The document details the summary of scope solution architecture and approach for the development of Packing & Loading System for TPR. The document is based on the inputs, system study, discussions and meeting held between SATO & TPR Teams



Ver- 1.0

Techno Commercial Proposal – Packing & Loading

Revision History

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# Introduction

TPR is looking forward for Packing & Loading application. The scope of the solution is to equip users with a Packing & Loading application which can print barcode label and dispatch items.

SATO is pleased to submit this solution document for TPR requirements as per the ongoing discussion.

# Functional Scope

The scope of the software would require the development of the front-end application. The document lays down the specifications of the middleware application, its architecture and infrastructure requirements.

The entire solution consists of followings:

* Front-end for Middleware Application
* Back-end Application

### 2.1 Packing & Loading System

|  |  |  |
| --- | --- | --- |
| **Label Printing** | **Operations** | **Database** |
| * Item Master | **Item Master**   * Item master will be used to create and update items | **Item Master**   * Data will be saved in the database. |
| * User Master | **User Master**   * User master will be used to create and update users | **User Master**   * Data will be saved in the database. |
| * User Management | **User Management**   * User management will be used to give the rights to users, so that only authorize user can work on particular module. | **User Management**   * Data will be saved in the database. |
| * Packing | **Packing**   * User will select the FG Item Code and print the label for carton or pallet. | **Packing**   * Data will be saved in the database. |
| * Delivery Challan | **Delivery Challan**   * User will select or enter Sales Order No (Given by TPR) and generate the delivery challan for the same. | **Delivery Challan**   * Data will be saved in the database. |
| * Dispatch | **Dispatch**   * User will select the delivery challan and dispatch the items as per delivery challan. | **Delivery Challan**   * Data will be saved in the database. |
|  | **Reports** |  |
|  | * Customize reports will be provided |  |

## 2.2 Out of Scope

Followings activities are not in the scope of SATO, however, are important for the project development and needs to be taken care by TPR:

* Test Data Creation

## 3.0 Hardware & Software Requirements

### 3.1 Desktop Computers

The desktop application would require the computer with following specifications:-

• Intel Pentium Processor with Windows 7 operating System or above

• 4 GB RAM or above

• Dot net Framework 3.5 or Above

# Project Phases & Deliverables

SATO follows a phased application development approach wherein, the project moves in the phases as summarized below. Each phase is detailed in this section to make customer understand SATO project process. The matrix also highlights the level of involvement from customer side.

## Phase wise Roles and Responsibility

### Requirement Study

In this phase all the stake-holders form customer team, define clear project objectives, process details, necessary validations, workflows. At the end of the phase, the complete requirement is revalidated with the initial scope as given in this document. Any new requirements which were not identified or communicated during the estimation and having major impact on the project architecture or project timeline shall be managed through a Change Request and would result in a revision of estimates, timelines and cost.

|  |  |
| --- | --- |
| **Deliverables** | **Responsibility** |
| Detailed Project Plan | SATO / TPR |
| Revalidation of Project Scope | SATO / TPR |
| Reporting & Escalation | SATO / TPR |
| Scope Document | SATO |
| Document Signoff | TPR |

### System Design

In this phase, a detailed System Requirement Document is prepared which contains database tables, user interfaces (screens, reports etc.), necessary process flows, Data Flow Diagrams & flow charts for processes.

|  |  |
| --- | --- |
| **Deliverables** | **Responsibility** |
| Software Requirement Specification Document | SATO |
| Interface Requirement | SATO / TPR |
| Test Plan | SATO / TPR |
| Document Signoff | TPR |

### Development

Once the customer has signed off SRS document, the development is started at SATO development center. This phase has less customer involvement and mostly deals with building application modules, performing unit level testing. Customer has to provide test data during this phase so that the code is test before it’s moved to next phase.

|  |  |
| --- | --- |
| **Deliverables** | **Responsibility** |
| System Codes | SATO |
| Test Data | TPR |
| Code Testing and Unit Testing | SATO |

### User Acceptance Testing

The purpose of this phase is to involve the End Users of the Warehousing Solution to test the Usability of the Application. End Users will create the Test Data and Business Scenarios which will be tested using Mobile Handheld.

|  |  |
| --- | --- |
| **Deliverables** | **Responsibility** |
| Test Cases | TPR |
| UAT | TPR / SATO |
| Business Scenario Testing | TPR / SATO |
| UAT Signoff | TPR |
| Release for Go-Live | TPR / SATO |
| Go-Live Plan | SATO / TPR |

### Go-Live

Once the UAT has been signed off, the application shall be make ready for go-live environment. No new requirements shall be entertained after UAT completion and any new requirement has to be parked by customer

|  |  |
| --- | --- |
| **Deliverables** | **Responsibility** |
| Software Installation | SATO |
| Data Migration / creation | SATO / TPR |
| Train the trainer | SATO |
| End user trainings | TPR |
| Change Management | TPR |
| Project Signoff | TPR |

## Change Management

All the change management during different phases of the project shall be handled as per the following proposed methodology. It’s advised that no project team member insist / enforce the changes without the proper methodology.

|  |  |
| --- | --- |
| **Activity** | **Responsibility** |
| New Requirement | TPR |
| Approval of Requirement | TPR Project Manager |
| Effort Estimation & Impact Analysis | SATO Project Manager / TL |
| Estimation approval | TPR Project Manager |
| Release of Order | TPR |
| Implementation of Change | SATO |

# Project Guidelines and Assumption

## General

1. A Steering Committee shall be constructed for the execution of the project jointly between SATO and Customer team.
2. SATO & Customer shall depute a single point of contact (SPOC) for the duration of entire project.
3. The Customers’ SPOC shall be responsible for arranging the involvement of relevant stake holders, process owners and technical members during the engagement of the project. The SPOC shall be responsible for the sign off any document and change management.
4. SATO will follow its internal standards for the life cycle of the project. In case Customer wishes to use internal set of standards, they should be conveyed and explained to SATO team before commencement of the project.
5. All the communication during the project shall be through either Email or written/printed documents.
6. SATO would need two week for resource allocation after release of purchase order.
7. The ownership of Change Management/ Business Process Changes which are required to be done for the project shall be with Customer.
8. System Testing Plan and the Acceptance Criteria would have to be defined jointly by Customer and SATO during the project scoping.
9. Customer should provide necessary authorization and access to the systems as required by SATO during the engagement.
10. Customer’s key users and management will be available on a timely basis to participate in completion of the SRS.
11. The approach is based on the information available to SATO and its understanding of the requirement. Any change in the information or the perceived scope will require change to this approach.
12. Customer would ensure correct representation from all business groups in SRS (Software Requirement Specification) discussions so that all requirements and concerns can be addressed correctly.
13. Customer’s key users and management will be available on a timely basis to participate in completion of the Business Requirement Document.
14. SATO resources are trained to follow a standard project life cycle. SATO follow policy of no application change without documentation. In no event, Customer shall insist any SATO on-site developer to modify / change the application (major or minor) without proper documentation through change management process. Encouragement of such modifications would result in poor quality code and non-tested modules.
15. All milestone deliverables will be deemed acceptable within a period of one week (5 working days) from submission of deliverable in case of no response. Any other decision / approval / signoffs will be deemed acceptable within period of 3 working days from submission in case of no response.
16. SATO will have full rights to change the members of their project team. However, SATO will give prior intimation to Customer and will ensure required continuity and skills profile.
17. Any data updating or data cleanup in legacy systems is wholly the responsibility of Customer.
18. SATO & Customer or any associate will not offer employment directly or otherwise to each other’s staff for a period of one year from completion of this project.
19. Any Software, Hardware or additional licenses that need to be purchased for this engagement would be Customer’s responsibility.
20. Customer will provide necessary and adequate infrastructure to SATO Onsite staff including office space, telephone, photocopying, fax, PC resources, unlimited access to internet, computer resources, software tools essential to the implementation of the project, to enable SATO to fulfill its commitment for the assignment (none of these facilities will be used for personal work). This will be applicable for each SATO onsite consultant associated with the project.
21. SATO will provide training only to the core team at the implementation site, end user training will be taken care by the core team members of Customer Team.

## Change Management

1. The estimation is based on the scope information provided by customer. In case any major process is identified during the detailed SRS phase, the same shall be treated as a new business requirement and would result in a revision of estimates, timelines and cost.
2. Any change to the agreed scope at the end of the SRS Phase will have to be addressed by a Change Management process and would result in a revision of estimates , timelines and cost.
3. Any change after the commencement of the development has to be parked till the development is complete and then all the requirements shall be taken care after proper documentation. All such changes would result in the revision of estimates, timelines and cost. In the event a change is very critical and has to be implemented during development itself, an intermediate Change Request document shall be prepared and approved by all stake holders before handed over to development team.
4. Any Customer specific application development compliance shall be extra and would result in revision of estimates, timelines and cost.
5. SATO will endeavor the availability of their staff as per the project plan for this assignment. In case of any difficulty SATO will inform about the non-availability of the particular person in advance.
6. Customer will endeavor the availability of their staff as per the project plan for this assignment. In case of any difficulty client will inform about the non-availability of the particular person in advance. The Steering Committee will evaluate the impact of any core team replacement on the project schedule and cost.
7. SATO will provide training only to the core team at the implementation site, end user training will be taken care by the core team members of Customer Team.

# Operating Principles

SATO agrees to the spirit of the operating principles defined under scope of work and would like to make the following observations:

1. **Resource Deployment:** The resource deployment has been done keeping in mind the starting and ending of different functionality under different phases and other integration points. This is to ensure that optimal resource is deployed on the project.
2. **Documentation:** It is expected that prior to commencement of the project, Customers’ team shall compile and document all the business processes. This shall significantly reduce the time of design document by SATO.
3. **Training:** The cost for the training has been considered on the basis that the core customer team shall be trained by SATO which would further train end-user. In case extensive end-user training has to be provided, the same shall be on the basis of number of users and the total training requirements.
4. **Warranty & Post Go-Live support:** SATO team will provide 3 months post go-live support with one resource. Any changes during the warranty period shall be as per the effort requirements.

# Critical Success Factors

While the overall responsibility for the Project rests with SATO, the following factors are identified as those, which TPR will strictly follow and perform in order that the implementation is successful and individual milestones as per the Project plan are delivered:

* Clear documentation of all processes to be included for implementation as per scope defined, with standardization and uniformity across different units. The initial document shall be compiled by TPR team based on the existing systems, which shall be used as the basis for further implementation. This shall be completed prior to the commencement date of this project.
* Clear definition of Project deliverables and adherence to Project Timelines, Scope and Work Breakdown Structures SATO will provide full time project team members from both the user department and the IT Department as per the Organization Structure outlined in the Project Organization. The same shall be finalized and approved by the SATOs’ Project Manager and TPR Project Manager prior to the start of the Project.
* TPR will provide for suitable hardware, operating system, communication software and all software products to enable effective configuration of Warehouse Management Solution software, as per the mutually agreed schedules. TPR will also provide for a suitable office infrastructure for the project team. All such infrastructure facilities will be provided well in time for use in the project effectively.
* TPR agrees to restrict the software modifications to the minimum. Such modifications are to be approved by both the SATO and TPR Project Managers in consultation with the Steering Committee.
* TPR is responsible to provide sample test data as per the schedules.
* The TPR Project Manager will give final approval and sign off on all deliverables as and when required.
* TPR agrees for a max 2 days of response times from the time of registering of the input with the concerned personnel.

# Roles & Responsibilities

In order to ensure the proper project progress the following role and responsibilities shall be put in place both by SATO & TPR:

The Steering Committee makes decisions related to the project that cannot be resolved by the project teams. The Steering Committee would also be responsible for the following:

* Reviewing the progress of the project as per the plan
* Resolving cross-functional issues and policy related issues

## SATO team

1. Project Champion
2. Project Manager & Team Leader
3. Developers
4. Testers

## TPR team

1. Project Manager
2. Functional process Owners

# Commercials

On the basis of effort estimation, following is the cost for the project as per the requirement stated in the document. This costing is worked on the basis that there are no delays in the information availability from the customer:-

## Effort Estimate

The effort estimate is calculate on the basis of following resources deployed for the project

|  |  |
| --- | --- |
| **Resource Type** | **Max Resources** |
| Project Manager/Analyst | 01 |
| Project Lead | 01 |
| Developers | 02 |
| Tester | 01 |
| Technical Document Writer | 01 |

## Cost Breakup

The cost for the development & implementation is as per the following breakup:-

### Label printing application

#### Development Cost

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Item Code** | **Description** | **Cost** |
| 1 | SW- Packing & Loading System TPR-STD | SATO Middleware Packing & Loading application (Including of SRS Design, Application Development, Testing, UAT & Documentation & Implementation) |  |

\* Go-Live is for one site

Note: Above prices do not include any taxes and same shall be extra as per actuals.

#### Hardware Cost

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Item Code** | **Description** | **Quantity** | **Unit Price** | **Total Cost(INR)** |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |

\* Go-Live is for one Line

## Schedule of Payments

### Software

|  |  |
| --- | --- |
| **Phase wise milestone** | **Percentage of overall value** |
| Advance with Purchase Order | 40% |
| Completion of Design Phase (SRS) | 20% |
| Completion of Development & UAT | 20% |
| Completion of Go-Live \* | 20% |
| **TOTAL** | **100%** |

### Hardware

|  |  |
| --- | --- |
| **Phase wise milestone** | **Percentage of overall value** |
| Advance with Purchase Order | 100% |
| **TOTAL** | **100%** |

### Implementation

Payment for Implementation has to be made after completion of each individual site.

## Terms & Conditions

1. Any Additional Changes other than standard format will cost you extra
2. All costs for out of office travel, boarding and lodging would be extra as per actual
3. All PC, LAN and WIFI network facility provided by TPR
4. The prices quoted are for Ex. works, SATO Warehouse at Panvel Maharashtra. Freight charges extra applicable
5. All applicable Taxes will be charged extra
6. The prices are Exclusive of all other applicable taxes & Octroi Charges (wherever Applicable)
7. Delivery period to be mutually discussed price validity is 30 days
8. Payment 100 % is in advance while placing the PO
9. Warranty is 1 year from the date of invoice for hardware.
10. Warranty is 3 month from the date of project / software sign off.
11. No warranty is provided on cables

\*\*\*\*\*END OF DOCUMENT\*\*\*\*\*\*