Project Management Plan

For OMMCOM NEWS

Version 1.0

Luminous Infoways Pvt. Ltd.  
  
Address: N6-373, IRC Village,  
Bhubaneswar - 751 015, Odisha, India  
Phone: +91 674 2360573, +91 674 6451236  
Fax: 91 674 2360724  
Web: [www.luminousinfoways.com](http://www.luminousinfoways.com)

**Revision History**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Version (x.y) | Date of Revision | Description of Change | Reason for Change | Affected Sections | Approved By |
| 1.0 | 02/04/2016 | Initial Draft | Project Plan | All | Sarada Prasana Behera |

**Approval History**

|  |  |  |  |
| --- | --- | --- | --- |
| Version (x.y) | Prepared By | Reviewed By/Date | Approved By/Date |
| 1.0 | Debasish Mishra | Sarada Prasana Behera /  02/04/2016 | Sarada Prasana Behera  (02/04/2016) |

Table of Contents

[Table of Contents 3](#_Toc463284578)

[1 Introduction 5](#_Toc463284579)

[1.1 Project Overview 5](#_Toc463284580)

[1.2 Scope of the Project 5](#_Toc463284583)

[1.3 Definition and Acronyms 6](#_Toc463284584)

[1.4 References 7](#_Toc463284585)

[1.5 Assumption and Dependencies 8](#_Toc463284586)

[2 Project Schedule and Milestones 8](#_Toc463284587)

[2.1 Estimation Approach 8](#_Toc463284588)

[2.2 Size and Effort Estimate 9](#_Toc463284589)

[2.3 Schedules and Deliverables 10](#_Toc463284590)

[Time Frame and Delivery Routines: 10](#_Toc463284591)

[2.4 Critical Path and Critical Dependency 10](#_Toc463284592)

[2.5 Service Level Agreement 11](#_Toc463284593)

[2.6 Acceptance Criteria 12](#_Toc463284594)

[3 Resource Plan 13](#_Toc463284595)

[3.1 Project Team Structure 13](#_Toc463284596)

[3.2 External Interfaces 13](#_Toc463284597)

[3.3 Hardware Requirement 13](#_Toc463284598)

[3.4 Software/ tools Requirement 14](#_Toc463284599)

[3.5 Critical Resource Requirement 14](#_Toc463284600)

[3.6 Customer Supplied Items 14](#_Toc463284601)

[4 Training Needs 14](#_Toc463284602)

[4.1 Training Need Identification 14](#_Toc463284603)

[4.2 Training Plan 14](#_Toc463284604)

[4.3 Plan for Knowledge Sharing 15](#_Toc463284605)

[5 Process Plan 15](#_Toc463284606)

[5.1 Life Cycle Chosen: Classical Waterfall 15](#_Toc463284607)

[5.2 Process Tailoring Summary 17](#_Toc463284608)

[5.3 Design Approach (If anything else can be added) :: Copy from Samadhan 17](#_Toc463284609)

[5.4 Approach to Testing and Result reporting 17](#_Toc463284610)

[5.5 Standards, Methodologies, Tools and Checklists to be used 17](#_Toc463284611)

[6 Reporting and Communication Plan 18](#_Toc463284612)

[6.1 Interaction with Other Teams 19](#_Toc463284613)

[7 Monitoring and Control 19](#_Toc463284614)

[7.1 Issue Management and Escalation 19](#_Toc463284615)

[7.1.1 Escalation 19](#_Toc463284616)

[7.2 Scheduling and Tracking 19](#_Toc463284617)

[7.2.1 Task Allocation 20](#_Toc463284618)

[7.2.2 Release Plan 20](#_Toc463284619)

[8 Project Risk Management Plan 20](#_Toc463284620)

[9 Configuration Management Plan 21](#_Toc463284621)

# Introduction

This document discusses the overall project process (Development, Configuration Management, Quality Assurance, Risk Management processes). This document is intended for use by members of the team and will lay down the procedures to be followed for all project activities.

This plan is the basis for the execution and tracking of all project activities related to OMMCOM NEWS. It shall be used throughout the life of the OMMCOM NEWS project and shall be kept up to date to reflect the actual accomplishments and plans of the project.

## Project Overview

## OMMCOM NEWS is a new generation application that can be accessed from both Web and mobile app. The primary objective includes spreading of latest happenings to all it’s viewers. Another module includes live video conference, where viewers can participate. Now every citizen can be a journalist using the citizen journalist feature in this application.

## Users can install the app and view current happenings. There will be a provision for admin to manage news and moderate live video conference. Project emphasized a unique design and user-friendly appearances where all users can participate. Users include Admin, Viewers, Journalists and editors, etc.

## 

## Scope of the Project

OMMCOM's Media Pvt. Ltd. Web & mobile app makes it easier for the viewers to read news on the fly and participates in live video conferences as well. Viewers shall be able to post their comments for any news/article and share any news/article in social media with ease.

**News Management:**

* Admin can post latest news and manage their positioning. News can have a title, description, images and videos.
* Viewrs can view the news, put comments
* Viewers can also share news on social media i.e, facebook, twitter, e.t.c.
* All news have onpage SEO, such that Admin can manage meta tag details from admin panel

**Citizen Journalist:**

* Viewers can post news from mobile or web
* Admin will approve or reject the news

**Video Conference:**

* Multi party video conference can be managed by admin
* Participants can join the conference from web or mobile
* Admin can moderate the conference and participants

**Breaking News:**

* Admin can update breaking news
* Breaking news will appear at bottom of the page

|  |  |  |
| --- | --- | --- |
| **SL#** | **Title** | **Remark** |
| 1 | Operating System | Ubuntu 14 |
| 2 | Browsers | Mozilla Firefox, Safari, Chrome |
| 3 | Operating Environments | Desktop, Mobile (Android, iOS, Windows) |
| 4 | Application media formats | Images (jpg, png), Videos (mp4) |

## Definition and Acronyms

|  |  |  |
| --- | --- | --- |
| **SL#** | **Acronym** | **Detail** |
| 1 | PM | Project Manager |
| 2 | SDLC | Software Development Life Cycle |
| 3 | DOC | Document |
| 4 | MOM | Minutes of meeting |
| 5 | PPT | Power Point Presentation |
| 6 | QA | Quality Analyst |
| 7 | DBA | Database Administrator |
| 8 | EA | Effort Estimation |
| 9 | CE | Cost estimation |
| 10 | Assum | Assumtion |
| 11 | DMD | Data Model Diagram |
| 12 | DFD | Data Flow Diagram |
| 13 | ERD | Entity Relationship Diagram |
| 14 | MA | Modular Architecture |
| 15 | SA | System Admin |
| 16 | NGINX | Enginex server |
| 17 | RDBMS | Relational Database Management System |
| 18 | HTML5 Player | The video player that plays mp4 videos on HTML Page |
| 19 | DD | Data Directory |
| 20 | MF | Media formats (mp4, jpg, e.t.c.) |
| 21 | ini\_set | Setting server config. For max. file size to upload, max. execution time of PHP scriopt |
| 22 | Manual | Complete user manual plus technical manuals for future reference |
| 23 | DDA | Database design and analysis |
| 24 | Journalist | Who collects news |
| 25 | Editor | Who edits and/or improvise news contents |
| 26 | Publisher | Who finally approves and publishes the news |
| 27 | Hand Brake | Tool to minimize video size |
| 28 | Google insight | Tool to check and increase google page score |
| 29 | DBI | Database Integration |
| 30 | VSS | Video streaming server |
| 31 | Journalist | Who collects news and forward news to editor to publish |
| 31 | Viewers | Who participate in video conference, post comments in various news |
| 32 | VCC | Video Capture Card: Works as an interface in between Camera and Computer |
| 33 | VC | Video Conference |

## References

* Work Order Copy
* Luminous Infoways Pvt. Ltd QMS
* Amazon: for various hardware and interfaces required to conduct video conference
* RTMP manual and various open source solutions

## Assumption and Dependencies

Dependency includes;

* System admin’s proposal towards Live media streaming
* Each task will complete before starting their related task, or related task not completed before completing its depending task.
* Dependency to get approval from client/authorized personnel on time.

Assumptions:

* Internet Connectivity required to view the updated information in web/mobile application
* Electricity should be available for accessing the web app.
* Web camera / Mobile's camera required for the visitors to participate in video conference.
* Internet connectivity of 25 kbps or more is required for a visitor to join live video conference.
* Five development team members always available and with Quality Analyst.

# Project Schedule and Milestones

## Estimation Approach

Estimation factors include;

* Resources availability at LIPL
* Skill set of the resources available.
* Size & complexity of the project.

Approach includes;

* Establish and maintain estimates of the attributes of the work products and tasks.
* Define the project lifecycle phases on which to scope the planning effort.
* Estimate the project effort and cost for the work products and tasks based on estimation.
* A project plan is established and maintained as the basis for managing the project.
* Identify and analyze project risks.
* Plan for necessary resources to perform the project.

|  |  |  |  |
| --- | --- | --- | --- |
| Sl.No | Major Milestones/ Deliverables Names | Planned Start Date | Planned End Date |
| 1 | SRS Delivery | 05/04/2016 | 12/04/2016 |
| 2 | Technical Solution Document | 14/04/2016 | 16/04/2016 |
| 3 | 1st Beta Release(Web & Mobile) | 16/04/2016 | 25/05/2016 |
| 4 | Go Live | 25/05/2016 | 30/05/2016 |
| 5 | Bug List | 22/05/2016 | 28/05/2016 |
| 6 | Release Notes | 25/05/2016 | 30/05/2016 |

## Size and Effort Estimate

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Module Name | Size Baseline (in number of persons) | Effort Baseline (in Person days) | Start Date Baseline | End Date Baseline |
| Requirement Documents | 1 | 7 | 05/04/2016 | 12/04/2016 |
| Technical Solution Documents | 1 | 3 | 14/04/2016 | 16/04/2016 |
| Coding | 5 | 29 | 18/04/2016 | 20/05/2016 |
| Testing | 1 | 13 | 11/05/2016 | 25/05/2016 |
| Release | 1 | 5 | 25/05/2016 | 30/05/2016 |

## Schedules and Deliverables

# Time Frame and Delivery Routines:

|  |  |  |  |
| --- | --- | --- | --- |
| SL# | Deliverable Names | Resource Name | Delivery Date |
| 1 | Requirement Documents | Satyakam Misra | 13/04/2016 |
| 2 | Technical Solution Documents | Samadhan Mishra | 16/04/2016 |
| 3 | DB Design | Ashok Sahoo | 20/04/2016 |
| 4 | Completion of design (UI) [Beta] | Debi Prasad | 19/04/2016 |
| 5 | Web Application Delivery | Subrat Rout, Debasrita Mohanty | 20/05/2016 |
| 6 | Mobile App Delivery | Suhasini Reddy | 12/05/2016 |
| 7 | Video Conference | Subrat Rout, Suhasini Reddy | 12/05/2016 |
| 8 | Test Plan Document | Mausumi Panda | 10/05/2016 |
| 9 | Test Cases | Mausumi Panda | 14/05/2016 |
| 10 | Test Report | Mausumi Panda | 25/05/2016 |
| 11 | Delivery of Beta Version | Debasish Mishra | 25/05/2016 |
| 12 | Delivery of 1st stable version | Debasish Mishra | 30/05/2016 |
| 13 | Product Integration Documents | Samadhan Mishra | 30/05/2016 |
| 14 | UAT | Debasish Mishra | 01/06/2016 |

## Critical Path and Critical Dependency

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SL#** | **Activity** | **type** | **Sch. Date of activity** | **Dependency** | **Action** |
| 1 | Invoice dispatch & first level communication | Internal | 02/04/2016 | DGM approval required | DGM participated and resolved |
| 2 | DB Movement | Internal | 04/04/2016 | Storage space to be available at OMMCOM server | Quota increased |
| 3 | Setting multiple static IPs in web server | Internal | 04/04/2016 | 2 LAN cards to be installed | installed |
| 4 | Video Conference | Internal | 04/04/2016 | Availability of video streaming server | Installed |
| 5 | News moderation | Internal | 04/04/2016 | Staffs to be hired for administration | OMMCOM hired staffs |
| 6 | Lunching of test application | Internal | 04/04/2016 | Test environment to be available at LIPL side | Environment created |

## Service Level Agreement



## Acceptance Criteria

|  |  |  |  |
| --- | --- | --- | --- |
| Deliverable | Acceptance By | On what basis | When |
| Functional Assessment Document | Mr. Jajati Karan (MD), OMMCOM MEDIA | SRS should match the requirements as per client | 12/04/2016 |
| Architecture/ Technical Assessment Document | Debasish Mishra | Technical documents should be as per the requirement | 16/04/2016 |
| Executable Code | QA, LIPL | Application to be matching the requirements with no pending major bug list | 23/05/2016 |
| Test Plan | Debasish Mishra | To make optimum use of available QA resources and cover all the modules of the application to make it perform at its best | 10/05/2016 |
| Test Reports | Debasish Mishra | No major pending bugs shall remain | 25/05/2016 |

# Resource Plan

## Project Team Structure

|  |  |  |  |
| --- | --- | --- | --- |
| SL# | Name | Responsibility | Reporting To |
| 1 | Debasish Mishra | Project Management | Mr. Tanmay Mohanty (CEO, LIPL) |
| 2 | Samadhan Mishra | System Architecture | Debasish Mishra |
| 3 | Ashok Sahoo | DBA | Debasish Mishra |
| 4 | Debi Prasad Behera | UI Designer | Debasish Mishra |
| 5 | Subrata Rout | Sr. Web Developer | Debasish Mishra |
| 6 | Debashrita Mohanty | Web Developer | Debasish Mishra |
| 7 | Satyakam Misra | System Analyst | Debasish Mishra |
| 8 | Sarada Prasanna Behera | DGM, Operation | Mr. Tanmay Mohanty (CEO, LIPL) |
| 9 | Mausumi Panda | QA | Debasish Mishra |
| 10 | Suhasini Reddy | Android Developer | Debasish Mishra |
| 11 | Mrs. Prativa Samal | HR | Mr. Tanmay Mohanty (CEO, LIPL) |

## External Interfaces

|  |  |
| --- | --- |
| Organization | Liaison/ Interface |
| WEFE | ISP |
| MHD Group, Kolkata | Web Server |

## Hardware Requirement

* Graphics card for all systems (Anchors, Journalists, Admin)
* Live media streaming server
* Video Capture Card (for Live video streaming from camera)
* SLR Digital Camera (with Live streaming facility)
* Digital Mic
* Good quality Internet network

## Software/ tools Requirement

* NGINX RTMP Server
* Adobe Media Server (for associated digital camera only)
* MySQL RDBMS
* OS: Ubuntu Server 12+

## Critical Resource Requirement

* 30 KB/PS from client machine and 1 MB/PS minimum from server’s end
* Unlimited bandwidth
* PHP-FPM to process PHP Files

## Customer Supplied Items

* Admin PC
* Complete setup (studio) for testing
* Logo
* Welcome Audio

# Training Needs

## Training Need Identification

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Skills Required | Existing Skills | Skill Gap |
| Developer | Live Video Conference | PHP, MySQL, Laravel | RTMP Server, JW Player |
| Project Manager, System Analyst, System Architect, Quality Analyst, HR | QMS | Project Related Documentation | Project Related Documentation as per QMS |

## 

## Training Plan

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S No | Role | No of people | Training Requirement | Training Mode | Planned  Date | Actual  Date | Status |
|  | Project Manager, System Analyst, System Architect, Quality Analyst, HR | 5 | QMS Training | Offline | 4-Apr-2016 | 4-Apr-2016 |  |
|  | Developer | 4 | Live Video Conference | Offline | 8-Apr-2016 | 9-Apr-2016 |  |

## Plan for Knowledge Sharing

* If a resource exits in between, the replacement resource to be transferred knowledge from the exiting resource.
* New knowledge acquired by any resource should be shared with the relevant team members via email.

# Process Plan

## Life Cycle Chosen: Classical Waterfall

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Life Cycle Phase | Activity | Entry Criteria | Exit Criteria | Output | Developed At |
| Requirement gathering and analysis | Client interactions for freezing the requirements & do the gap analysis if required | After getting the work order | After requirement is frozen | SRS, RTM, Change Request Tracker | Luminous Infoways Pvt. Ltd. |
| Design | Creation of overall software architecture referring SRS documents and illustrating all the modules described in SRS in a developer friendly language | Completion and acceptance of SRS. | Completion of Detailed Design Document and High Level Design Document. | Detailed Design Document, High Level Design Document. | Luminous Infoways Pvt. Ltd. |
| Coding/UI Designing & Implementation | Writing the source code referring the Design Documents using the specified tools/language. | Completion of Technical Solution Documents. | UAT | Application Software | Luminous Infoways Pvt. Ltd. |
| Testing | Identifying any bugs in the application if present. | Application is testable | UAT | Test Cases, Test Plan, Defect Sheet | Luminous Infoways Pvt. Ltd. |
| Deployment | Hosting of application on live server | After development and testing of software application |  | Project Closure Report, Build Plan & Release Notes | Luminous Infoways Pvt. Ltd. |
| Maintenance | Scheduled feedbacks from end users resulting formation of scope of improvement in the overall software | After deployment |  |  | Luminous Infoways Pvt. Ltd. |

## Process Tailoring Summary

| S.NO | Process/Deliverable Name | Luminous Infoways Process | Tailored Process / Change | Reason for tailoring |
| --- | --- | --- | --- | --- |
| 1 | Content Management System | * 1. Own developed Content management System   2. Drupal | Own developed Content Management System | Less time consumption |
| 2 | System Development Life Cycle Model | * + 1. Classical Waterfall Model     2. Iterative Waterfall Model     3. Agile | Classical Waterfall Model | * Being an R & D Project, we have selected this model as we get sufficient time for R & D. * The scope of the work for this project may not change in course of development. |

## 

## Design Approach

|  |  |
| --- | --- |
| MODULE NAME | DESCRIPTION |
| 1. Landing Page(Web) | This is the home page of the news portal which greets the viewers with various news snippets and the viewer can navigate to various sections of the portal from this point. |
| 1. Landing Screen(Mobile) | This is the point of entry to the application and facilitates the citizen to view news of all categories in one single screen. |
| 1. Role Management(Web) | Admin shall be able to manage roles for given set of users and set access levels for each user set. |
| 1. User Management(Web) | Admin can create, update and remove users against specific roles. |
| 1. Content Management System(CMS) (Web) | This module includes features like;   * Managing news categories * Addition, updation and deletion of news items by journalists. * Publish/Unpublish a news item by the admin. * Admin can add vote/poll for a particular news item. |
| 1. Video Conference (Web and Mobile) | Citizen can join video conference for a discussion forum which is subjected to the approval of the joining request by the citizen to the admin |
| 1. Social Media (Web and Mobile) | Citizen can share news items in the following social media;   * WhatsApp * Facebook * Twitter   Also news sharing functionality is available via SMS service. |
| 1. Audit Trail(Web) | Viewers will be given the access to comment on a news item. Viewers will also have the access to update the comments.  Admin can moderate the comments from the users. |

## Approach to Testing and Result reporting

|  |  |  |  |
| --- | --- | --- | --- |
| SL# | Title | Tool’s Technology | Remark |
| 1 | Performance Testing | Nu-Loader |  |
| 2 | Preparation of test cases | Libre Writter |  |
| 3 | Functional testing | Selenium |  |
| 4 | Result Reporting | Mail, attached document, Skype, PMIS |  |
| 5 | Daily Status Report | PMIS, Mail, Skype |  |

## Standards, Methodologies, Tools and Checklists to be used

* MVC Pattern (HMVC)
* DB Type: RDBMS
* Server type: Ubuntu (Linux) Server
* Language: English
* Table Engine: InnoDB, MyISAM

|  |  |  |  |
| --- | --- | --- | --- |
| SL# | Title | Standard | Remark |
| 1 | Web Standard | W3 Compliances | HTML & CSS |
| 2 | Server Side Scripting | MVC | Laravel5 |
| 3 | Database | RDBMS | MySQL 5.2+ |
| 4 | Project Management | PMIS | FengOffice |
| 5 | IDE | - | Sublime, Navicat |
| 6 | Functional testing | - | Manual |
| 7 | UI & UX | DDA | Disability Discrimination Act |
| 8 | Versioning | - | GITHUB |

# Reporting and Communication Plan

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Details | Frequency | From Whom | To Whom | Content/ Agenda | Medium |
| Status Reporting | Monthly | Debasish Mishra | Sarada Prasanna Behera | Regular status to be submitted i.e, work progress & bug fixes | Email |
| Customer Reporting | Monthly | Debasish Mishra | Sarada Prasanna Behera | Meet customer and report the status, queries, suggestions | Email |
| Project Review Meetings with Sr. Management | Fort-Nightly | Debasish Mishra | Sarada Prasanna Behera | Internal demonstration and enhancement inputs collection | Physical presence |
| Project Team meetings | Weekly | Debasish Mishra | Sarada Prasanna Behera | On work progress and discussion on challenges | Physical presence |
| Communication with onsite/ client through conference calls | Monthly | Debasish Mishra | Jajati Karan | Project Review | Physical presence |

## Interaction with Other Teams

* Email
* Team Meetings

# Monitoring and Control

## Issue Management and Escalation

Issue management is the process of identifying and resolving issues. Problems with staff or suppliers, technical failures, material shortages – these might all have a negative impact on the project. If the issue goes unresolved, it will create unnecessary conflicts, delays, or even failure to produce the project deliverable.

To manage the above mentioned findings, we will maintain issue logs and make sure its resolved.

### Escalation

Development Issue:

Customer -> LIPL Support -> PM -> TL -> Sr. Developer

Designing Issue:

Customer -> LIPL Support -> PM -> TL -> Designer

Operational Issue

Customer -> LIPL Support -> PM -> TL -> Operation Team

## Scheduling and Tracking

=> Feng Office for scheduling & tracking

=> Version tracking with Github

### Task Allocation

|  |  |  |  |
| --- | --- | --- | --- |
| SL# | Task Title | Responsible | Remark |
| 1 | System Analysis | Satyakam Misra |  |
| 2 | System Design | Samadhan Mishra |  |
| 3 | Project Management | Debasish Mishra |  |
| 4 | Client Coordination | Debasish Mishra |  |
| 5 | Delivery Head | Debasish Mishra |  |
| 6 | QA | Mausumi Panda |  |
| 7 | Development | Subrat Raut, Debashrita, Suhasini Reddy |  |
| 8 | DBA | Ashok Sahoo |  |
| 9 | UI Designing | Debi Prasad Behera |  |
| 10 | Configuration Management | Samadhan Mishra |  |
| 11 | Operation | Sarada Prasanna Behera |  |

### Release Plan

|  |  |  |
| --- | --- | --- |
| SL# | Release Title | Remark/Date |
| 1 | Beta Release | 25/May/2016 |
| 2 | Final Release | 30/May/2016 |

# Project Risk Management Plan

****

**Risk Mitigation:**

|  |  |  |  |
| --- | --- | --- | --- |
| SL# | Risk | Mitigation | Remark |
| 1 | Avalanche in Scope of work | Regular follow-up and approval before start and end of each module completion |  |
| 2 | Staff Experience | Training program to be conducted |  |
| 3 | Natural Calamities, Electrical malfunctions | Scheduled data back ups |  |
| 4 | Cyber security risk | Check XSS, CSRF |  |
| 5 | Budget Risk | Proper plan, keeping client in loop, selection of tools prior to development & ensuring timely delivery of product |  |

# Configuration Management Plan

//Attachment requirement