**Document 1- Business case document template**

**Question 1**- Why is this project initiated?

**Answer-** Business Case Document

Project Name: Nurturing Process Improvements  
Prepared By: Sonal Pattanaik  
Version: 1.0

1. Executive Summary

The Nurturing Process project is initiated to streamline and improve the efficiency of client engagement and follow-up mechanisms within the organization. This project aims to address gaps in current workflows that lead to lost opportunities, inconsistent communication, and delayed responses, ultimately impacting client satisfaction and business growth.

2. Background and Problem Statement

Currently, the nurturing process is fragmented, with multiple manual touchpoints and lack of centralized tracking. Leads often go cold due to delayed or missed follow-ups. The sales and marketing teams lack real-time visibility into engagement stages, leading to inefficiencies and reduced conversion rates.

3. Why is this Project Initiated?

* Improve client engagement by implementing a structured and automated nurturing process.
* Increase lead conversion through timely follow-ups and personalized communication.

By addressing these objectives, the organization can ensure better client relationship management and improved ROI on marketing efforts.

4. Business Objectives

* Reduce lead drop-off rate by 30% in 6 months.
* Increase client satisfaction ratings through personalized interactions.

5. Benefits and Expected Outcomes

* Streamlined client nurturing workflow
* Data-driven insights into client behavior

6. Risks and Assumptions

* Risk of user resistance to new tools/processes
* Assumption: Required data and systems are available for integration

**Question 2**- What are the current problems?

**Answer-** Essentially, I will be describing the pain points or gaps in the existing process that the project aims to solve.

Current Problems in the Nurturing Process

1. Lack of Standardized Follow-Up Process
   * There is no consistent method for following up with leads or existing clients, resulting in missed opportunities and delays in communication.
2. Manual Tracking and Poor Visibility
   * Most nurturing activities are tracked manually using spreadsheets or notes, which leads to errors, miscommunication, and a lack of real-time updates.
3. Uncoordinated Communication
   * Sales and marketing teams are not always aligned, leading to duplicated efforts or conflicting messages being sent to clients.
4. Delayed Response Times
   * Prospective clients often experience delays in receiving follow-ups or information, which can lead to a drop in interest and trust.
5. Low Conversion Rates
   * Because of inconsistent nurturing and lack of timely engagement, a significant number of leads do not convert into paying customers.

1. Limited Insights and Analytics
   * There’s no centralized system to analyze client engagement data, making it difficult to measure the effectiveness of the current nurturing efforts or make data-driven improvements.

**Question 3**- With this project how many problems could be solved?

**Answer-** Problems Solved by the Nurturing Process Project

This project aims to address and solve the following key problems:

1. Problem: Lack of Standardized Follow-Up Process  
   Solution: Implementing a structured and automated follow-up workflow ensures timely and consistent communication with leads and clients.
2. Problem: Manual Tracking and Poor Visibility  
   Solution: Introducing a centralized CRM or nurturing platform will eliminate manual work, reduce errors, and offer real-time visibility to all stakeholders.
3. Problem: Uncoordinated Communication  
   Solution: Creating a unified nurturing framework will align sales and marketing teams, improving coordination and messaging consistency.
4. Problem: Delayed Response Times  
   Solution: Automation and notification systems will ensure faster response times and proactive engagement with clients.
5. Problem: Low Conversion Rates  
   Solution: Better nurturing through timely and personalized communication will increase client trust and lead conversion rates.
6. Problem: Limited Insights and Analytics  
   Solution: Implementing reporting dashboards and analytics tools will help track engagement, measure performance, and guide continuous improvements.
7. Problem: No Lead Prioritization System  
   Solution: Implement lead scoring and segmentation to prioritize high-potential leads for quicker and more strategic follow-ups.

**Question 4-** What are the resources required?

**Answer**- Resources Required for the Nurturing Process Project

1. Human Resources-

* Project Manager – To oversee planning, execution, and delivery of the project.
* Business Analyst – To gather requirements, analyze gaps, and document processes.
* Sales & Marketing Team – For domain knowledge and user input.
* CRM Specialist / Technical Expert – To configure and implement the CRM or nurturing
* UI/UX Designer – To ensure user-friendly nurturing workflows and dashboards.
* Quality Assurance (QA) Tester – To test the process and system before deployment

2. Technical Resources-

* CRM Tool or Marketing Automation Software  
  (e.g., HubSpot, Salesforce, Zoho CRM, etc.)
* Analytics/Reporting Tools  
  (e.g., Power BI, Google Analytics, Tableau)
* Communication Tools  
  (e.g., Email automation systems, Chatbots, WhatsApp API)

3. Financial Resources

* Software Licenses & Subscriptions  
  (CRM, automation tools, analytics platforms)
* Training Budget  
  (For staff learning new systems)
* Consultancy Fees  
  (If third-party vendors or experts are involved)
* Hardware (if needed)  
  (e.g., servers, computers, network infrastructure)

4. Time & Schedule Resources-

* Dedicated Time from Stakeholders  
  For interviews, reviews, and testing.
* Project Timeline  
  Estimated duration of 4–6 months following the Waterfall phases:
  + Requirements → Design → Development → Testing → Deployment → Maintenance

**Question 5-** How much organizational change is required to adopt this technology?s

**Answer**- Organizational Change Required to Adopt the Nurturing Process Technology

Adopting a new nurturing process supported by technology (like CRM or marketing automation tools) will require moderate organizational change, involving adjustments in processes, roles, and behavior across departments.

1. Process Changes

* From Manual to Automated:  
  Teams will shift from manually tracking follow-ups to using an automated system.
* Standardized Workflows:  
  Defined nurturing stages will replace inconsistent communication patterns.

2. People and Roles

* New Roles or Responsibilities:  
  Team members may need to manage CRM dashboards, assign lead scores, or monitor campaign performance.
* Cross-Functional Collaboration:  
  Sales, marketing, and support teams will need to work more closely in a coordinated system.

3. Culture and Mindset

* Shift Towards Data-Driven Decisions:  
  Teams must begin using insights and analytics instead of relying solely on intuition or past experience.
* Proactive Client Engagement:  
  Culture needs to move towards consistent and timely follow-ups instead of reactive outreach.

4. Technology Adoption

* New Systems and Interfaces:  
  Teams need to become familiar with new platforms (CRM, automation tools, analytics dashboards).
* System Integration:  
  May require integration with existing tools like ERP or email systems.

**Question 6-** Time frame to recover ROI?

**Answer-** Estimated Time Frame to Recover ROI (Return of investment)

The ROI recovery for the Nurturing Process Project is expected within 6 to 12 months after full implementation. This estimate is based on the following factors

* Key Contributors to ROI

1. Increased Lead Conversion Rate
   * Faster and more effective follow-ups can increase conversions by 20–30%.
2. Improved Employee Efficiency
   * Automation reduces manual effort, freeing up time for higher-value tasks.
3. Reduced Customer Drop-Off
   * Timely engagement improves client retention and reduces churn.
4. Data-Driven Decision Making
   * Real-time analytics improve campaign targeting and reduce wasted effort.

* ROI Recovery Timeline (Breakdown)

| Phase | Timeframe | Impact on ROI |
| --- | --- | --- |
| Implementation | Month 0–2 | Initial setup cost |
| User Training | Month 2–3 | Minor productivity dip |
| Go-Live | Month 3 | Early benefits start |
| Performance Stabilizes | Month 4–6 | Measurable gains emerge |
| Full ROI Realized | Month 6–12 | Cost recovery + profit |

ROI Recovery Estimate- 6 to 12 months  
(depends on team adoption, lead volume, and system efficiency)

**Question 7-** How to identify Stakeholders?

**Answer-** A stakeholder is any person or group who is involved in the project, is affected by it, or can influence its outcome. Identifying stakeholders is important because they help define requirements, make decisions, and support project success. To identify them, first understand the project goals, then find out who uses the system, who requested the project, who will build it, and who will benefit from the results.

How to Identify Stakeholders -

1. Understand the Project Scope

by clearly understanding:

* What the project is about
* What areas of the organization are involved
* Who will benefit from it or be impacted by the change

2. Key Questions:

* Who requested or sponsored the project?  
  --*Project sponsor, senior management*
* Who will use the new process or system?  
  -- *Sales team, marketing team, customer service*
* Who will set it up or support it?  
  --*IT department, software vendors*

3. Methods You Can Use:

* Review project documents or contracts
* Talk to the project manager
* Conduct interviews with key team members
* Review the RACI Matrix (if available)

4. Examples of Stakeholders

Stakeholder Role Why They Are Stakeholders

Project sponsor Approves budget, defines vision

Sales Team Will use the process to follow up on leads

Marketing team Responsible for nurturing campaigns

IT Team Implements or integrates the tools

Business Analyst Gathers requirements and validates outcomes

CRM Vendors Provides the platform or support

Customer They will receive better service

**Document 2: BA Strategy**

**Question 1-** Write BA Approach strategy, As a business analyst.

**Answer- Business Analyst Approach Strategy**

1. Project Initiation & Planning-

Understand Business Needs

* Review the Business Case or Project Charter.
* Conduct high-level stakeholder interviews.
* Identify business goals, objectives, and KPIs.

Conduct Stakeholder Analysis

* Identify all stakeholders (internal & external).
* Use Stakeholder Matrix (Interest vs. Influence).
* Create RACI Matrix:
  + Responsible
  + Accountable
  + Consulted
  + Informed

ILS Matrix (Information, Level, Source)

| Information | Level | Source |
| --- | --- | --- |
| Product Requirements | High | Product Owner |
| Budget Constraints | Medium | Finance Team |

2. Elicitation of Requirements-

* Workshops – For collaborative discussion
* Interviews – One-on-one with SMEs
* Surveys/Questionnaires – For large stakeholder groups
* Document Analysis – Existing systems, manuals
* Observation/Shadowing – Understand user environment
* Prototyping – Early mock-ups for feedback

3. Requirement Documentation

1. Business Requirements Document (BRD)
2. Functional Requirements Specification (FRS)
3. Software Requirements Specification (SRS)
4. Use Case Document / User Stories (Agile)
5. Process Flow Diagrams (BPMN/UML)
6. Wireframes / Mockups
7. Requirements Traceability Matrix (RTM)

4. Review & Sign-off Process

Internal Review:

* Review with internal stakeholders (Product Owner, Developers, QA).
* Use version control for document revisions.

Client Sign-off Process:

* Share final reviewed documents with client.
* Present via walk-through sessions.
* Use Formal Sign-Off Template with:
  + Client Name
  + Date
  + Document Version
  + Approval Signature or Email Confirmation

5. Communication Channels

Establish and Implement:

* Email – For formal communication.
* Meetings (Zoom/MS Teams) – For discussions, reviews, demos.
* Project Management Tools – Jira, Trello, Asana.
* Documentation Repository – SharePoint, Confluence, Google Drive.

6. Handling Change Requests (CRs)

1. Log CR in a Change Request Tracker.
2. Analyze the impact (cost, time, scope).
3. Discuss with PM and stakeholders.
4. Document CR with justification and updated requirements.
5. Get client approval before implementation.

7. Project Progress Updates

Progress Reporting Techniques:

* Use Dashboards (Jira, Power BI).
* Weekly or bi-weekly Status Reports:
  + Completed tasks
  + In-progress work
  + Risks & Issues
  + Next steps
* Conduct Sprint Reviews or Milestone Meetings.

8. UAT (User Acceptance Testing)

* Create UAT Test Plan & Scenarios
* Identify UAT testers from client side.
* Conduct UAT sessions and log issues.
* Fix defects, retest, and confirm closure.

Client Project Acceptance:

* Share final UAT Sign-off Form with:
  + Test Summary
  + Defect Log (with status)
  + Client Confirmation (sign/stamp/email)

**Document 3- Functional Specifications**

**Answer-**

Project information

|  |  |
| --- | --- |
| Project name | Nurturing Process Improvement |
| Customer name | SP Pvt.ltd |
| Project Version | 1.0 |
| Project Sponsor | SP pvt.ltd |
| Project Manager | Dharmesh |
| Project Initiation date | 01-04-2025 |

Purpose

This Functional Specification document outlines the required features and behavior of the system to improve process efficiency and performance. It serves as a reference point for the development, testing, and acceptance phases.

Scope

Process tracking

Automation of manual tasks

Data visualization dashboard

Notifications and alerts

Functional Requirements-

| ID | Requirement Description | Priority | Status |
| --- | --- | --- | --- |
| FR-001 | The system shall allow users to log in using a secure username/password. | High | Draft |
| FR-002 | The system shall allow managers to assign tasks to users. | High | Draft |
| FR-003 | The system shall display a dashboard showing task completion stats. | Medium | Draft |
| FR-004 | The system shall send automated reminders for overdue tasks. | High | Draft |

Use Case Example

Title: Submit Task Update  
Actor: Employee  
Precondition: User is logged in  
Steps-

1. User navigates to assigned task
2. Enters task progress and notes
3. Clicks “Submit Update”  
   Post-condition: Update is saved and visible to the manager

Wireframes / Mockups

* Login Page
* Dashboard
* Task Form

Business rules

*Rule ID Description*

BR- 01 Only manager can reassign tasks.

BR-02 tasks cannot have dates set in the past

BR-03 users must their task progress daily if assigned

Data requirement

Username, Password, Task Title, Due Date, Progress

Error handling

*Error Code Description*

ER-001 Display credential for incorrect password or login

ER-002 warn user if due date is not selected

ER-003 show error is task progress exceed 100%

**Functional Requirement specifications:**

**Answer-**

|  |  |  |  |
| --- | --- | --- | --- |
| Req ID | Req Name | Req Description | Priority |
| FR0001 | Login | User should be able to login to the application to do inventory operations | 10 |
| FR0002 | |  | | --- | | Dashboard |  |  | | --- | |  | | The system should display an inventory dashboard after login | 09 |
| FR0003 | |  | | --- | |  |  |  | | --- | | Add Inventory | | User should be able to add new inventory items with details (name, quantity, etc.) | 10 |
| FR0004 | Update inventory | User should be able to update stock quantity of existing inventory items | 09 |
| FR0005 | Delete Inventory | Admin should be able to delete inventory items from the system | 07 |
| FR0006 | Search Inventory | User should be able to search inventory items using name or item code | 08 |
| FR0007 | Inventory report | System should generate daily/weekly/monthly inventory reports | 08 |
| FR0008 | Notifications | System should alert users when stock goes below threshold levels | 09 |
| FR0009 | Role management | Admin should be able to assign roles and permissions to users | 06 |
| FR0010 | Logout | User should be able to securely logout of the application | 10 |
|  |  |  |  |

**Document 4- Requirement Traceability Matrix**

**Answer-**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Req ID | Req Name | Req Description | Design D1 | Test Case T1 | Design D2 | Test Case T2 | UAT |
| FR0001 | Login | User must be able to login to access the application | Yes | Pending | No | Yes | Yes |
| FR0002 | Dashboard | Display inventory summary after login | Yes | No | Yes | Yes | No |
| FR0003 | Add Inventory | Add new inventory items with necessary details | Yes | Pending | No | Yes | Yes |
| FR0004 | Update inventory | Update stock quantity for existing items | Yes | Yes | Yes | No | Yes |
| DR0005 | Delete inventory | Admin can delete obsolete inventory records | Yes | No | Yes | No | Yes |
| DR0006 | Search Inventory | Search for inventory items using item name or code | Yes | Pending | Yes | Yes | Yes |
| DR0007 | Inventory report | Generate and export inventory reports by date range | Yes | Yes | No | Yes | Yes |
| DR008 | Notifications | Notify users when stock is low | Yes | Pending | No | Yes | Yes |

**Document 5- BRD Template.**

**1. Document Revisions**

|  |  |  |
| --- | --- | --- |
| **Date** | **Version number** | **Document changes** |
| 05/02/2025 | 0.1 | Initial draft |
| 10/02/2025 | 0.2 | Added project background and stakeholder details |
| 15/02/2025 | 0.3 | Updated business requirements and use case section |
| 20/02/2025 | 0.4 | Incorporated review feedback and aligned priorities |
| 25/02/2025 | 0.5 | Finalized requirement list and added sign-off section |
| 01/03/2025 | 1.0 | Final Version approved and baselined by stakeholders |

**2. Approval Table**

| Role | Name | Title | Signature | Date |
| --- | --- | --- | --- | --- |
| Project Sponsor | John Smith | Senior Vice President |  |  |
| Business Owner | Sarah Johnson | Director of Operations |  |  |
| Project Manager | Michael Brown | Project Manager |  |  |
| System Architect | David Williams | Chief Architect |  |  |
| Development Lead | Emily Davis | Lead Developer |  |  |
| User Experience Lead | Robert Martinez | UX Design Head |  |  |
| Quality Lead | Jennifer Wilson | QA Manager |  |  |
| Content Lead | Chris Anderson | Content Strategist |  |  |

**3. RACI Chart for This Document**

| **Name** | **Position** | **\*** | **R** | **A** | **S** | **C** | **I** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sonal Pattanaik | Business Analyst |  | **🗸** |  |  | **🗸** | **🗸** |
| Michael Brown | Project Manager |  |  | **🗸** |  | **🗸** | **🗸** |
| John Smith | Project Sponsor | **🗸** |  |  |  |  | **🗸** |
| David Williams | System Architect |  |  |  | **🗸** | **🗸** |  |
| Emily Davis | Development Lead |  |  |  | **🗸** | **🗸** |  |
| Robert Martinez | UX Design Head |  |  |  |  | **🗸** |  |
| Jennifer Wilson | QA Manager |  |  |  |  | **🗸** | **🗸** |
| Sarah Johnson | Business Owner (Client) | **🗸** |  |  |  | **🗸** | **🗸** |
| Ravi Kumar | Client SME |  |  |  |  | **🗸** | **🗸** |

**4. Introduction**

**4.1. Business Goals [This should describe the organization goals& Organization Need] Need:**

**Answer-** Organizational Goals-

The organization aims to enhance operational efficiency by identifying, analyzing, and improving existing business processes. The goal is to reduce inefficiencies, eliminate manual errors, and standardize workflows to support long-term growth.

Through this initiative, the organization seeks to build a more agile, process-driven environment that promotes accountability, improves service delivery, and fosters better collaboration between departments.

Need:

Currently, the organization faces challenges such as inconsistent processes, redundant tasks, lack of visibility into workflows, and dependency on manual operations. These issues lead to delays, miscommunication, and resource wastage.

There is a clear need for a process improvement strategy that includes:

* Mapping existing workflows to identify bottlenecks
* Standardizing operations across departments
* Digitizing or automating repetitive tasks
* Tracking KPIs to monitor improvements over time

**4.2. Business Objectives**

**Answer**- To provide an IT solution for:

1. Mobile Application for Android and iOS

The objective is to develop a user-friendly, cross-platform mobile application that works seamlessly on both Android and iOS devices. This app will serve as a unified access point for employees, students, and administrators to perform essential tasks

* + Develop a user-friendly mobile application compatible with both Android and iOS platforms.
  + Ensure accessibility for employees, students, and administrators to perform core tasks such as viewing content, receiving notifications, and accessing essential features on the go.

1. E-Learning Management System (LMS)

The LMS aims to be a comprehensive digital learning platform designed to facilitate structured learning and training across the organization.

* + Design and implement a full-featured LMS to manage course content, video lectures, quizzes, and student progress tracking.
  + Enable role-based access for administrators, trainers, and learners.
  + Allow progress monitoring, certification, feedback submission, and interactive learning tools.

1. HRMS (Human Resource Management System)

The HRMS module will provide a centralized platform for managing all HR operations, aiming to reduce manual intervention and improve employee experience.

* + Develop an HRMS module to automate HR-related activities such as employee onboarding, attendance tracking, payroll, leave management, and performance evaluation.
  + Integrate employee self-service features to allow real-time access to personal and professional information.

**4.3. Business Rules**

**[List Organization Policies, Procedures, and Rules& Regulations]**

**Answer-** The following business rules outline the policies, procedures, and regulations to be followed in the functioning of the proposed IT solution. These ensure standardization, compliance, and consistency across all modules**.**

* General Rules

1. *User Authentication:*  
   All users (employees, students, administrators) must log in using valid credentials (username and password). Passwords must follow security policy standards (minimum 8 characters, alphanumeric, special characters).
2. *Role-Based Access Control (RBAC):*System access and functionality are granted based on user roles (e.g., Admin, Trainer, Employee, Student). No user may access features beyond their authorized role.
3. *Data Privacy and Confidentiality:*All personal, academic, and HR data must be securely stored and accessible only to authorized personnel, in compliance with the organization's data privacy policy.
4. *Audit Logging:*  
   The system must maintain logs for all significant user activities (logins, updates, deletions, approvals) for accountability and traceability.

* LMS-Specific Rules

1. *Course Completion Criteria:*A student is considered to have completed a course only if they have achieved the minimum required score in all assessments and have viewed all course content.
2. *Certification Rule:*Certificates are issued automatically only after successful completion of the course and passing the evaluation.
3. *Leave Policy Enforcement:*  
   Employees cannot apply for leave exceeding their leave balance. All leave requests must be approved by the assigned reporting manager
4. *Payroll Generation Timeline:*  
   Monthly payroll will be generated only after the 25th of each month and will include all attendance and leave data recorded till that date.

Mobile App Usage

1. *Mobile Accessibility:*  
   Users may only access modules assigned to their role via the mobile app. Restricted features will not be displayed on the interface.
2. *Session Timeout:*  
   If the mobile app is idle for more than 10 minutes, the session will automatically expire to protect user data.

**4.4. Background**

**[Provide a brief history of how the project came to be proposed and initiated, including the business issues/problems identified, and expected benefit of implementing the project/developing the product.]**

**Answer-**

In recent years, the organization has faced several challenges due to manual operations, fragmented systems, and lack of digital integration in key areas such as human resource management, employee learning, and communication. These issues have led to delays in work, inconsistent data handling, limited access to learning materials, and poor visibility into employee performance and progress.

The absence of a unified digital platform for internal operations has created bottlenecks, especially in tracking employee activities, delivering training, managing leave/payroll, and maintaining records. Furthermore, the growing workforce and learner base have made it difficult to scale processes efficiently using traditional methods.

To address these business challenges, the idea for the "Nurturing Process Improvement" project was proposed. The goal is to develop an integrated IT solution comprising:

* A Mobile Application for on-the-go accessibility and convenience
* An E-Learning Management System (LMS) to digitize training and skill development
* A Human Resource Management System (HRMS) to automate and streamline HR functions

By implementing this solution, the organization expects to achieve the following benefits:

* Improved efficiency and speed in operations
* Centralized access to learning and HR services
* Enhanced employee engagement and performance tracking
* Reduced manual errors and better decision-making through data visibility
* Scalability of systems to support future organizational growth

This project marks a key step towards digital transformation and continuous improvement within the organization.

**4.5. Project Objective**

**[These should describe the overall goal in developing the product, high level descriptions of what the product will do, how they are aligned to business objectives, and the requirements for interaction with other systems]**

**Answer**- The main objective of the "Nurturing Process Improvement" project is to develop a unified, user-friendly IT solution that improves the efficiency of business processes in the areas of human resource management, learning and development, and employee engagement.

This product will include:

* A Mobile Application for employees, trainers, and students to access HR services and learning modules from anywhere.
* A Learning Management System (LMS) to digitize and manage training materials, video content, tests, and certifications.
* A Human Resource Management System (HRMS) to handle attendance, payroll, leaves, onboarding, performance evaluations, and employee data.

These modules will:

* Help the organization automate manual tasks
* Improve accessibility for all users
* Reduce errors and delays
* Improve employee satisfaction and productivity

Alignment with Business Objectives:

* Supports digital transformation goals
* Enhances employee learning and development
* Streamlines HR operations
* Reduces paperwork and manual errors
* Makes internal systems scalable for future growth

Integration with Other Systems:

* The product may need to integrate with biometric devices for attendance
* Email or SMS gateways for sending notifications
* Finance or ERP systems for payroll processing, if applicable

**4.6. Project Scope [What we are going to develop in the current project]**

**Answer**-

The scope of the “Nurturing Process Improvement” project includes the design, development, testing, and implementation of a digital solution to improve the organization's training, HR, and communication processes. This project will deliver three key modules:

1. Mobile Application (Android and iOS)

* A cross-platform mobile app will be developed for employees, trainers, and students.
* It will provide role-based access to essential features like viewing training content, receiving notifications, submitting leave requests, and accessing personal profiles.
* The app will support real-time updates and a user-friendly interface.

2. E-Learning Management System (LMS)

* A full-featured LMS will be developed to manage training and learning activities.
* It will include functionalities like uploading course materials, conducting online tests and quizzes, monitoring learner progress, issuing certificates, and collecting feedback.
* Role management for administrators, trainers, and learners will be implemented to ensure secure access.

3. Human Resource Management System (HRMS)

* The HRMS module will automate HR-related operations including:
  + Employee onboarding
  + Attendance and leave management
  + Payroll processing
  + Performance evaluation
  + Employee self-service
* This system will reduce paperwork and streamline internal HR functions.

Additional Scope Includes:

* Secure login with authentication
* Role-based access control (RBAC)
* Integration with notification systems (Email/SMS)
* Dashboards for admin reporting and approvals
* Basic analytics and data export functionality

**4.6.1. In Scope Functionality**

**[List what functionalities we are going to do with in the project in bullets]**

**Answer-** The following functionalities are considered in scope for this project:

* Development of Mobile Application for Android and iOS
* User authentication and secure login
* Role-based access (Admin, HR, Trainer, Employee, Student)
* E-Learning module for course uploads, video training, and online tests
* Admin dashboard for analytics and reporting
* Notifications via email and SMS
* Feedback and evaluation forms
* Employee self-service portal for profile, leave, and payslip viewing
* Document and certificate upload/download
* Multi-language support (if needed)
* Basic reporting and export features (Excel/PDF)

**4.6.2. Out Scope**

**Functionality [List of functionalities what is not included in the current project]**

**Answer-** The following functionalities are not included in the current project scope:

* Integration with external payroll or ERP systems (e.g., SAP, Oracle)
* Biometric device integration for attendance tracking
* Third-party job portals or recruitment websites
* Advanced analytics with AI/ML or predictive reporting
* Performance bonus or compensation planning module
* Hardware or infrastructure setup (servers, devices, etc.)
* Integration with government portals for compliance (e.g., PF/ESI/Income Tax)
* Social media login (Google, Facebook, etc.)
* Offline access to the mobile app
* Custom branding for multiple organizations (multi-tenant setup)

**5. Assumptions [List all assumptions requirements are based on]**

**Answer-** Assumptions which lists the assumptions made while gathering and writing the requirements are

* All stakeholders will be available for requirement gathering and approvals as needed.
* Users will have access to smartphones and internet connectivity for using the mobile app.
* Necessary hardware (e.g., laptops, desktops, internet access) will be provided by the client for using the LMS and HRMS systems.
* The client will provide the required course materials, employee data, and other content in a timely manner.
* User roles and access permissions will be clearly defined and approved before development.
* Any third-party services (e.g., SMS gateway, email services) will be arranged by the client or provided by the project team.
* There will be no integration with external systems in this phase (e.g., biometric, SAP, etc).
* Testing and UAT will be conducted with support from client-side users.
* The scope will not change during the development phase unless a formal change request is raised and approved.
* Adequate training and support will be provided to end-users during deployment.

**6. Constraints [List all Constraints].**

**Answer-** The following constraints may impact the development, delivery, and performance of the project:

* Time Constraints:  
  The project must be completed within the agreed timeline. Any delays in requirement approvals or UAT may affect the final delivery.
* Budget Limitations:  
  The project is limited to a fixed budget. Additional features or changes outside the approved scope will require separate approval and may impact cost.
* Technology Stack:  
  The project must use pre-approved technologies (e.g., Android, iOS, web-based platforms). Any change in technology will require re-evaluation.
* Resource Availability:  
  Limited development and testing resources may affect parallel workstreams. Dependencies on key personnel could create bottlenecks.
* Scope Boundaries:  
  Only the agreed features listed in the “In Scope” section will be developed. Out-of-scope items will not be entertained without a formal change request.
* Third-party Dependency:  
  Any delays from third-party services (e.g., SMS/email API providers) may impact project timelines.
* Data Availability:  
  Functionalities such as course upload, payroll processing, and onboarding require timely and accurate data from the client side.
* Device Compatibility:  
  The mobile application will support standard Android and iOS devices; specific older versions may not be fully supported.

**7. Risk,**

| Risk ID | Risk Description | Likelihood | Impact | Strategy | Action Plan |
| --- | --- | --- | --- | --- | --- |
| R001 | Delay in requirement approval from stakeholders | High | High | Mitigate | Set deadlines for reviews; send regular reminders to stakeholders. |
| R002 | Mobile app compatibility issues with older devices | Medium | Medium | Accept | Test on most commonly used versions; inform users of minimum device requirements. |
| R003 | Third-party SMS or email service downtime | Medium | High | Transfer | Use reliable providers; include fallback communication methods. |
| R004 | Incomplete or delayed data from client (e.g., HR info) | High | High | Mitigate | Assign a client-side coordinator; request early data sharing. |
| R005 | Change in project scope during development | High | High | Mitigate | Freeze scope with sign-off; handle new requests via formal Change Requests. |
| R006 | Key team member unavailability (e.g., developer or tester) | Medium | Medium | Avoid | Cross-train team members; have backup resource plan. |

**7.1 Technological Risks**

**This subsection of “Risk Analysis” specifies new technology issues that could affect the project.**

**Answer-** This identifies possible issues related to technology that may impact the success of the project. These risks could arise from using new tools, platforms, or systems and should be managed proactively.

| Risk ID | Technological Risk Description | Likelihood | Impact | Strategy | Action Plan |
| --- | --- | --- | --- | --- | --- |
| TR001 | Compatibility issues across Android and iOS devices | Medium | Medium | Mitigate | Test app on multiple devices and OS versions; define minimum supported versions. |
| TR002 | Integration challenges with third-party APIs (SMS, email, payment) | High | High | Mitigate | Use stable APIs; conduct early integration testing; have backup providers. |
| TR003 | Lack of developer expertise in selected technologies (e.g., Swift, Kotlin) | Low | Medium | Avoid | Assign skilled resources; provide internal training if needed. |
| TR004 | Server performance issues during high user load | Medium | High | Mitigate | Perform load testing; optimize backend code and database queries. |

**7.2 Skills Risks**

**This subsection of “Risk Analysis” specifies the risk of not getting staff with the required expertise for the project.**

**Answer-** This section outlines the risks related to availability or lack of skilled personnel required for the successful execution of the project. If the right people with the right expertise are not available on time, the project could be delayed or affected in quality.

| **Risk ID** | **Skill Risk Description** | **Likelihood** | **Impact** | **Strategy** | **Action Plan** |
| --- | --- | --- | --- | --- | --- |
| SR001 | Lack of mobile app developers experienced in both iOS and Android | Medium | High | Mitigate | Hire experienced developers; consider outsourcing if needed. |
| SR002 | Inadequate knowledge of LMS/HRMS domain by developers | Medium | Medium | Mitigate | Conduct domain training sessions; assign BA to clarify use cases. |
| SR003 | Unavailability of a skilled UI/UX designer | Low | Medium | Accept | Use templates or simple designs; outsource if needed. |
| SR004 | Key team member leaves mid-project | Medium | High | Avoid | Maintain documentation; assign a backup resource for each key role. |
| SR005 | Delays in onboarding skilled QA/testing resources | Medium | Medium | Mitigate | Plan early for testing phase; onboard testers ahead of time. |

**7.3 Political Risks**

**This subsection of “Risk Analysis” identifies political forces that could derail or affect the project.**

**Answer-** This section identifies organizational politics or internal power struggles that could delay or impact the project. These are not government politics, but company-level situations, like:

* Conflicts between departments, Leadership changesResistance from internal teams or stakeholders

| Risk ID | Political Risk Description | Likelihood | Impact | Strategy | Action Plan |
| --- | --- | --- | --- | --- | --- |
| PR001 | Conflict between HR and IT departments over system ownership | Medium | High | Mitigate | Set clear roles and responsibilities; involve both teams in early planning. |
| PR002 | Delay in approvals due to internal hierarchy or bureaucracy | High | Medium | Mitigate | Plan extra time in timeline for approvals; escalate to project sponsor if delayed. |
| PR003 | Change in leadership during project (e.g., new Project Sponsor) | Low | High | Accept | Keep updated documentation; conduct knowledge transfer sessions. |
| PR004 | Resistance from staff toward system changes (especially HRMS users) | Medium | Medium | Mitigate | Conduct awareness workshops and early demo sessions to reduce resistance. |
| PR005 | Department not cooperating with data sharing (HR or Academics) | Medium | High | Mitigate | Arrange regular meetings and use SPOCs to ensure smooth communication. |

**7.4 Business Risks**

**This subsection of “Risk Analysis” describes the business implications if the project is canceled.**

**Asnwer**- This section outlines the impact on the business if the project is delayed, fails, or gets canceled. These risks relate to missed opportunities, financial losses, or loss of competitive edge.

| Risk ID | Business Risk Description | Likelihood | Impact | Strategy | Action Plan |
| --- | --- | --- | --- | --- | --- |
| BR001 | Delay in launching the mobile app could affect user engagement | Medium | High | Mitigate | Set clear timelines and track milestones regularly. |
| BR002 | Canceling the LMS may lead to poor training delivery and low student growth | Low | High | Accept | Document benefits and present them to stakeholders to keep project alive. |
| BR003 | Not implementing HRMS may result in manual errors and compliance issues | Medium | High | Mitigate | Emphasize ROI and efficiency improvements to decision-makers. |
| BR004 | Competitors may gain an edge if we delay digital transformation | Medium | High | Avoid | Prioritize features that give competitive advantage. |

**7.5 Requirements Risks**

**This subsection of “Risk Analysis” describes the risk that you have not correctly described the requirements. List areas whose requirements were most likely to have been incorrectly captured.**

**Answer**- These are the risks that the requirements may not have been captured correctly, which could lead to confusion, rework, or development of the wrong features.

Requirements Risks Happen for the reason.

* Incomplete understanding of client needs
* Miscommunication between stakeholders and BA
* Requirements not reviewed or signed off properly
* Changes made without proper documentation.

**7.6 Other Risks**

**In this subsection of “Risk Analysis,” document any other risks not covered in the prior subsections.**

**Answer**- These are risks that don’t fit into the earlier categories (technical, business, political, etc.) but may still affect the project,

These could include environmental, logistical, third-party, or external factors that might cause delays or impact delivery**.**

| **Risk ID** | **Other Risk Description** | **Likelihood** | **Impact** | **Strategy** | **Action Plan** |
| --- | --- | --- | --- | --- | --- |
| OR001 | Internet or server downtime affecting LMS access | Medium | High | Mitigate | Ensure cloud infrastructure with backup and monitoring. |
| OR002 | Mobile device compatibility issues (older Android/iOS versions) | Medium | Medium | Mitigate | Set minimum supported OS versions and test on various devices. |
| OR003 | Delay from third-party services (SMS, payment gateways, etc.) | Medium | Medium | Transfer | Include SLAs in vendor contracts and select reliable partners. |
| OR004 | Data privacy laws or compliance updates during project | Low | High | Accept | Stay updated on regulations and plan adjustments if needed. |

**8. Business Process Overview**

**[This describes the overall process flow from each phase]**

**Answer-** This section explains how the entire business process will flow across different phases of the project. It helps all stakeholders understand what steps the user will follow and how the system supports those steps from start to finish

Phase-wise Overview

1. User Registration & Login (Mobile App)

* Users download the mobile app from the Play Store/App Store.
* Register using mobile/email and set credentials.
* Log in to access HRMS and LMS features.

2. Learning Management System (LMS)

* Admin uploads training content like videos, documents, and quizzes.
* Employees or learners access training modules assigned to them.
* Trainers or managers assign tasks and assessments.
* Learners complete lessons and take quizzes.
* The system tracks progress, generates certifications, and provides feedback options.

3. HRMS Functionality

* HR team manages employee profiles, onboarding, and documents.
* Employees log attendance, apply for leaves, and view payslips.
* Managers approve leave and track performance.
* The system automates payroll and generates HR reports.

4. Notifications & Communication

* Users receive push notifications and emails about updates, tasks, approvals, and training reminders.

5. Admin Dashboard

* Admins can view reports, monitor attendance and course completion, and generate analytics.
* Centralized control over user management and role-based access.

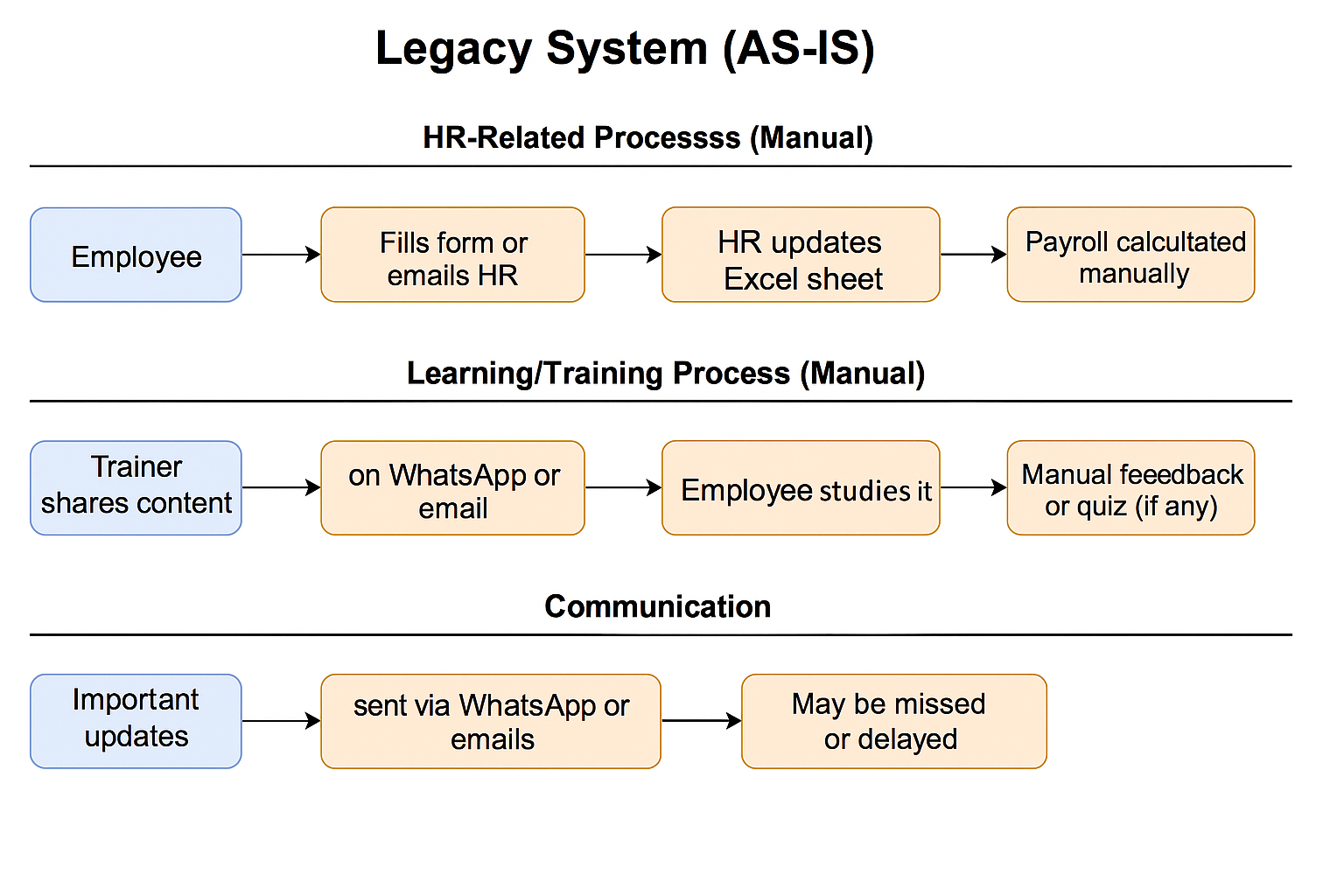
**8.1. Legacy System (AS-IS)**

**[Brief Explanation about the process in legacy system and draw process flow diagrams]**

**Answer-** Currently, the organization handles its learning and HR processes manually or using disconnected tools like Excel sheets, WhatsApp communication, paper-based records, or basic standalone systems. This causes delays, errors, and lack of visibility into employee progress and HR tasks.

Problems in Legacy System:

* ❌Training is managed via Google Drive or email — difficult to track progress.
* ❌ Attendance and payroll are maintained in Excel — high chance of errors.
* ❌ Employees need to contact HR manually for leave requests or pays lip info.
* ❌ No centralized dashboard or system for real-time data and reports.
* ❌ Poor communication and lack of notifications/reminders.



**8.2. Proposed Recommendations (TO-BE)**

**[Describe the recommended process and how the proposed system will address the challenges in legacy system]**

**Answer**- Recommended Process (TO-BE System)

The proposed system introduces an integrated digital platform that will automate and streamline HR and learning processes through a mobile and web-based solution. It addresses the inefficiencies of the legacy system and provides a user-friendly, transparent, and scalable solution.

| **Challenge in Legacy System(AS-IS)** | **Proposed Solution (TO-BE)** |
| --- | --- |
| Manual attendance and payroll processing | HRMS will automate attendance, leave, and payroll with real-time access. |
| Training delivered over WhatsApp or email | LMS will host structured training modules with progress tracking and certificates. |
| No centralized communication | Push notifications and emails will notify users of tasks, deadlines, and updates. |
| Employees rely on HR for basic info (leaves, payslips, etc.) | Self-service portal on mobile app will provide instant access to such info. |
| Lack of analytics and reports | Admin dashboard with real-time data, reports, and analytics. |

**9. Business Requirements**

**Answer-** The business requirements define what the business needs from the proposed system. These requirements were identified through stakeholder interviews, workshops, and document analysis. Each requirement is categorized based on the functional area and assigned a priority using planning poker

Functional requirements

| Req ID | Requirement Name | Description | Functional Area | Priority (Poker Card Value) |
| --- | --- | --- | --- | --- |
| FR001 | User Login & Authentication | Users must securely log in using credentials (OTP/email) | Mobile App | 13 |
| FR002 | Attendance Management | Employees can mark attendance via the app | HRMS | 8 |
| FR003 | Leave Management | Apply, approve, and track leave digitally | HRMS | 5 |
| FR004 | Payroll Generation | Auto-generate payslips based on attendance and leave data | HRMS | 5 |

Non- Functional requirements

| Req ID | Requirement | Description | Priority (Poker Value) |
| --- | --- | --- | --- |
| NFR001 | Performance | System should load within 3 seconds | 8 |
| NFR002 | Availability | 99.9% system uptime | 13 |
| NFR003 | Security | Role-based access control and data encryption | 13 |
| NFR004 | Usability | Easy-to-use interface for non-technical users | 5 |

**10.Appendices**

10.1. List of Acronyms

| Acronym | Full Form |
| --- | --- |
| BRD - | Business Requirement Document |
| HRMS - | Human Resource Management System |
| LMS - | Learning Management System |
| UAT - | User Acceptance Testing |
| UI/UX - | User Interface / User Experience |
| OTP - | One Time Password |
| API - | Application Programming Interface |
| RACI - | Responsible, Accountable, Consulted, Informed |
| KPI - | Key Performance Indicator |

10.2. Glossary of Terms

| Term | Definition |
| --- | --- |
| Stakeholder | Any person or group who has an interest in the project outcome. |
| Functional Requirement | A feature or behavior the system must have or perform. |
| Non-Functional Requirement | Attributes like performance, security, usability. |
| Legacy System | The old/existing system before the proposed solution. |
| TO-BE Process | The future recommended process to be followed. |
| AS-IS Process | The current process being followed before improvement. |
| Role-Based Access | A security approach where access is granted based on the user's role. |
| Self-Service Portal | A feature that allows users to perform certain tasks without administrator help. |

10.3. Related Documents

| Document Name | Description |
| --- | --- |
| Business Case Document | Describes the business need and justification |
| Functional Requirement Specification (FRS) | Detailed list of functional system requirements |
| Non-Functional Requirement Document | Defines system performance and other constraints |
| UAT Test Plan | Plan and checklist for User Acceptance Testing |
| Project Plan | Overall schedule, timeline, and milestones |
| Stakeholder Analysis Document | Roles, influence, and involvement of each stakeholder |