**Document 1- Business case document template**

**➢ Why is this project initiated?**

The project is initiated to solve the existing problems of LMS portal which resulted in less productivity of both students and trainers. This project will help to enhance the features and improve efficiency in the LMS portal to give students and trainers a better platform to engage and keep a track of their progress without any hassle.

**➢ What are the current problems?**

There are several problems currently faced by students and trainers. Below are some points mentioned -

\* Students had to rely on email communication to schedule evaluation slots with the evaluators.
\* Students faced issues in tracking their learning progress.
\* Lack of mismanagement.
\* Delayed response.

**➢ With this project how many problems could be solved?**

Below are the points that can be solved with the help of the project -

\* Students can directly book evaluation slots with the evaluators.\* Students have proper track to their progress in learning management system by entering study logs.\* User friendly interface.\* Improved communication between the students and evaluators.\* Students can raise doubts within the portal and get resolutions faster.

**➢ What are the resources required?**

A. People – one business analyst, one project manager, one senior java developer, five experienced java developers, one admin person, two testers are taken in the project.
B. Time
Requirement analysis -: 2-4 weeks Requirement gathering-: 2-4 weeks System design -: 3-5 weeksImplementation-: 8-12 weeks
 Verification-: 4-6 weeksMaintenance-: ongoing C. Budget – the overall hours estimated For the project is 18 months and the current team size is 11, hardware ,software, training and services not to exceed Rs 80 L.D. Other – Third party software evaluation, site visit, and data quest reports, not to exceed Rs 20L.

**➢ How much organizational change is required to adopt this technology?**

The amount of organizational change needed to adopt a new technology depends heavily on the complexity of the technology itself, how well it integrates with existing systems, and the current organizational culture; however, most new technologies will require some level of adjustment in processes, employee training, and potentially even structural changes to fully integrate and reap the benefits; a thorough change management strategy is crucial to minimize disruption and maximize adoption.

Key areas where organizational change might be needed:

Workflow adjustments, Employee training, Data migration, Cultural shift, System integration. **➢ Time frame to recover ROI?**Return on Investment (ROI) can be calculated for any period of time, but it's usually calculated annually. This allows for easier comparison between investments.
 **➢ How to identify Stakeholders?**

To identify stakeholders, you need to define the project scope and objectives, then systematically identify individuals, groups, or organizations that could be impacted by or influence the project outcome; this can be done by brainstorming potential stakeholders, analyzing organizational charts, conducting interviews, and using tools like stakeholder mapping to categorize and prioritize them based on their level of interest and power within the project.

Key steps to identify stakeholders:

* **Define project scope:**

Clearly understand the project goals, deliverables, and potential impacts to identify who might be affected.

* **Brainstorm potential stakeholders:**

List all individuals, teams, departments, external organizations, and communities that could be impacted by the project.

* **Analyze organizational charts:**

Review the company structure to identify key decision-makers and relevant departments.

* **Conduct interviews and surveys:**

Engage with potential stakeholders through interviews or surveys to gather information about their interests and concerns.

* **Categorize stakeholders:**

Classify stakeholders based on their level of power, influence, interest, and urgency in relation to the project.

* **Create a stakeholder map:**

Visualize stakeholder relationships and their level of involvement using a matrix or diagram.

* **Document stakeholder information:**

Maintain a record of identified stakeholders, their interests, and communication details.

**Document 2: BA Strategy

As a business analyst what are the steps to complete a project -**

Step 1: Gather Background Information - This first step is where much of the groundwork for a project is covered.
Step 2: Identify Stakeholders - The stakeholders on a project are the ones who make decisions and sign off on requirements and priorities. Therefore, identifying all of the stakeholders early on is important.
Step 3: Discover Business Objectives - Establishing the business strategy and objectives and putting them on paper will help the business analyst and project managers stay focused on the vision and make course corrections along the way. It will also help during scope definition.
Step 4: Evaluate Options - To achieve the objective, it’s important to determine the critical path among the various options available.
Step 5: Scope Definition - Based on the objective of the project and a team discussion, this step is when the scope is defined.
Step 6: Business Analyst Delivery Plan - The business analyst and project owner will provide a detailed timeline for delivering the requirements to the development team.
Step 7: Define Project Requirements - This step requires the business analyst to clarify requirements to the business owner and get the OK to deliver them to the development team. Requirements can be divided into functional and non-functional.
Step 8: Support Implementation through SDLC - A business analyst is involved in the technical implementation of requirements to ensure that everything aligns.
Step 9: Evaluate Value Added by Project - To maintain the business objective through the implementation, a constant evaluation of business outcomes needs to be maintained.

[**As a business analyst what are elicitation techniques to apply**](https://www.google.com/search?sca_esv=9f50e05d338b6bab&sxsrf=AHTn8zqVWLvlkbMI2PkdpszUQG7rCJoGlQ:1740413114439&q=as+a+business+analyst+what+are+elicitation+techniques+to+apply&spell=1&sa=X&ved=2ahUKEwjFi8uL2NyLAxWRdfUHHbWHCiQQkeECKAB6BAgJEAE) **-

Elicitation techniques -**

* Interviews: Structured or unstructured conversations with stakeholders to gather information
* Brainstorming: A group activity that generates ideas and solutions to problems
* Prototyping: Creates realistic models of applications to gather feedback from stakeholders
* Observation: Watching stakeholders perform tasks or interact with a product or system
* Document analysis: Examining existing documents to learn about the business environment.

**How to do Stakeholder Analysis-**

Stakeholder analysis is the process of identifying the individuals or groups that are likely to affect or be affected by a proposed action, and sorting them according to their impact on the action and the impact the action will have on them. A RACI categorization is often used for clarifying what stakeholder’s roles and responsibilities are in a context of a specific task or process.
RACI is an acronym that stands for Responsible, Accountable, Consulted, and Informed.

**Responsible:** Does the work to achieve the task

* Person who perform a task/activity; refer to the doer, responsible for action/implementation
* The degree of responsibility is defined by the Accountable person
* Responsibility can be shared and delegated

**Accountable:** Has authority to approve or disapprove the result

* Person who has ultimate accountability and authority
* Only one accountable “A” to each task/activity
* Accountability cannot be delegated

**Consulted:** Possesses needed input to the task

* Person to be consulted before a final decision or action is taken
* Refers to a two-way communication

**Informed:** Needs to be informed of the result

* Person that needs to be informed after a decision or action is taken
* Refer to a one way communication

To perform a stakeholder analysis in an ILS (Integrated Learning System) context, you need to identify all individuals or groups who may be impacted by or influence the implementation of the ILS, assess their level of interest and influence on the project, categorize them based on their needs and concerns, and develop a strategy to effectively engage with each stakeholder group; this typically involves creating a stakeholder map to visualize their relationships and prioritize communication efforts based on their level of impact.
* **What documents to write -**Business analysts use a variety of documents to manage projects, including requirement documents, test cases, and change request forms.

Requirement documents
* **Business requirement document**: Describes the business requirements for a product or process, and the expected end result
* **Functional requirement specification (FRS)**: Specifies the functional requirements of a system
* **System requirement specification (SRS)**: Specifies the system requirements of a system
* **Requirement management plan (RMP)**: Documents the information needed to manage project requirements from start to finish
* Test documents
* **Test case**: Contains test data, preconditions, variables, and expected results to verify that a piece of functionality is working as intended
* **Requirement traceability matrix (RTM)**: Links requirements throughout the validation process
* Change request documents
* **Change request form**: A standardized document that captures information about proposed changes to a project
* Other documents Project vision document, Use case diagrams, Wireframes, Mockups, and Gap analysis document.

**\*\* What process to follow to sign off on the document -**

To sign off on documents, follow a process that includes: identifying key stakeholders, distributing the document for review, gathering feedback, addressing concerns, holding a sign-off meeting to discuss any remaining issues, and finally, obtaining formal approval from all necessary parties through signatures or electronic sign-off, ensuring clear documentation of the approval process and any comments made throughout the review cycle.

**\*\* How to take approval from the client -**To effectively take approval from a client, clearly present the work with detailed explanations, provide a clear call to action for feedback, use a preferred communication channel, proactively address potential concerns, and follow up regularly until receiving their final approval; consider utilizing dedicated project management tools or feedback platforms to streamline the process and document all communication.

**\*\* How to handle change request in waterfall project -**

To handle a change request in a waterfall project, you need to first identify the scope of the change, then thoroughly evaluate its impact on the project timeline, budget, and quality, before formally submitting a change request for approval through a defined process, which includes assessing the feasibility, costs, and benefits of the change, and communicating any necessary adjustments to project baselines if approved; in waterfall, change requests should be carefully managed due to the linear nature of the project where changes can significantly disrupt the established phases.

 **\*\* How to update the progress of the project to the stakeholders -**To update stakeholders on project progress, identify key stakeholders, understand their needs, create a communication plan, provide regular updates with clear and concise information about completed milestones, ongoing tasks, potential risks, and next steps, while also seeking feedback and adapting your communication method based on their preferred channels; always be transparent and honest about progress, including any challenges encountered.

**\*\* How to take sign off on the UAT -**
* Use a UAT sign off template
* Customize the template to fit your project needs
* Define the testing criteria
* Gather feedback from stakeholders
* Seek sign-off approval from stakeholders

**\*\* Client project acceptance form -**In project management, the client acceptance form is a critical document that signifies the successful completion of a project and the client's approval of the work performed.
This document is used to obtain the customer's sign-off once the project is complete

**Document 3** **Functional Specifications**


**Functional Requirement specifications:







Document 4- Requirement Traceability Matrix







Document 5- BRD Template

Project Name – LMS Portal
Project ID – 001
Version ID – 01
Author – Mr Sourav Banerjee**A business requirements document (BRD) is an official document that provides a comprehensive overview of a project, including its objectives, key stakeholders, timeline, budget, constraints, and more. This document outlines what's needed to reach the intended project objectives.1. Document Revisions

****

2. Approvals

****

3. RACI Chart for This DocumentThe RACI chart identifies the persons who need to be contacted whenever changes are made to this document. RACI stands for responsible, accountable, consulted, and informed. These are the main codes that appear in a RACI chart, used here to describe the roles played by team members and stakeholders in the production of the BRD. They are adapted from charts used to assign roles and responsibilities during a project.( RACI Can be made for IT side[Project stakeholder] as mentioned above, apart from that Can also Be made for Client side[Business Stakeholder]).
4. Introduction4.1. Business Goals - The project is initiated to solve the existing problems of LMS portal which resulted in less productivity of both students and trainers. This project will help to enhance the features and improve efficiency in the LMS portal to give students and trainers a better platform to engage and keep a track of their progress without any hassle.

4.2. Business Objectives - To provide an IT solution for LMS portal

4.3. Business Rules - [List Organization Policies, Procedures, and Rules& Regulations]

4.4. Background –
\* Students had to rely on email communication to schedule evaluation slots with the evaluators.
\* Students faced issues in tracking their learning progress.
\* Lack of mismanagement.
\* Delayed response.

4.5. Project Objective - To solve the existing problems of LMS portal which resulted in less productivity of both students and trainers.

4.6. Project Scope -

4.6.1. In Scope Functionality -
Below are the points that can be solved with the help of the project -
\* Students can directly book evaluation slots with the evaluators.\* Students have proper track to their progress in learning management system by entering study logs.\* User friendly interface.\* Improved communication between the students and evaluators.\* Students can raise doubts within the portal and get resolutions faster.
4.6.2. Out Scope Functionality -

* Additional tasks, requirements, or deliverables
* Extra functions or activities
* Deadlines that are extended
* Features that are added
* Deliverables that are increased

5. Assumptions -

Key assumptions of the waterfall model LMS project :
* Complete requirement gathering - All necessary project requirements can be defined and documented accurately at the start without significant unknowns or future modifications.
* Linear progression - Each project phase must be fully completed before moving on to the next, with no backtracking or significant revisions allowed.
* Stable environment -Project scope and conditions remain relatively constant throughout the development process, with minimal external factors impacting the plan.
* Clear communication -All stakeholders have a clear understanding of their roles and responsibilities, with effective communication throughout the project lifecycle.

6. Constraints -

In waterfall project management, the primary constraints are time, cost, and scope, which are considered "fixed" once the project starts, meaning significant changes to any of these elements during development can be very difficult to implement due to the rigid, linear nature of the methodology; this can lead to challenges if requirements evolve or unexpected issues arise during the project lifecycle.

7. Risks-

The primary risks associated with waterfall project management include: a lack of flexibility to adapt to changing requirements, potential for significant rework if issues are discovered late in the development cycle, limited stakeholder feedback during the process, high risk of missing critical needs due to a rigid structure, and difficulty managing complex projects with evolving needs, all stemming from the waterfall model's linear, sequential approach.

8. Business Process Overview -

The waterfall project management methodology is a linear process that involves a series of phases, including requirements, design, implementation, testing, and maintenance.

Phases

* **Requirements**: Gather and document the project's requirements, usually outlined by the client
* **Design**: Develop a design for the project, including a workflow and prototypes
* **Implementation**: Put the design into place, with each team member completing their tasks in sequence
* **Testing**: Test the project at every stage to ensure it meets requirements
* **Maintenance**: Provide ongoing support and improvements to keep the project functional and up to date.

9. Business Requirements -

In waterfall project management, "business requirements" refer to the detailed list of functionalities, features, and outcomes that a project needs to deliver, which are meticulously documented at the very beginning of the project lifecycle, setting the foundation for the entire development process and ensuring all stakeholders understand what the final product should achieve.

10.Appendices -

Referred notes / documents shared initially