**1. Overview**

ABC Company used to manage their sales, product, and inventory management manually. They have warehouse in Gazipur, sales center in Bogra and Dhaka and main office in Dhaka. That was costly for them in both timing and man power for document transmission and tracking. So they want to make their system centralized and automated. That’s why they are looking for online solution. So the main motivation of the project is to provide an online solution and hence increase our work experience and portfolio. The estimated project cost is about 3,00,000 taka. This project will take about 6 months to complete.

**2. Goals and Scope**

**2.1 Project goals**

| **Project Goal** | **Priority** | **Comment/Description/Reference** |
| --- | --- | --- |
| **Functional Goals:** | 2 |  |
| Making online software |  | This feature will allow to access the system from any device and from anywhere in the world. |
| Sales management |  | They sale in different corners in the country, so sales management is very important for them. In sales management they need to keep track on record no, sales date customer, sales person, invoice no, chalan no, chalan date, product, sales center quantity etc. |
| Inventory management |  | When they get product from the suppliers from different countries they keep them in their two warehouses. Number of warehouses can be increased in the future. So they need the inventory management to manage their product. In Inventory management they need to keep track on Product name, quantity in pack, sales center, physical stock entry, date. |
| Collection management |  | Sometimes when they sale products, the payment remains due. As they need to collect them so they need collection management. They need to keep track on date, customer name, sales person, amount, payment date, payment method, check no, check bank. |
| Product management |  | They need this product management to keep track of product of different ranges. They need to keep track on product name, pack size, supplier. |
| Supplier management |  | They have suppliers in different countries so they need to keep track of them. They need to keep track on supplier name, supplier country, contact, supplier email. |
| Customer management |  | They need to keep track of the customer to whom they sale their products. They need to keep track on customer name, contact, address, sales person, customer type and opening due. |
| **Business Goals:** |  |  |
| Cost effectiveness |  | They will need less man power and hard copy resources like paper, pen etc. |
| Time effectiveness |  | They will need less time of managing the business as they will not use manual process. Manual bookkeeping needs more time then automated system. |
| Accessibility |  | They can keep track of their progress of business from any part of the world |
| **Quality Goals:** | 2 |  |
| Error free software |  | Software should not have any major bugs/defects |
| User friendliness |  | Software should be user friendly so that user can easily access the process. |
| Ensuring high performance |  | Page loading of the software should be faster. Database queries should be faster by implementing query caching. |
| Precise reporting |  | There should not be any bug while generating a report. |
| **Constraints:** |  |  |
| Working environmental |  | Sudden resignation of team member, poor communication from client end, less skill implementation of team members, poor understanding of requirement from client end. |
| appl. specific standards |  | Schedule failure, funding problem, sudden addition in requirement, hardware damage. |
| national standards |  | Political unrest. |

**2.2 Project scope**

**2.2.1 Included**

* Softcopy of software installed in live server
* User manual CD
* User manual document
* Software requirement analysis document

**2.2.2 Excluded**

* Training of the end-users
* Installation of the software

**3. Organization**

The entire project will be handled by our development team. We have project manager, system analyst, developer, graphics designer, and tester. The server will be provided by third party hosting provider like godaddy.com or hostgetter.com.

## 3.1 Organizational Boundaries and Interfaces

The development part will be done by our company .For requirement analysis and acceptance testing ABC Company will work with us. Project manager will design the system with requirement analyst. Developers will develop according to the design, then tester will test the system.

**3.1.1 Resource owner**

Resource owner is our company.

**3.1.2 Receiver**

Receiver is ABC Company.

**3.1.3 Supplier**

We don’t have any suppliers as we will build everything in house from the scratch.

**3.1.4 Cross Function**

| **Function** | **Person: Contact** | **Responsibility/Comment** |
| --- | --- | --- |
| Project  Mgmt. | Md. A Rahman | Managing the whole project |
| Development | Md B Rahman, Md C Rahman, Md D Rahman | Developing all the functionalities of the software according to requirements. |
| Quality | Md E Rahman | Managing the quality of the software ensuring that requirements are correctly fulfilled. |
| Service | Md. F Rahman | Managing after sales service |
| Training | Md. G Rahman | Managing the training of the end-user. |

**3.1.5 Other Project Dependency**

We don’t have dependencies on other project

**3.2 Project Organization**

**3.2.1 Project Manager**

| **Role** | **Organization: Name** |
| --- | --- |
| Project Manager | Our company XYZ LTD |
| Technical Project Mgr. | Our company XYZ LTD |

**3.2.2** **Project-internal Functions**

| **Function** | **Organization: Name** | **Person : Name** |
| --- | --- | --- |
| Quality Assurance | Our company XYZ LTD | Md E Rahman |
| System Test Lead | Our company XYZ LTD | Md H Rahman |
| Validation Lead | Our company XYZ LTD | Md E Rahman |
| Configuration Mgmt. | Our company XYZ LTD | Md B Rahman |
| Change Mgmt. | Our company XYZ LTD | Md.A Rahman |

### 3.2.3 Project Team

| **Organization: Name** | **Designation :Person Name** | **Availability** |
| --- | --- | --- |
| XYZ LTD | Project Manager: Md. A Rahman | Whole project |
| XYZ LTD | Developer: Md B Rahman,Md C Rahman,Md D Rahman | Whole project |
| XYZ LTD | Tester : Md E Rahman | Whole project |
| XYZ LTD | System Analyst : Md H Rahman | Whole project |

### 3.2.4 Steering Committee

| **Organization** | **Role** | **Name** |
| --- | --- | --- |
| ABC Company | Management body | Md X Rahman |
| ABC Company | Correspondent | Md Y Rahman |
| XYZ Company | Management body | Md.A Rahman |
| XYZ Company | System analyst | Md H Rahman |
| XYZ Company | Development lead | Md B Rahman |

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# 4. Schedule and Budget

## 4.1 Schedule, Milestones and Work Breakdown Structure

## 

|  |  |  |
| --- | --- | --- |
| **Milestones** | **Description** | **Planned Date** |
| M0 | Start Project | 1-11-2014 |
|  | Requirement analysis documentation | 1-11-2014 to 1-12-2014 |
| M1 | Start planning | 2-12-2014 |
|  | After requirement analysis making a plan for overall project by assigning tasks to related team members | 2-12-2014 to 4-12-2014 |
| M2 | Start execution | 5-12-2014 |
|  | Design documentation | 5-12-2014 to 5-1-2015 |
| M3 | Confirm execution | 6-1-2015 |
|  | Front end design finalization | 6-1-2015 to 26-1-2015 |
|  | Back end programming with database design | 27-1-2015 to 27-3-2015 |
|  | Testing and bug fixing | 28-3-2015 to 18-4-2015 |
| M4 | Release product | 20-4-2015 |
|  | Training | 22-4-2015 to 26-4-2015 |
| M5 | Close project | 30-4-2015 |

**4.2 Budget**

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Work** | **Man hour** | **Cost(Taka)** |
| Human Resources (internal) | Requirement analysis | 26\*8\*2=416 | 416\*500=2,08,000 |
|  | Design | 26\*8\*1=208 | 208\*500=1,04,000 |
|  | Front end design | 18\*8\*1=144 | 144\*500=72,000 |
|  | Back end programming with database design | 52\*8\*3=1248 | 1248\*500=6,24,000 |
|  | Testing and bug fixing | 26\*8\*2=416 | 416\*500=2,08,000 |
| Equipment & Tools |  |  | 50,000 |
| Premises |  |  | 70,000 |
| Training | Training | 26\*8\*2=416 | 416\*500=2,08,000 |
| Review activities | Review |  | 10,000 |
| Total |  |  | 15,54,000 |

**4.3 Process model**

We used water fall process model in our project

**4.4 Development Environment**

| **Item** | **Applied for** |
| --- | --- |
| **Methods** |  |
| Use Case | Requirements capturing |
| **Tools** |  |
| Rational Rose | Design |
| GUI | Testing |
| **Languages** |  |
| UML | Design |
| Java | Web interface |
| C++ | Web interface |

**5. Risk Management**

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk** | **Risk level** | **Responsible person** | **Probable solution** |
| Schedule failure | High | Project manager | Increasing man power to adjust time or |
| Team member irregularity | Medium | Development team lead and member | Giving non-financial motivation |
| Sudden resignation of team member | High | That team member | Recruiting new member as soon as possible from the pipe line. |
| Funding problem | Medium | Functional manager | Applying IT financial loan from Govt. |
| Sudden addition in requirement | Medium | Requirement analyst |  |
| Poor communication from client end | High | Client | Acknowledge the top management of the client end |
| Hardware damage | Low | None |  |
| Less skill implementation of team members | Medium | Developer,  Project  manager | Project manager should motivate the members to implement their proper skill. |
| Poor understanding of requirement from client end | high | Client | Acknowledge the top management of the client end |

**6. Change Management**

|  |  |
| --- | --- |
| **Change management activities** | **Performed by** |
| Submit change request describing the  proposed change and indicating the  importance to the user | Requirement analyst |
| Review and evaluate the requested  change request | Project manager |
| Estimate the required work effort and the  impact of the change to the project  schedule, cost, and resource availability | Project manager |
| Approve, defer or deny the change  request | Top management and Requirement analyst |
| Update the project plan for authorized  change requests | Project manager |
| Make approved changes and document  resolution | Developer |
| Place approved and completed changes  under CM | Project manager |
| Close change request | Project manager |

**7. Communication and Reporting**

| **Type of Communication** | **Method / Tool** | **Frequency/Schedule** | **Information** | **Participants / Responsibilities** |
| --- | --- | --- | --- | --- |
| **Internal Communication:** | | | | |
| Project Meetings | Teleconference | Weekly and on event | Project status, problems, risks, changed requirements | Project Mgr Project Team |
| Sharing of project data | Shared Project Server | When available | All project documentation and reports | Project Mgr(s)  Project Team Members |
|  |  |  |  |  |
| Milestone Meetings | Teleconference | Before milestones | Project status (progress) | Project Mgr |
| Final Project Meeting | Teleconference | M6 | Wrap-up  Experiences | Project Mgr Project Team |
| **External Communication and Reporting:** | | | | |
| Project Report | Excel sheet | Monthly | Project status - progress - forecast - risks | Project Manager |
| SteCo Meetings | Teleconference | Monthly |  | Project Manager, SteCo |

**8. Delivery Plan**

**8.1** **Deliverables and Receivers**

| **ID** | **Deliverable** | **Receiver** |
| --- | --- | --- |
| D1 | Softcopy of software installed in live server | ABC company |
| D2 | User manual CD | ABC company |
| D3 | User manual document | ABC company |
| D4 | Software requirement analysis document | ABC company |

# 9. Quality Assurance

Test plan and test cases were done properly. Test cases were 95% successful.

**10.** **Abbreviations and Definitions**

ID Identification, Identifier

SteCo Steering Committee

V&V Verification and Validation

Govt. Government

CM Configuration Management

**11. Reference**

Project Plan wo. QA, Transition doc written by Prof . B. Meyer & Prof. P.Kolb