and final decision on the request will be based on that
* If deployment is done in client’s server, Verbat cannot be held responsible for any performance issues arising due to hardware malfunctions.
* Client is responsible for data backup in case the application is not hosted on Verbat server.
* Source code will only be delivered or uploaded on the Production Server once the due payments are made.

## Assumptions and Dependencies

* Detailed system study is required before the start of the project.
* During the requirement gathering phase, authorized personnel from the Client’s side is expected to be available for discussion and finalizing the HLD (High Level Design), before development commences.
* Type of reports and formats, if under the scope of the project, needs to be specified by Client before project sign off.
* Workflows if under the scope of the project, need to be specified/ confirmed by client before project signoff.
* All queries regarding the client requirement and any queries which may hinder the project advancement at any stage should be answered by the client within 24 hours from the time of initiation, failing which the time delay will get added to the actual effort which was estimated.
* Verbat assumes that all sign-offs from Client will be provided within agreed and specified timeframe.
* Client will provide all the necessary contents, both text and image, before starting the project in the format suggested by Verbat (if any).
* The client should provide the relevant information and data well in time for the execution of a related activity. Non- availability of this information or data may lead to an interruption of work which may result in a delay in delivery as well as additional costs to the client.
* Client should have/possess server with technical specifications as suggested by Verbat for the proposed application.

## Source Code & Intellectual Property Rights

* Upon completion of the Project and 100% completion of the payment, client will have access to the source code except for propriety codes, developer tools and third party application etc.
* The solution offered will be the intellectual property of the client and will be made available to the client on an “unlimited license” basis.
* Modifications by third party/person: No person or organization, other than Verbat or any person authorized by Verbat in writing, has any permission to modify/change the software Solution to be eligible to get continued support from Verbat as per the support terms defined under this document.
* Liabilities/Damages: Verbat accepts no liability or damages of any kind arising out of use or non-use of the software delivered. The responsibility of testing of software lies with Client.

## Maintenance & Support

* Maintenance contracts by default are supported as per the basic SLA terms.
* **AMC with Basic SLA is charged at 20 % of the total project value**. Additional Effort/change management request will be added towards Total Value of the Project to determine the AMC value.
* Maintenance support is limited to providing application support for ensuring the consistency of the look-and-feel, bug fixes and user issues i.e. maintenance and support of the existing features of the application.
* Support does not in any way cover providing technical or other support to the end users. The maintenance agreement does not include functionality changes or feature additions which are handled as change requests which will be charged AED 1200 per man day. AMC does not include server support, maintenance and application deployment.
* AMC charges will cover Off-Site Support and Debugging. Support includes E-mail, Telephone and Chat unless explicitly specified. In the event, the application is hosted with the client; necessary remote desktop connectivity should be provided for carrying out maintenance activity.
* Gap in AMC - In case if the client does not opt an AMC for a year and want to renew it after that period, 50% of the AMC amount for the year for which AMC is not taken will also be payable if the client wishes to renew the AMC contract.
* Note:
  + Please note that the AMC support shall start only after all the necessary sign-offs (AMC Document) to this effect have been given.
  + It is not mandatory that the client should opt for an AMC. The client will still be supported on an ad-hoc basis on an agreed man-day rate.
  + AMC Payment Terms: 100% to be paid as advance.

## Service Level Agreement

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Key** | **Max Response Time** | | **Max Resolution Time** | **Target** |
| Basic | 1  working day | 3 working days | | Request / incident / problem tickets |
| Advanced | 5 Business Hours | 12 Business Hours | | Request / incident / problem tickets |
| Priority | 3 Business Hours | 5 Business Hours | | Request / incident / problem tickets |

Note:-

* We provide Basic SLA as standard with AMC while Advanced and Priority SLAs attract additional charges.
* Time zone applicable as per India time zones (3:30 AM GMT to 12:30 PM GMT- Monday to Friday).

# Our Clients

**UAE University**

Education

Transportation

**Canada Cartage**

Construction

Services

Finance

We look forward to hearing from you soon and hope that you will give us the privilege to work with you in meeting your business goals. Thank you.

Thank You



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