**1. Document 1- Business case document**

Answer:

A. Why is this project initiated?

Raamaya Technologies, an IT reseller and system integrator for government organizations, has been handling its processes manually. The company participates in bids, tenders, and takes orders from government entities. The manual system is inefficient and with error chancing, causing delays, inaccurate data, and limited insight into business performance. With an increasing number of bids and government contracts, the company faces challenges in scaling operations, improving efficiency, and maintaining competitive advantage.

The decision to implement SAP ERP software is to streamline processes, increase bid participation, generate revenue, and improve decision-making by integrating business functions into one centralised system.

B. What are the current problems?

* Improper Tender Management Process
* Inefficient Document Management
* Difficulty in Tracking and Managing Compliance Requirements.
* Lack of Centralized Project Management
* Inability to Monitor Real-Time Performance and Metrics
* Difficulty in Collaboration and Communication Across Teams
* Slow Response Time to Tender Opportunities
* Challenges in Managing OEM, distributor & Vendor Relationships.

C. With this project how many problems could be solved?

* Automated Processes
* Centralized System
* Accurate Data
* Improved Reporting
* Scalability
* Compliance Management
* Risk Mitigation
* Streamline with OEM, distributor, vendors
* Streamline with procurement & Financials

D. What are the resources required?

* Human resources: Project Manager, Business analyst, SAP consultant, IT Team, Sales Team, Procurement team, SAP Trainer.
* Technical resources: SAP ERP Software, Server, Storage, laptop, desktop, integration tools, security & backup systems
* Financial resources: Budget for SAP software procurement and customization as per government procurement process.

E. How much organizational change is required to adopt this technology?

* Process re-engineering: Raamaya Technologies will need to redefine and optimise business process to align with SAP’s best practice.
* Change management: Employees will need to be trained to use the new ERP system, and a clear communication plan will be necessary to ensure smooth adoption.
* Resistance to change: There may be resistance to change, so proper training, support, and leadership will be required to facilitate the transition.

F. Time frame to recover ROI?

The time frame to recover ROI from the SAP implementation may take 2-3 years. By improving bid management and project tracking, Raamaya can potentially win more contracts, thus increasing revenue.

G. How to identify Stakeholders?

A stakeholder is a person or group of people or organization with an assigned interest in the decision making and activities of business organisation, or project. They can directly or indirectly influence the activities of project of an organization. Their support is often crucial for the success of a business project.

A stakeholder analysis is a process of identifying people before the project begins; grouping them according to their levels of participation, interest, and influence in the project; and determining how best to involve and communicate each of these stakeholder groups throughout.

(i) Internal Stakeholders:

* Executive Leadership (MD)
* Sales team
* Finance team
* Procurement team
* Project Managers
* Business Analyst
* IT Team
* End Users (Employees)

(ii) External Stakeholders:

* SAP consultant
* SAP Vendors

**2. Document 2: BA Approach Strategy**

A. As a Business Analyst, what are the steps that you would need to follow to complete a project?

Prepare Project Preparation and Planning:-

* Define Project Objectives: Align the project with Raamaya Technologies' strategic goals to improve operational efficiency, streamline processes, and achieve scalability in handling government contracts.
* Set up a BA Plan: Define the scope, roles, responsibilities, and deliverables for the business analysis activities, including timelines and project milestones

B. What Elicitation techniques to apply?

* Interviews: Conduct one-on-one interviews with key stakeholders to understand their pain points, needs, and expectations.
* Workshops: Organize collaborative workshops where stakeholders can come together to define and prioritize requirements.
* Surveys/Questionnaires: Use surveys to gather feedback from a larger group of users, especially regarding current processes.
* Brainstorming: The goal of your brainstorming session would be to gather requirements, understand the current challenges, and ensure the successful implementation of the Sales ERP software (SAP).
* Document Analysis: Review existing documentation on current processes, bids/tender management, and any existing ERP or manual systems.
* Observation: Observe the current business processes in action to understand inefficiencies, bottlenecks, or gaps.

C. How to do stakeholder analysis RACI/ILS?

(i) Internal Stakeholders:

* Executive Leadership (MD)
* Sales Team
* Finance team
* Project Managers
* Business Analyst
* IT Team
* End Users (Employees)

(ii) External Stakeholders:

* SAP consultant
* SAP Vendors & Suppliers

I have used RACI elicitation technique to clarify the roles of each stakeholder in the project.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Task** | **PM** | **BA** | **IT** | **Sales** | **Procurement** | **Finance** | **End Users** | **SAP Consultants** | **MD** |
| Needs Assessment & Requirements Gathering | A | R | C | C | C | C | I | C | I |
| Vendor Selection/ERP Software Configuration | A | C | R | C | C | C | I | R | I |
| System design - Customizing SAP as per Govt. procurement system | C | R | A | C | C | C | I | R | I |
| Data Migration (Manual to SAP) | R | C | A | I | C | C | I | R | I |
| UAT Testing | C | C | A | I | C | C | I | R | I |
| Go-Live | A | C | R | C | C | C | R | R | I |
| Maintenance | A | R | C | C | C | R | I | C | I |

D. What documents to Write?

(i) Business Requirements Document (BRD): Define high-level business objectives, project scope, and functional/non-functional requirements. Ensure alignment with Raamaya’s business goals.

(ii) Functional Requirements Document (FRD): Detail the functional and technical specifications, mapping out how SAP ERP will meet business needs (e.g., sales, procurement, finance).

(iii) Data Migration Plan: Document the data migration strategy, including data cleansing, mapping, and testing for smooth migration from legacy systems to SAP.

(iv) Test Plans and Test Cases: Develop test cases for User Acceptance Testing (UAT) to ensure that the system works as expected.

(v) Change Management Plan: Outline strategies to manage organizational change.

(E) What process to follow to sign off & approval on the documents?

* Document Review: Share documents (e.g., BRD, FRD) with stakeholders for feedback and revisions.
* Approval Workflow: Use an approval workflow to get formal sign-off from key stakeholders (e.g., department heads, project sponsors).
* Formal Sign-off: Once all documents are reviewed and approved, obtain formal sign-off on these documents.

(F) What communication channels to establish and implement?

* Face to face meeting
* Emails communication
* Zoom/Teams meeting
* Daily stand up meeting
* Project Management tool: Tool like JIRA used for tracking updates.

(G) How to handle change request?

* Formal Change Request Form: Define a clear process for stakeholders to submit change requests, including a Change Request Form with a description, reason, and impact analysis.
* Impact Assessment: Evaluate the impact of changes on the scope, timeline, budget, and resources before approval.
* Approval Process: Change requests should be reviewed by the project directing committee and approved based on their impact and alignment with project goals.
* Documentation Updates: Ensure that any approved changes are reflected in updated documents like BRD, FRD, Test Cases.

(H) How to update the progress of the project to the Stakeholders?

* Weekly Status Reports: Provide detailed updates on progress, milestones, risks, and issues. Share these via email or project management tools.
* Regular Stakeholder Meetings: Schedule monthly or bi-weekly meetings with key stakeholders (e.g., project steering committee) to review progress and address concerns.
* Visualization Tools: Use a project management tool like Microsoft Project, Jira to display real-time project progress via visual dashboards.

(I) How to take signoff on the UAT- Client Project Acceptance Form)

* UAT Planning: Develop a UAT plan that includes testing scenarios, test cases, and a timeline.
* UAT Execution: Facilitate UAT sessions with end users, ensuring they validate the system against their daily tasks.
* UAT Issue Log: Track any issues identified during UAT, ensuring they are addressed before final approval.
* Client Project Acceptance Form: Once UAT is complete and all issues are resolved, present the client with a Project Acceptance Form to sign off, confirming that the system is ready for production.
* Post-UAT Review: Once UAT is completed and signed off, review lessons learned and close any remaining open issues.

**3. Functional specifications:-**

|  |  |
| --- | --- |
| Project name | Raamaya SAP ERP Implementation |
| Customer name | Raamaya Technologies |
| Project version | Version 1.0 |
| Project sponsor | Mr. Ashit Khandelwal |
| Project manager | Mr. Amit Srivastava |
| Project Initiation date | 03-03-2025 |

Functional requirement:-

|  |  |  |  |
| --- | --- | --- | --- |
| Req. ID | Req. Name | Req. Description | Priority |
| FR0001 | Enquiry Management | System should record the enquiry, tracking status and reminder for follow up. | 10 |
| FR0002 | Quotation Management | System should generate quotation, quotation approval, quotation expiry & notifications, conversion to sales order. | 10 |
| FR0003 | Sales Order Management | System should create sales order, order confirmation, internal approvals. | 10 |
| FR0004 | Procurement Management | System should generate purchase order, vendor selection, PO approval, order tracking & delivery management. | 10 |
| FR0005 | Billing Management | Invoice generation, invoice approval. Tax calculations | 10 |
| FR0006 | Delivery Management | Delivery scheduling, tracking & monitoring, delivery confirmation | 10 |
| FR0007 | Report Generation | System should be able to generate detailed report of lead, sales, finance, purchase, payment, delivery. | 8 |
| FR0008 | Collaboration with Other Departments | System should display required information of other department. | 8 |
| FR0009 | OEM Management | OEM database, OEM partnership management, notify about renewal of partnership. | 8 |
| FR0010 | Distributor management | Distributor database, Registration with distributor, Distributor order creation. | 8 |
| FR0011 | Vendor management | Vendor data base, vendor performance tracking, vendor purchase order creation. | 8 |
| FR0012 | Customer Relationship Management | Customer data management, customer internal tracking, CRM reporting, sales pipeline management | 10 |
| FR0013 | Payment management | Payment tracking, payment terms, reminder notifications | 9 |
| FR0014 | Installation & service management | Service order creation, resource scheduling, Service Level agreement, post installation report | 9 |

**4. Requirement Traceability Matrix:-**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Req. ID | Req. name | Req. description | Design | D1 | T1 | D2 | T2 | D3 | T3 | D4 | T4 | UAT |
| REQ-001 | Enquiry Management | System should record the enquiry, tracking status and reminder for follow up. | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| REQ-002 | Quotation Management | Quotation creation, quotation approval, quotation expiry & notifications, conversion to sales order. | Yes | Yes | Yes | Yes | Yes | Yes | Yes | WIP | No | No |
| REQ-003 | Sales Order Management | SO creation, order confirmation, order modification, internal approvals. | Yes | Yes | Yes | Yes | WIP | No | No | No | No | No |
| REQ-004 | Procurement Management | PO creation, vendor selection, PO approval, order tracking & delivery management. | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No |
| REQ-005 | Billing Management | Invoice generation, invoice approval. Tax calculations | Yes | Yes | Yes | Yes | Yes | WIP | No | No | No | No |
| REQ-006 | Delivery Management | Delivery scheduling, tracking & monitoring, delivery confirmation | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No |
| REQ-007 | Report Generation | System should be able to generate detailed report of lead, sales, finance, purchase, payment, delivery. | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | WIP | No |
| REQ-008 | Collaboration with Other Departments | System should display required information of other department. | Yes | Yes | Yes | WIP | No | No | No | No | No | No |
| REQ-009 | OEM Management | OEM database, OEM partnership management, notify about renewal of partnership. | Yes | WIP | No | No | No | No | No | No | No | No |
| REQ-010 | Distributor management | Distributor database, Registration with distributor, Distributor order creation. | Yes | WIP | No | No | No | No | No | No | No | No |
| REQ-011 | Vendor management | Vendor data base, vendor performance tracking, vendor purchase order creation. | Yes | WIP | No | No | No | No | No | No | No | No |
| REQ-012 | Customer Relationship Management | Customer data management, customer internal tracking, CRM reporting, sales pipeline management | Yes | Yes | Yes | Yes | Yes | Yes | WIP | No | No | No |
| REQ-013 | Payment management | Payment tracking, payment terms, reminder notifications | Yes | Yes | No | No | No | No | No | No | No | No |
| REQ-014 | Installation & service management | Service order creation, resource scheduling, Service Level agreement, post installation report | Yes | WIP | No | No | No | No | No | No | No | No |

**5. Document 5- BRD Template**

Project Name: Raamaya SAP ERP Implementation

Project ID: RT-SAP-ERP-2025

Version ID: Version 1.0

Author: Komal Ajit Chauhan – Business Analyst

1. Document revisions: -

|  |  |  |
| --- | --- | --- |
| Date | Version number | Document changes |
| February 24, 2025 | 1.0 | Initial draft of functional requirements for CRM and report generation. |
| February 25, 2025 | 1.1 | Added changes based on stakeholder feedback and initial review. |
| February 28, 2025 | 2.0 | Final version of BRD after review and approval from all departments. |
| February 28, 2025 | 2.1 | Updated user permissions section based on security requirements. |

1. Approvals:-

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Role | Name | Title | Signature | Date |
| Project Sponsor | Mr. Ashit Khandelwal | Managing Director | Sign on final proposal & Client Acceptance Form | February 24, 2025 |
| Project Manager | Mr. Amit Srivastava | Project Manager | Sign on project mgt. perspective details. | February 25, 2025 |
| System Architect | Mr. Nikhil Pranjale | Senior System Architect | Sign on architecture of the solution | February 25, 2025 |
| Development lead | Mr. Chandra | Development Team Lead | Sign on technical aspects related to development. | February 26, 2025 |
| IT Support | Mr. Azim Tamboli | IT Head | Sign on technical feasibility document | February 27, 2025 |
| Quality Assurance | Mr. Sachin Deshpande | QA Head | Ensures quality standards are met in the proposed solution. | February 28, 2025 |

1. RASCI Chart :-

Below are the RASCI Chart for IT Side & Client Side in production of BRD.

IT Side (Project Stakeholder)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | R | A | S | C | I |
| Mr. Amit Srivastava | Project Manager |  |  |  |  |  |
| Ms. Komal Chauhan | Business Analyst |  |  |  |  |  |
| Mr. Nikhil Pranjale | System Architect |  |  |  |  |  |
| Mr. Azim Tamboli | IT Support |  |  |  |  |  |
| Mr. Gorakh Gaikwad | Database Administrator |  |  |  |  |  |
| Mr. Sachin Deshpande | Quality Assurance |  |  |  |  |  |

Client Side (Business Stakeholder)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | R | A | S | C | I |
| Mr. Ashit Khandelwal | Project Sponsor |  |  |  |  |  |
| Mr. Amit Mundalik | Sales Director |  |  |  |  |  |
| Ms. Nidhi Yadav | Procurement head |  |  |  |  |  |
| Mr. Sameer Nivangune | Finance Manager |  |  |  |  |  |
| Mr. Raj Pawar | Operation Head |  |  |  |  |  |

1. Introduction:-

4.1 Business Goal:-

(i) Organizational goal:

* **Increase Operational Efficiency:** Automating manual processes with SAP Sales ERP will improve workflow efficiency, reduce administrative time, and increase productivity.
* **Improve Sales Performance**: The goal is to streamline the sales process, enhance decision-making, and improve sales conversion rates by leveraging real-time data and integrated systems.
* **Enhance Customer Satisfaction**: A more responsive and efficient system will improve order processing, invoicing, and customer communication, leading to better customer retention and satisfaction.
* **Ensure Compliance and Transparency**: Implementing SAP will enable better reporting and auditing capabilities, ensuring the business meets government regulatory requirements and provides transparency.
* **Optimize Procurement**: The system will help manage procurement processes more efficiently, minimizing stockouts, reducing excess stock, and ensuring timely deliveries.
* **Enable Scalable Growth**: SAP ERP will provide a foundation for the company’s expansion by supporting larger data volumes, more clients, and increased transactions.

(ii) Organization need:

* **Centralized Data Management**: Raamaya needs a unified system to consolidate business data, ensuring efficient decision-making and reporting without relying on disconnected systems.
* **Advanced Reporting and Analytics**: A robust reporting system is required to provide insights into sales, inventory, and customer behavior, which helps in making informed business decisions.
* **Enhanced Collaboration Across Departments**: The organization needs better collaboration between departments through an integrated system, enabling efficient communication and sharing of information.
* **Reduction of Manual Errors**: SAP will minimize human errors in processes like pricing, order entry, and inventory management, ensuring accuracy and consistency.
* **Improved Customer Relationship Management (CRM)**: The system needs to improve customer relationship management by capturing detailed profiles, tracking ongoing projects, and facilitating proactive engagement.
* **Streamlined Billing and Payment Process**: A streamlined billing system will improve invoicing accuracy, payment tracking, and cash flow management, particularly for government contracts.

4.2 Business Objective:-

Raamaya Technologies aims to improve its operational efficiency, streamline sales and procurement processes, enhance customer satisfaction, and ensure regulatory compliance by implementing an SAP ERP system. The ERP system will automate manual processes, provide real-time data, and offer a centralized platform for managing sales, procurement, customer relationships, and reporting.

This SAP ERP will provide below functionalities:

1. Sales Management (Enquiry, Quotation, and Order Management)
2. Procurement and Vendor Management
3. Customer Relationship Management (CRM)
4. Financial Management and Invoicing
5. Reporting and Analytics

4.3 Business Rules:

Organization Policies, Procedures, and Rules & Regulations:-

* Data Security: All sensitive data must be encrypted and accessed only by authorized personnel.
* Compliance: All operations, especially government contracts, must follow to relevant regulations.
* Confidentiality: Employees must sign NDAs to protect sensitive business information.
* Enquiry Management:

Enquiry: All customer inquiries via email or phone should be recorded in the SAP ERP system with a unique enquiry ID.

Quotation: Once the enquiry is clear and the required details are gathered, create a **quotation** in the SAP ERP system using predefined templates that include.

* Quotation Management:

Quotation Approval: Government quotes must be approved in SAP System before issuance.

Order Processing: Quotation require customer confirmation and approval before processing for bid publishing.

Bid Tracking: Bid status should be updated regularly tracked on GeM Portal.

* Bid Management:

Bidding: After downloading bid, check qualification, contact OEMs & distributor, prepared documents & participate in bid before deadline.

Check bid Evaluation: Check technical & financial evaluation of bid.

Update bid details in SAP ERP.

* Order Management:

Sales Orders: Order should be accepted within 24 hours of receiving on GeM Portal and entered details in SAP ERP.

Order Processing: Orders require customer confirmation and approval before processing. Process through SAP ERP.

Order Tracking: Sales order status should be updated regularly and communicated.

* Procurement and Vendor Management:

Vendor Selection: New vendors must be evaluated and approved for reliability and compliance.

Procurement Approval: Purchase orders require managerial approval before issuance.

Supplier Performance: Vendor performance must be tracked and reviewed regularly.

* Customer Relationship Management (CRM):

Customer Data: Customer profiles must be regularly updated with accurate information.

Customer Communication: All communications must be logged, with follow-up within 48 hours.

Service Requests: Support tickets must be resolved within a defined SLA.

* Financial Management and Invoicing:

Invoicing: Invoices should be auto-generated, reviewed, and sent after approval.

Payment Tracking: Payments must be tracked against invoices, with reminders for overdue payments.

Financial Reporting: Regular reports (monthly, quarterly) must be generated for performance tracking.

Tax Compliance: Invoicing must comply with tax regulations for government transactions.

* Reporting and Analytics:

Sales Reporting: Real-time sales and order reports should be available for performance tracking.

Procurement tracking: Real-time purchase order reports should be available.

Financial Reports: Profit and loss, balance sheets, and cash flow statements should be available for auditing.

4.4 Background:-

Raamaya Technologies, an IT reseller and system integrator company, has been providing services to government organizations for several years. They have built a strong reputation in the market by participating in bids, tenders, and executing government contracts. However, the company has faced significant challenges in managing its operations, particularly in handling sales, orders, procurement, and customer relationships, all of which have traditionally been managed manually.

As the business grew and demand for services increased, the existing manual systems became inefficient, error-chancing, and difficult to manage. The lack of automation in key processes led to delays in processing orders, difficulties in tracking customer interactions, and an overall slowdown in the company's ability to respond to customer needs efficiently.

Hence, Raamaya Technologies decided to implement an Enterprise Resource Planning (ERP) system, specifically SAP ERP, to streamline business processes and overcome the limitations of their current manual system.

Business Issues/Problems Identified:

* Manual Process Inefficiency
* Lack of Integration
* Compliance Challenges
* Data Inaccuracy and Inconsistency
* Limited Reporting and Analytics

Expected Benefits of Implementing the SAP ERP System

* Increased Efficiency
* Improved Data Accuracy and Consistency
* Enhanced Compliance and Reporting
* Better Decision-Making
* Improved Customer Satisfaction
* Increase Organizational growth
  1. Project Objective:

The primary goal of implementing the SAP ERP system at Raamaya Technologies is to automate and streamline key business processes, such as sales, order management, procurement, financials, and customer relationship management. This solution will replace the current manual system, reducing inefficiencies, minimizing errors, and enabling better decision-making.

By integrating all business functions into one organized system, the SAP ERP will enhance Raamaya Technologies’ ability to deliver timely and accurate services to government clients, comply with regulations, and scale operations as the company grows.

What the SAP ERP will do?

1. Sales Management and Order Processing:

Automate the Enquiry, Quotation, and Sales Order Process: The SAP ERP system will streamline the process of generating inquiries, quotations, and sales orders, improving accuracy and reducing manual input. It will also allow easy tracking and follow-up of these processes.

Integration of Sales Data: Sales data will be integrated with procurement and financial modules to ensure seamless order fulfillment and better visibility of sales performance.

1. Procurement Management:

Streamline Procurement and Vendor Management: The system will automate procurement processes, from vendor selection to purchase orders, ensuring compliance with government contracts and optimized vendor performance monitoring.

Real-time Procurement Tracking: Automated procurement tracking will improve inventory management, enabling better control over purchase orders and stock replenishment.

1. Financial Management:

Invoicing and Payment Processing: The system will automate the invoicing process, ensuring invoices are generated based on accurate sales order data, reducing the risk of errors. Payment tracking will be integrated, with reminders for overdue payments.

Automated Financial Reporting: The system will generate real-time reports for financial analysis, compliance audits, and tax reporting, improving transparency and financial decision-making.

1. Customer Relationship Management (CRM):

Centralized Customer Data: The CRM module will centralize all customer data (contact details, sales history, service requests), improving customer support and ensuring better communication.

Improved Service Management: Service requests will be tracked, and follow-ups will be automated, improving response times and customer satisfaction.

1. Compliance and Reporting:

Automated Compliance Checks: The SAP ERP system will ensure all processes are aligned with government regulations, particularly for pricing, contracts, and invoicing.

Real-Time Reporting: Real-time compliance and financial reports will be available, improving audit preparedness and decision-making.

Alignment with Business Objectives:

1. Improved Efficiency: By automating manual processes across departments, SAP ERP aligns with the business goal of increasing operational efficiency, reducing manual errors, and speeding up service delivery.
2. Compliance and Transparency: The system will ensure that Raamaya Technologies adheres to government regulations and industry standards, helping to maintain and strengthen its relationships with government clients.
3. Enhanced Customer Experience: Through improved order processing, accurate data management, and effective customer support, the SAP ERP system directly supports the objective of providing superior customer service.
4. Data-Driven Decision Making: Real-time data, integrated reports, and performance dashboards will empower management to make data-driven decisions that align with strategic goals.
5. Scalability for Growth: The SAP ERP system will scale with the company as it grows, supporting the acquisition of new government contracts and expanding operations.

Requirements for Interaction with Other Systems:

1. Vendor Systems: Integration with external vendor systems will allow real-time updates on product availability, order status, and delivery timelines, improving procurement efficiency.
2. Financial Systems: The SAP ERP system must integrate with any existing Tally accounting software used by Raamaya Technologies to ensure smooth financial reporting and tax compliance.

4.6 Project Scope:

The scope of the SAP ERP implementation project at Raamaya Technologies will focus on automating and streamlining key business processes to improve operational efficiency, compliance, and customer service. Below is a detailed scope of what will be developed and implemented in this project.

#### **1. Sales Management Module (Enquiry, Quotation, bidding)**

#### **2. Procurement and Vendor Management Module**

#### 3. **Financial Management and Accounting Module**

#### **4. Customer Relationship Management (CRM) Module**

#### **5. Reporting and Analytics**

#### **7. System Integration**

#### **8. User Interface and User Experience**

#### **9. Data Migration and Testing**

#### **10. Training and Support**

#### 4.6.1. In Scope Functionality

#### Sales Management

#### Procurement Management

#### Financial Management and Accounting

#### Customer Relationship Management (CRM)

#### Reporting and Analytics

#### System Integration

#### User Interface & Experience

#### Data Migration & Testing

#### Training and Support

#### 4.6.2. Out Scope Functionality

#### Human Resource Management System (HRMS)

#### Marketing Management

#### Advanced Custom Development

#### Full Supply Chain Management

#### Internationalization

#### **Third-Party Payment Gateways**

#### Customer Portal

5. Assumptions:

Below is a comprehensive list of assumptions and requirements that should be considered in the BRD.

* Transition from manual system: Raamaya Technologies is ready to move from a manual to a digital system, and employees will be willing to adopt the new system after receiving adequate training and support.
* Efficient bid management: The bid management process will be standardized across all stakeholders, and the system will be able to automate the entire bidding cycle without requiring major customizations or manual interventions.
* User will accept automated process: Users will be open to automation after receiving adequate training and support. The automation is expected to improve efficiency, and users are not likely to resist its implementation.
* Stakeholder involvement: Key stakeholders will be available to provide timely feedback during the requirements gathering, design, and testing phases. Their involvement will be proactive and consistent throughout the project.
* Cost & timeline: The project will be completed within the defined budget and timeline unless unforeseen technical or operational challenges arise.

6. Constraints:

* Limited Budget & time: The project has constraints on both budget and timeline, meaning that resources and deliverables need to be prioritized, and the project must be completed within the specified cost and timeframe.
* Resources: The availability of internal staff for the implementation process may be limited. For example, key team members from different departments (sales, procurement, finance) will need to dedicate time to participate in the project, which could impact their regular duties.
* System Integration: The SAP ERP system needs to integrate with existing software and third-party systems (such as government portals, financial systems, and email systems). This may introduce limitations based on the compatibility and readiness of current systems for integration
* SAP Software Customization: There may be limitations in customizing the SAP ERP system to meet Raamaya's specific needs without impacting overall system performance, maintainability, or upgrade paths.
* User adoption: Employees accustomed to the manual system may resist adopting the new ERP system, which could affect the speed and effectiveness of the implementation.

7. Risks:

a. Technological risk:

* Performance Issues

Avoid: Implement regular system health checks and thorough pre-launch testing to ensure system stability.

Mitigate: Optimize infrastructure and use performance monitoring tools to address issues before they become critical.

Transfer: Outsource system maintenance and support to experts or vendors who guarantee uptime and performance.

Accept: Prepare a contingency plan, including backup systems or manual processes, in case the ERP system experiences downtime.

b. Skills risk:

* Lack of SAP Expertise

Avoid: Hire SAP-certified consultants or staff with experience in SAP ERP systems.

Mitigate: Provide intensive training for internal teams and create a knowledge transfer plan to gradually build expertise.

Transfer: Contract with an SAP partner or third-party vendor to handle more complex configuration and implementation tasks.

Accept: Acknowledge that initial expertise gaps may exist and plan to upskill the internal team over time.

c. Political Risks

* Changes in Government Procurement Regulations

Avoid: Stay updated on relevant procurement regulations and ensure the ERP system is flexible enough to accommodate future regulatory changes.

Mitigate: Create system configurations and reports that are adaptable to regulatory changes, and include periodic updates to maintain compliance.

Transfer: Consult with legal or regulatory experts to transfer the responsibility of ensuring compliance with changing laws and policies.

Accept: Acknowledge that changes in procurement regulations could require ongoing updates to the system and plan for such updates accordingly.

d. Business Risks

* Business Process Misalignment

Avoid: Conduct thorough business process analysis and involve key stakeholders in the system design and requirements gathering process to ensure alignment.

Mitigate: Customize the SAP system to match Raamaya’s business processes as much as possible, while ensuring flexibility for future changes.

Transfer: Outsource the business analysis or process redesign work to a third-party consultant specializing in business process optimization.

Accept: Accept minor misalignments that can be fixed post-launch and continuously improve the system after go-live.

* Competitive Risks

Avoid: Keep an eye on the competitive landscape and continuously innovate services to stay ahead.

Mitigate: Develop a flexible business model and ensure the ERP system is scalable to adapt to changes in business strategies.

Transfer: Outsource market research and competitor analysis to third-party agencies.

Accept: Accept that competition in the government sector may intensify and plan to regularly review strategies to stay competitive.

e. Requirement Risks

* Unclear or Changing Requirements

Avoid: Conduct thorough requirements gathering with all stakeholders upfront and ensure clear and well-documented requirements.

Mitigate: Set up a formal change control process to manage scope creep and ensure that any changes to requirements are evaluated and agreed upon before implementation.

Transfer: Engage a third-party consultant to ensure that requirements are accurately captured and documented.

Accept: Acknowledge that some requirements may evolve over time and have a flexible system design that can accommodate changes.

Other Risks:

* Vendor Dependency

Avoid: Ensure that internal teams have the necessary skills and knowledge to maintain andsupport the system after implementation.

Mitigate: Establish clear service level agreements (SLAs) with the vendor, and ensure that there is a knowledge transfer process in place.

Transfer: Shift some of the responsibility for maintaining and supporting the system to third-party service providers if needed.

Accept: Accept that for some periods, the company may rely on the vendor and plan to gradually reduce dependency by building internal capabilities.

8. Business Process Overview:

8.1. Legacy System (AS-IS):

The legacy system refers to the current processes and systems that Raamaya Technologies uses to manage their operations, which are primarily manual based on Microsoft Excel, Word, Powerpoint etc.

In the AS-IS system, the company deals with various tasks related to sales, procurement, government tenders, and order management manually, which can lead to inefficiencies, data inaccuracies, and a lack of real-time insights.

Process In Legacy System:-

* Bid/Tender Management: Raamaya manually tracks government tenders and bids. The team regularly checks for tender announcements, prepares bid documents, and submits them manually. Tracking the status of the bids is done manually via emails or spreadsheets, making it difficult to monitor the progress and ensure timely submissions.
* Order Management: Once a bid is won, the order details are entered manually into a system (could be a spreadsheet or a basic software tool). The order management is fragmented, and there’s no centralized platform for managing orders. This results in difficulties tracking the order status, inventory requirements, and delivery timelines.
* Customer Relationship Management (CRM): Customer data (e.g., government agencies) is stored manually, often in paper files or in a spreadsheet, leading to a lack of proper insights into customer interactions. Following up with customers, handling queries, or managing customer preferences is difficult without a centralized system.
* Procurement: The procurement system is also handled manually. Inventory levels are updated manually, and orders are placed based on availability or forecasts, leading to overstocking or stock-outs.
* Invoicing and Payment: The invoicing and payment processing are done manually, often using spreadsheets. This requires significant time for preparing invoices and tracking payments, leading to delays and errors.

Process Flow diagram in Legacy System (AS-IS):



#### **2. Proposed Recommendations (TO-BE)**

#### Transition from Manual Processes to SAP ERP: Implement SAP’s Sales and Distribution (SD) module to automate the bid management and tendering process. This will allow for faster and more accurate bid submissions, better tracking of deadlines, and improved communication with government clients.

#### Customer Relationship Management: Customer Relationship Management (CRM) module will provide a centralized platform for managing all customer data, including government agencies, ensuring better tracking of interactions, preferences, and opportunities.

#### SAP Customization for Raamaya’s Unique Business Requirements: SAP will be customized to accommodate the company's specific requirements for government bids, tender management, and order tracking.

#### Data Security and Confidentiality: SAP provides strong data security features, including role-based access control, encryption, and audit trails to protect sensitive information and ensure compliance with government data protection regulations.

#### Reporting and Analytics: The proposed SAP ERP system will provide built-in reporting tools to generate customizable reports for bids, orders, sales performance and financials.

#### Scalability for Future Growth: The SAP system is highly scalable and can easily handle increased volumes of bids, orders, and customer data as the company grows. This ensures that the business can expand without outgrowing the system.

**9. Business Requirements**

### **Business Requirements for SAP ERP Implementation at Raamaya Technologies.**

Business requirements are divided into **Functional** and **Non-Functional Requirements**, and a **traceability matrix** will be created to track these requirements throughout the project.

### **1. Functional Requirements**

#### **Enquiry management: System should record the enquiry, tracking status and reminder for follow up.**

#### **Quotation Management: System should generate quotation, quotation approval, quotation expiry & notifications, conversion to sales order.**

#### **Sales Order Management: System should create sales order, order confirmation, internal approvals.**

#### **Procurement Management: System should generate purchase order, vendor selection, PO approval, order tracking & delivery management.**

#### **Billing Management: Invoice generation, invoice approval. Tax calculations**

#### **Delivery Management: Delivery scheduling, tracking & monitoring, delivery confirmation**

#### **Report Generation: System should be able to generate detailed report of lead, sales, finance, purchase, payment, delivery.**

#### **Collaboration with Other Departments: System should display required information of other department.**

#### **OEM Management: OEM database, OEM partnership management, notify about renewal of partnership.**

#### **Distributor management: Distributor database, Registration with distributor, Distributor order creation.**

#### **Vendor management: Vendor data base, vendor performance tracking, vendor purchase order creation.**

#### **Customer Relationship Management: Customer data management, customer internal tracking, CRM reporting, sales pipeline management**

#### **Payment management: Payment tracking, payment terms, reminder notifications**

#### **Installation & service management Service order creation, resource scheduling, Service Level agreement, post installation report**

#### **2. Non-Functional Requirements**

#### **System Performance: The system should have minimal downtime during working hours**

* **Security: The system must ensure the security and confidentiality of government-related documents and sensitive business data.**
* **Usability: The system should be user-friendly with an intuitive interface for all users.**
* **Compliance: Ensure the system is compliant with relevant government regulations and standards.**

#### Scalability: The system should be scalable to handle an increasing number of tenders, orders, and users as the business grows.

#### Performance: The system should have minimal downtime during working hours

* Reliability: Backup and disaster recovery processes must be in place.

### Requirement **Traceability Matrix:-**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Req. ID | Req. name | Req. description | Priority | Design | D1 | T1 | D2 | T2 | D3 | T3 | D4 | T4 | UAT |
| REQ-001 | Enquiry Management | System should record the enquiry, tracking status and reminder for follow up. | High | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| REQ-002 | Quotation Management | Quotation creation, quotation approval, quotation expiry & notifications, conversion to sales order. | High | Yes | Yes | Yes | Yes | Yes | Yes | Yes | WIP | No | No |
| REQ-003 | Sales Order Management | SO creation, order confirmation, order modification, internal approvals. | High | Yes | Yes | Yes | Yes | WIP | No | No | No | No | No |
| REQ-004 | Procurement Management | PO creation, vendor selection, PO approval, order tracking & delivery management. | High | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No |
| REQ-005 | Billing Management | Invoice generation, invoice approval. Tax calculations | High | Yes | Yes | Yes | Yes | Yes | WIP | No | No | No | No |
| REQ-006 | Delivery Management | Delivery scheduling, tracking & monitoring, delivery confirmation | High | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No |
| REQ-007 | Report Generation | System should be able to generate detailed report of lead, sales, finance, purchase, payment, delivery. | High | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | WIP | No |
| REQ-008 | Collaboration with Other Departments | System should display required information of other department. | Medium | Yes | Yes | Yes | WIP | No | No | No | No | No | No |
| REQ-009 | OEM Management | OEM database, OEM partnership management, notify about renewal of partnership. | Medium | Yes | WIP | No | No | No | No | No | No | No | No |
| REQ-010 | Distributor management | Distributor database, Registration with distributor, Distributor order creation. | Medium | Yes | WIP | No | No | No | No | No | No | No | No |
| REQ-011 | Vendor management | Vendor data base, vendor performance tracking, vendor purchase order creation. | Medium | Yes | WIP | No | No | No | No | No | No | No | No |
| REQ-012 | Customer Relationship Management | Customer data management, customer internal tracking, CRM reporting, sales pipeline management | Medium | Yes | Yes | Yes | Yes | Yes | Yes | WIP | No | No | No |
| REQ-013 | Payment management | Payment tracking, payment terms, reminder notifications | Medium | Yes | Yes | No | No | No | No | No | No | No | No |
| REQ-014 | Installation & service management | Service order creation, resource scheduling, Service Level agreement, post installation report | Medium | Yes | WIP | No | No | No | No | No | No | No | No |
| REQ-015 | System Performance | The system should have minimal downtime during working hours | High | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| REQ-016 | Security | The system must ensure the security and confidentiality of government-related documents and sensitive business data. | High | Yes | Yes | Yes | Yes | Yes | Yes | WIP | Yes | Yes | Yes |
| REQ-017 | Usability | The system should be user-friendly with an intuitive interface for all users. | High | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No |
| REQ-018 | Compliance | Ensure the system is compliant with relevant government regulations and standards. | Medium | Yes | Yes | Yes | Yes | Yes | Yes | Yes | WIP | No | No |
| REQ-019 | Scalability | The system should be scalable to handle an increasing number of tenders, orders, and users as the business grows. | Medium | Yes | Yes | Yes | Yes | WIP | No | No | No | No | No |
| REQ-020 | Performance | The system should have minimal downtime during working hours | Medium | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | WIP | No |
| REQ-021 | Reliability | Backup and disaster recovery processes must be in place. | High | Yes | Yes | Yes | Yes | WIP | No | No | No | No | No |

**10. Appendices**

#### **10.1. List of Acronyms**

|  |  |
| --- | --- |
| Acronym | Meaning |
| ERP | Enterprise Resource Planning |
| SAP | Systems, Applications, and Products in Data Processing |
| PO | Purchase Order |
| SO | Sales Order |
| CRM | Customer Relationship Management |
| ROI | Return On Investment |
| SD | Sales & distribution |
| UAT | User Acceptance Test |
| HRMS | Huma Resource Management System |
| RFQ | Request for Quotation |
| RFP | Request for Proposal |
| SLA | Service Level Agreement |
| BRD | Business Requirement Document |
| FRD | Functional Requirement Document |
| RTM | Requirement Traceability Matrix |

#### **10.2. Glossary of Terms**

|  |  |
| --- | --- |
| Term | Definition |
| Sales Order (SO) | A document created by the sales team to confirm customer order details and initiate the fulfillment process. |
| Purchase Order (PO) | A document issued by Raamaya Technologies to a supplier, indicating the products or services to be purchased. |
| Procurement Process | The process of acquiring goods or services, including the creation of purchase orders, vendor selection, and order fulfillment. |
| Bid Management | The process of identifying, preparing, and submitting bids or tenders to government or private sector clients. |
| Bid Preparation | The process of creating proposals and documents to respond to tenders or requests for proposals (RFPs). |
| Compliance | Adherence to laws, regulations, and standards relevant to business operations, including financial and procurement practices. |
| ERP System | A suite of integrated applications that help Raamaya Technologies manage core business processes such as sales, procurement, inventory, and financial reporting. |
| Customization | The ability to modify the standard features of the SAP ERP system to meet the specific needs of Raamaya Technologies. |
| Real-time Reporting | The ability to generate and view reports with up-to-date data, ensuring informed decision-making. |
| Automated Workflows | The automation of business processes (e.g., order processing, invoicing) using predefined rules and triggers. |

#### **10.3. Related Documents**

1. **Business Case Document**: Justification for the SAP ERP system implementation, including expected benefits, costs, and ROI.
2. **Project Plan**: A high-level schedule and timeline for the SAP ERP implementation, including major milestones and deadlines.
3. **System Architecture Document**: Defines the technical architecture of the SAP ERP system, including hardware and software requirements.
4. **Data Migration Plan**: A plan detailing how legacy data will be migrated to the SAP system, ensuring smooth transition and data integrity.
5. **Training Plan**: Outlines the approach for training users on the SAP ERP system, including who will be trained, how training will occur, and timelines.
6. **Change Management Plan**: A document detailing how changes within the organization will be managed to ensure smooth adoption of the new SAP ERP system.
7. **Risk Management Plan**: Identifies potential risks associated with the implementation and outlines mitigation strategies.