

Overview

This is the feasibility Plan for NIMS, an information management suite for an NGO.

Target Audience

This document is intended for the development team cum the NGO that the team is preparing the platform for. This document contains the Feasibility Report.

Revision History

| Version | Primary Author(s) | Description of Version | Reviewed By | Date Completed |
|---------|----------------------|---|-------------|-------------------|
| 2.0 | Aakash | Statistics related to network coverage of Vodafone in Gujarat | | 27 Mar 2012 |
| 1.0 | Lalit, Anshul | First Draft | Megha | 21 Feb, 2012 |

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1. Introduction

In today's date, a lot of NGO's have been working for the betterment of the nomadic and de-notified tribes by helping them attain an identity. But as we can see that there is no organized documentation of their work. In order to ease their work, make it public and store it for a longer period of time using the technology at our disposal, this project has been undertaken. It will focus on developing information management system for NGOs, paperless entry by NGO coordinator using Android application. The aim of this feasibility report is to analyse the challenges of the project and how much and why it is feasible to implement this idea.

2. Ideas considered- Rejection and Finalisation

2.1. Faculty Information Management

It was about managing all information about all faculty members of our college (DAIICT). It proposed to make a common website that contains all faculty details and automatically searches the web for updates.

Reason for Rejection: This idea was not accepted because this project does not require a group of 9 members to work upon for four months and all faculty members may not like to have the same format for their personal pages and show all details as we wished to build a common platform for it.

2.2. Digitalising the Census Procedure

This project would digitize and manage all the data collected by govt. officials at one server and analysing the data accordingly. The census form was supposed to be paperless. It would have used the government promoted Aakash tablets and would have been helpful a lot.

Rejection Reason: But, this idea was not undertaken because of the fact that a fully functional census web based software toolkit is already being employed by the government of India.

2.3. Student Application

In this idea the mail account of a student, Moodle page, online social networking sites related to studies, buying and selling of second hand books from other student etc. would get managed through a common application. The main aim was to bring all major login based web applications onto a common a desktop application with a single login and password.

Rejection Reason: This idea was rejected because of the fact that similar thing was already been done by a SEN Group last year and it would have being difficult to integrate Moodle, daiictpdc and webmail etc in one in the absence of a proper API

2.4 NGO Information Management Suite

This software aims to help NGO's to manage and collect all the data from various areas of operation in real time, automate the analysis and maintain proper database. This idea seemed the most feasible and not much work has being done in the area, so it was more relevant to take this up as SEN project.

3. Project Description

Our Project involves Information Management System for NGO, NGO's public website and a data entry application for NGO coordinator. We aim to develop a web based information management system. The IMS will be equipped with several relevant statistical analysis capabilities. The IMS is going to consist of 2 parts (both software and hardware wise):

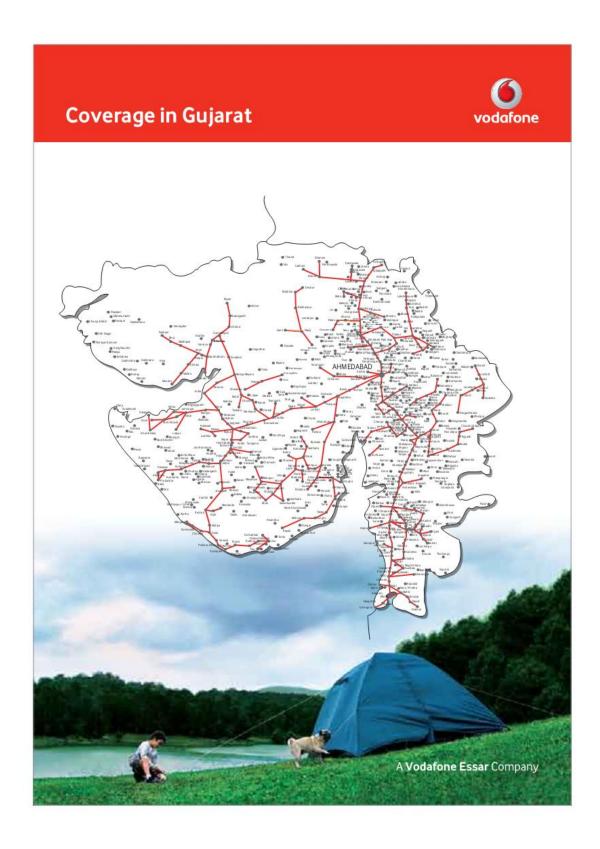
- 1) Client application (which will be with the coordinators) for easy data collection and updation. This will be an android based application (can run on Aakash tablet)
- 2) Server application (at main centre of the NGO) for database management and analysis of the collected data

4. Market Analysis

After talking to a NGO and searching the Internet, we found that some NGO's have their own websites but they cannot update it appropriately because of lack of technical skills in addition to the fact that most data of NGO work done is collected is on paper and thus it's a cumbersome and time consuming procedure to port all that data onto a computer, analyse and extract information as NGOs aren't always run in a professional manner like corporate organizations. What we are proposing is relatively different and is not used at least by the people we met and as much we searched on the internet. The idea is to send properly organized information to the NGO in real time and automate the analysis in addition to mapping of people and relevant places onto actual satellite maps for possible data visualization. The paperless data collection and submission by NGO coordinator would save NGO's time.

Our project includes social mapping and statistical analysis of the data collected by the NGO coordinators. Social mapping would help NGO's in locating any place in the village accurately as well data visualization.

On the basis of Vodafone network's coverage statistics in Gujarat it's also safe to assume that GPRS/3G/wifi connectivity will by and large be available almost all the time when the coordinators of the NGOs are working on field.



Reference: http://www.vodafone.in/documents/coveragemaps/map_guj.pdf

5. Feasibility

5.1. Technical

The project requires a proper analysis of inputs from NGO with some person who has knowledge of this area. The team leader has some relevant work experience and has good understanding of the needs and this will be helpful in designing our product.

Also the languages needed for the 2 major subdivisions of the project are known to at least one of the team members. The programming languages and platform are the following:

Client side: Android SDK

Server side web interface: PHP, HTML, CSS, Javascript

5.2. Economic

Cost based: The detailed budgeting has been provided in the proposal for the same. As in general, we need android devices (preferably Aakash tablets) for all coordinators. This would increase the cost of work in material sense but it would give correct, improved and faster information. Also, it will be possible for one coordinator to do work of three with these user friendly devices. The NGO needs to have a laptop/desktop with Internet connectivity to maintain the incoming data. They as user of the product will also have to buy a website domain, cost details of which are present in proposal. But in all it's a very economic conversion of paper work to digital information.

Time based: For this project total man-hour required according to our estimation is around 13 hrs per week per person

5.3. Social

The penetration of tablets is not much though they will soon be widely used seeing the trend of continuous decrease in costs. We can do the same project even with android mobile phones which have penetrated the markets a lot by now. This kind of system may take some time to be deployed and used by the people, who are sceptic about technology, but will be in demand soon, if we keep in mind all user requirements which we surely will.

5.4 Legal

There may be a contract with the site hosting company; else our entire software platform is open source, so no other legal issues.

6. Team Capabilities

6.1. Strengths

All team members are eager to learn about the needs for this product and do field work and simultaneously learn new programming languages. A few team members know basics of website development like HTML, Javasript, CSS, Jquery, PHP and MySQL and 1 person also has basic knowledge of Android SDK. Three of our team members are ex-group leaders in previous course projects and know the importance of team work, planning and organization.

6.2. Weakness

Only few team members have previous software development experience. Therefore this is the first complete software development for many of us.