



## **Requirement Understanding and Commercial Estimates**

**For**

**Shri Balaji Exim**

## **TABLE OF CONTENTS**

*Summary*

*Requirement Overview*

*Problem Statement*

*Proposed Offering*

*Process Flow*

*Responsibility Matrix*

*Timelines*

*Budget/Cost*

*Terms and Condition*

*Others*

### **REVISION HISTORY**

| <b>Date</b>                | <b>Version Name</b>                                      | <b>Name of the Author</b>      | <b>Details</b>                       |
|----------------------------|--|--------------------------------|--------------------------------------|
| May 25 <sup>th</sup> 2016  | Conference Call  | Nitin Sharma and Bharat Achhra | Initial Requirement Gathering        |
| May 26 <sup>th</sup> 2016  | Visit to Balaji Premises                                 | Nitin Sharma                   | In-depth Understanding               |
| June 10 <sup>th</sup> 2016 | One to one Interaction on Process Understanding and Flow | Nitin Sharma and Bharat Achhra | More Inputs and deeper understanding |
| June 22 <sup>nd</sup> 2016 | Project Proposal/Estimates                               | Nitin Sharma                   | Commercials and Statement of Work    |

## **Summary**

This Project Understanding has been prepared from the inputs through conversation/email and reference sites provided by the Client along with other details which has helped create this document; however once this document is approved it supersedes any other documents provided before or after approval of this document.

Shri Balaji Exim is looking at taking services of People's Technology Resource for Development and Implementation to automate their Site Workforce, Inventory/Stock and Account entries. The system would be available on Mobile Devices and People's Technology Resource proposes to offer the said service to Shri Balaji Exim on time and material basis. People's Technology Resource would take care of the complete cycle for a standard Software Development and Support.

## **Requirement Overview**

The purpose of the system is to streamline the Sub processes within the Primary Process. The system would enable users to see the real time status of their specific areas of responsibility. The system is been primarily built for Site Supervisors who has workforce at their disposal and their attendance has to be maintained along with Stock Entries and Payment Details.

The system to be developed has 3 parts:

1. Labor or Workforce Management
2. Stock Check and Order Management aka Challan Entry
3. Finance and Accounts

## **Problem Statement**

**Workforce Management:** The current way of managing the Labor force is by entering people in a paper format. The disbursals are calculated manually which is a cumbersome act and the chances of payments been incorrect are very high.

The process would automate the complete work management that includes the payments. Since the work during tight timelines stretches to a 24 hour shift, the payments are in accordance with the shift hours a labor is at work. There are different slabs

**Stock Entry:** There are times when there is more than 1 site where Work is in Process. Sometime there is discrepancy in forecasting of the materials and additional items needs to be procured. In the current manual process, the Supervisor calls up the Godown Supervisor to check the availability. Based on the availability or non availability of material he re-orders the material either from Godown or the other site where Work is in Process.

To take care of such a scenario, the system would provide for real time information on the availability of stock either at Godown or Site. This will help in reduced time for delivery.

**Finance and Accounts:** The Application is being built keeping in mind the Supervisor roles and responsibility. When a Supervisor is assigned a Site for setting it up, he is provided with some initial cash for carrying out the work. This amount is called the opening balance. In the present scenario, the Supervisor maintains a booklet where he enters the details of the cash payments he has made during the course of work. Due to workload, he sometimes misses out on putting it in his booklet and then it skips his mind. This causes discrepancy in the Company Balance Sheet. To eliminate the risk of discrepancy, the system would have the capacity to enter information of the payments that are made on the spot. As the payments are made, the closing balance would reflect the amount left with the supervisor.

## ***Proposed Offering***

As stated above, the Solution would have 3 aspects to it and the development would have two parts to it. One will be mobile app development while the other will be back-end Admin Panel Development.

Based on our understanding, Shri Balaji Exim wants to develop an application that would take care of all the paper based activities like Labor Attendance, Stock Inventory and different challans and convert them into a seamless and paperless data entry in an application.

The data entered through the application would be stored in a back-end server and based upon meaningful data transaction procedure they will be visible to the user in his/her login.

Following items needs to be created:

1. Android Application
2. iOS Application
3. Responsive Admin Panel (Browser on Computer, Laptop or any h and-held devices)
4. Back-end Database
5. Web-services/API

There would be a back-end centralized database to store the data and responsive Admin panel. Admin panel will have different kinds of Management to control and manage data in the front-end. There is also a need to create API's in order to allow the application to communicate to the server and show the output in real time.

## ***Features of the System***

### **Mobile Application for Site Supervisor:**

1. User login
2. View Labor List
3. Add Labour Attendance
4. Item Request
5. Cash Purchase
6. User Logout

### **Mobile App for Godown User:**

1. User Login
2. Inventory List View
3. Inventory Update Input

#### 4. User Logout

#### **Web based Back-end Admin Panel**

1. Admin Login
2. Add Site Supervisor
3. Assign Site to Site supervisor
4. Assign fund to Site supervisor
5. Add Godown Supervisor
6. Assign Godown to Godown Supervisor
7. Add Godown
8. Manage Godown Inventory
9. Manage Godown Supervisor
10. Add Site
11. Manage Site Supervisor
12. View Site Labour log with different filters by Date, Department and shifts
13. Fund Management
14. Add/Upload Inventory Master list
15. Manage inventory Quantity and Availability
16. Manage Inward and Outward challan
17. Add/Edit Shift and its time slots
18. Add/Edit Shift Rate per hour
19. Manage Labour Department/Category
20. Inward/Outward challan management

### ***Process Flow***

#### **Site Supervisor**

The screen will display on the launch of the app. This screen would be displayed for 3-5 seconds and will take the user to the next screen.

Site Supervisor will be able to login by providing his email id and password as provided by the Admin. If the Site Supervisor has multiple Sites assigned by the Admin then a list of Sites will be displayed to select. The System would automatically capture the date and time based on the current time zone on the device.

Labor List would display the list of all the labors who are real ready added by the Site Supervisor. The labors who are marked as in and not yet marked as out

Site Supervisor will have the option to "Check-Out". Once this option is tapped the labor will be released and system will automatically capture the current time and his/her shift will end. System will automatically calculate the hours worked and break it into shifts and then submit the details to server to calculate the wage.

Site Supervisor will be able to Add Labor by providing the following details:

1. Full Name-Text Field
2. S/o- Text Field
3. Address-Text field
4. Photo-Captured from Camera
5. IDProof-Capture from Camera

After adding labor, Site Supervisor would have the option to “Check-In”. Once this option is tapped the labor would be in and system will automatically capture the current time and his/her shift would start.

If Supervisor needs any additional items for the site, they will to create a list of additional requirement that he needs for the site. To create the list, Site Supervisor needs to select the items from the inventory master and define the quantity.

After entering the details he/she would have an option to search. Once the search Option is tapped the app will query the server to find the Godown from where he can order the items.

From the list of the Godown, the Site Supervisor can select one and request the order. He/she will have an option to buy from the local Market in case it is not internally available or viable. Cash Parcha will display the opening balance and closing balance as the format provided in “CashParcha.pdf”. Whenever Site Supervisor spends any fund from the allocated fund, he will enter the details in the provided format and subsequently the app will calculate the Closing Balance.

### **Godown Supervisor**

Godown Supervisor would have the following flow:

There would be a launch screen that will display on the launch of the app. This screen will display for 3-5 seconds and will take the user to the next screen.

Godown Supervisor will be able to login by providing their email id and password as provided by the Admin.

If the Godown Supervisor have multiple Godowns assigned by the Admin a list of Site will be displayed to select .System will automatically capture the date and time based on the current time zone on the device.

Godown Supervisor to see all the inventory available in the Godown. He/She can update the inventory one by one.

Godown Supervisor will be able to enter the inventory that he needs to send. Once he enters the details and submits it, the inventory stock will be updated accordingly. This section will be as per the BALAJI ChallanBook.pdf

### **Back-end Admin**

Admin will have an option to login into the application. After login the Admin will see a dashboard.

The dashboard would have different management interface to control Site Supervisor Management, Godown Supervisor Management, GodownManagement, Site Management, Inventory Management, Shift and Shift Rate, Management, Labor Department Management, Inward/Outward Challan.

Using different management interface, an admin would have total control on the data.

Using Site Supervisor management, the admin can add new Site Supervisor, Assign Site to the Supervisor and allocate funds to him.

Using Godown Supervisor Management, admin can add new Godown Supervisor, Assign Godown to him.

Godown Management will help the Admin Add Godown, Manage Godown, Inventory, Manage Godown Supervisor.

Site Management will help the Admin to Add Site, Manage Site Supervisor, View Site Labour log with different filters by Date, Department and Shifts, Fund Management

Inventory Management will help the Admin to Add/Upload Inventory Master list, Manage inventory Quantity/Availability, Manage Inward and Outward challan.

Shift and Shift Rate Management would help the Admin to Add/Edit Shift and its time slots, Add/Edit Shift Rate per hour.

Labor Department Management will allow admin to add Labour Departments. This category will populate in the app to select.

Inward/Outward Challan Management will allow the admin to add the items required and the same can be printed as Inward/Outward Challan.