### Live Project – Waterfall Deliverables – Part 1/2

### Document 1: Business case document Template

### **Project initiation:**

The Pennant App project is initiated to address the inefficiencies of the current app. It helps to make communication between the employees easy. Also helps to save time by removing duplicates and increasing employees' efficiency by tracking their performance. It helps to create transparency, so that salesperson can track their cases.

### **Current Problem:**

- **Duplications of Documents**: Users upload the same documents many times which takes a lot of time to evaluate.
- Contact Management: Every user has no access to see contact information of the user.
- Stage of Cases: The salesperson cannot able to track their respective cases on the app.
- Analysis: The app didn't able to generate performance report of their employees.
- **Built-in telephony**: App didn'table to provide a telephony feature.

### Solution:

- **Remove Duplicity**: The user will not be allowed to add the same document again and again. If they do so then it pops up a message that the document already exists.
- **Communication:** Allow user to see the contact of other user so that they can communicate with each other.
- Enhance Efficiency: Managers can track the performance of employees which helps to increase the efficiency of employees:
- **Transparency:** It should helps to create transparency in the process so that employee can mange the cases and track the stage of the case.

### **Required Resources:**

The successful implementation of the project will require resources including:

#### Human resources

- Project Manager: Oversees the project.
- Business Analyst: Gather and analyzes requirement
- Developers: Build the app
- UI/UX Designer: Design the interface.
- Testers: Ensure functionality and reliability.
- IT Support: Handle deployment and support.
- Trainers: Provide user training.

### **Technical Resources:**

- Development Tool
- Design Tool
- Testing Tool
- Hosting Tool
- Security Tool

### Financial Resources:

Budget-For salaries, software licenses, hardware and training material.

Documents and Training material:

- Guides for portal use.
- Structured training sessions

### **Process Change**

- Documents management: User can manage the document of client easily.
- Contact Information: User can manage their contact information.

Training and supporting session: Provide training and supporting to the user so that can use the app easily.

### Communication & Collaboration:

- Enhanced Communication: Improved channels between users so that they can communicate with each other easily.
- Stakeholder Involvement: It helps to increase the involvement of stakeholders in planning and development.

### Technology Integration:

- IT infrastructure: Upgrading to increase the efficiency of app.
- Data Management: Manage the information of user and their clients.

### **ROI Timeframe:**

The expected timeframe for the pennant app is 10-12 months, with tangible benefits and cost saving becoming evident within the first year and full ROI realized by the end of the second year.

### Stakeholder Identification:

### Primary Stakeholder:

Administrator: oversee the implementation and alignment with company goal.

Employees: Main user who upload documents and manage them for the smooth flow of communication.

IT staff: Manage technical aspects, including deployment, integration and support.

Project Team.

- Project Manager: It ensures that the project will finish within the timeframe and budget.
- Business Analyst: Gather and make sure that it meets the project need
- Developers: Build the app
- UI/UX Designer: Design and create a user-friendly interface.
- Testers: Ensure functionality and reliability.
- Trainer: Develop and deliver training program for end user.

### Document BA Strategy:

1. Project initiation:

- Understand the project objective, scope, and constraint..
- Identify key stakeholders and establish communication channels.
- Conduct a preliminary assessment of business needs and requirements.

2. Elicitation Technique:

- Interviews: Conduct one-to-one interviews with the sales team, credit team, operations team, and IT team to gather the information and requirements of the project.
- Surveys and questionnaires: Distribute surveys to all employees to collect quantitative data on needs and expectations.
- Focus group: Organize a focus group session with employees to discuss about challenges and solutions collaboratively.
- Observation: Observe the employees while working to understand their workflow, pain points and areas of improvement.
- Document analysis: Review existing documents such as the current system and workflow diagram to understand the current state and identify gaps.
- Prototyping: Develop and present the prototype of the pennant app to the stakeholders and get feedback from them for any improvement required.
- Brainstorming: Organize a brainstorming session with the stakeholders and project team to generate ideas and identify innovations.

### Stakeholder Analysis:

- Identify stakeholders and their roles using RACI (Responsible, Accountable, Consulted, Informed) or ILS (Influencer, Leader and Supporter).
- Determine each stakeholder's level of involvement and expectations regarding the project.
- Need to use this analysis to allocate responsibilities, manage expectations, and ensure effective communication.

Stakeholder	Responsible	Accountable	Consulted	Informed
Company		A	С	I
Administrator				
Employees	R		C	
IT Staff			C	1
Project	R	A		
Manager				
Business	R			
Analyst				
UI/UX Designer	R			
Tester	R			
Trainers	R			

Documents to write:

- Business Requirement Documents
- Functional Requirement Specification.
- Use Case Document
- User Stories
- Test Plan
- User Acceptance testing
- Training Material
- Project Management Plan

Document Sign-off process:

- Share draft documents with stakeholders for review and feedback.
- Incorporate feedback revisions as necessary.
- Obtain formal sign-off from stakeholder indicating their acceptance of the documents.

• Maintain version control to track changes and updates.

Client Approval:

- Present finalized documents to the client for final approval.
- Provide specification and clarification as needed to ensure understanding.
- Obtain formal approval from the client through signed agreement email confirmation.

Communication Channel:

- Establish regular meeting with the stakeholder to discuss on project progress, issue and updates.
- Utilize email project management software and collaboration tools for communication.
- Maintain an open door policy for stakeholder to raise concern or provide feedback.

Change Request Handling:

- Establish a formal change management process to capture asses and prioritize change requests.
- Evaluate the impact of the proposed change request on the timeline, scope, and budget.
- Obtain approval from the change control board before implementing changes.

# Progress reporting to stakeholders:

- Provide regular updates on project milestones, deliverables, and risks.
- Use dashboards, status reports, and presentations to communicate progress effectively..
- Highlight achievements, Challenges, and upcoming tasks to keep stakeholders informed.

# UAT – Client Project Acceptances:

- Coordinate User Acceptance Testing (UAT) with the clients to validate that the software meets requirements.
- Provide clear instructions and test cases for the client to execute during UAT.
- Obtain sign-off on the UAT- Client project Acceptance from once the client confirms satisfaction with the software functionality.

# Functional Specification:

Project Name	Pennant APP
Customer Name	Prime Housing Finance Ltd.
Project Version	1.0
Project Sponsor	Prime Finance
Project Manager	Himanshu Pandey
Project Initiation Date	30/11/2024

# Functional Specification:

Req. ID	Req. Name	Req. Description	Priority
FR0001	User Authentication	The system should provide a secure	10
	and authorization	login to employees, administrators, and	
		IT staff.	

<b>ED0000</b>	Dala haradaaaaa		
FR0002	Role-based access	The system should provide role-based	9
	control	access control restricting functionality based on the user's role	
FR0003	Desument Linia ed		9
FRUUUS	Document Upload	The system should allow user to add document	9
<b>FD0004</b>	Document Validation	It should validate the document and	9
FR0004	Document validation		9
		restrict duplicate documents from being	
FR0005	Contact Information	uploaded.	9
FRUUUS	Contact Information	System should store contact	9
		information of employees that can	
500000	Casa Stars	accessible to every user.	0
FR0006	Case Stage	Employee can able to track the stage of	8
<b>FD0007</b>		Cases.	0
FR0007	Employee Performance	System should generate report on the	8
<b>FD</b> 0000	Devente e d De como conte	performance of employee.	7
FR0008	Download Documents	It allow the employee to download the	1
		documents.	10
FR0009	Data encryption	The System should encrypt sensitive	10
550040		data to ensure confidentiality.	-
FR0010	User Friendly Interface	The system should provide a user-	8
		friendly interface for entering, viewing	
550044		and managing data.	-
FR0011	Alerts	The system shall alert user on any	7
		discrepancies or error in data entry.	
FR0012	Technical Support	The system shall provide access to	8
550010		technical support for troubleshooting.	-
FR0013	Compliance reporting	The system should generate	7
		compliance report for regulatory bodies.	-
FR0015	Training Material	The system shall provide access to	8
	Access	training material for users.	_
FR0016	User Feedback	The system should allow user to	7
		provide feedback on the portal	
		functionality.	
FR0017	Help Section	The system shall include help section	7
		for any kind of enquiry.	
FR0018	Notification	The system shall give notification to	8
		employee on pending task.	
FR0019	Data Security	Data shall be secure	8
FR0020	Auto Logout	The system should be logout	10
		automatically if the system is open for a	
		while and user is not active.	

# Document 4- Requirement Traceability Matrix

Req.	Req. Name	Req.	Desig	D1	T1	D2	T2	UAT	Priorit
ID		Description	n						у
FR000	User	The system	Yes	Complete	Complete	Ye	Yes	Pendin	10
1	Authenticati	should		d	d	s		g	
	on and	provide a							
	authorizatio	secure login							
	n	to employees,							
		administrators							
		, and IT staff.							
FR000	Data	The System	Yes	Complete	Complete	Ye	Yes	Pendin	10
9	encryption	should		d	d	s		g	
		encrypt							
		sensitive data							

		to ensure confidentiality.							
FR001 1	Alerts	The system shall alert user on any discrepancies or error in data entry.	Yes	Complete d	Complete d	Ye s	Yes	Pendin g	7
FR001 3	Compliance reporting	The system should generate compliance report for regulatory bodies.	Yes	Complete d	Complete d	Ye s	Yes	Pendin g	7
FR001 8	Notification	The system shall give notification to employee on pending task.	Yes	Complete d	Complete d	Ye s	Yes	Pendin g	8
FR000 2	Role-based access control	The system should provide role- based access control restricting functionality based on the user's role	Yes	Complete d	Complete d	Ye s	Yes	Pendin g	9
FR000 6	Case Stage	Employee can able to track the stage of cases.	Yes	Complete d	Complete d	Ye s	Yes	Pendin g	8
FR001 2	Technical Support	The system shall provide access to technical support for troubleshootin g.	Yes	Complete d	Complete d	Ye s	Yes	Pendin g	8
FR001 7	Help Section	The system shall include help section for any kind of enquiry.	Yes	Complete d	Pending	Ye s	Pendin g	Pendin g	7
FR000 3	Document Upload	The system should allow user to add document	Yes	Complete d	Pending	Ye s	Pendin g	Pendin g	9
FR000 4	Document Validation	It should validate the document and restrict duplicate documents from being uploaded.	Yes	Complete d	Pending	Ye s	Pendin g	Pendin g	9

FR000 7	Employee Performanc e	System should generate report on the performance of employee.	Yes	Complete d	Pending	Yes	Pendin g	Pendin g	8
FR001 5	Training Material Access	The system shall provide access to training material for users.	Yes	Complete d	Pending	Yes	Pendin g	Pendin g	8
FR002 0	Auto Logout	The system should be logout automatically if the system is open for a while and user is not active.	Yes	Complete d	Pending	Yes	Pendin g	Pendin g	10
FR000 5	Contact Information	System should store contact information of employees that can accessible to every user.	Yes	Pending	Pending		Pendin g	Pendin g	9
FR000 8	Download Documents	It allow the employee to download the documents.	Yes	Pending	Pending	Ye s	Pendin g	Pendin g	7
FR001 0	User Friendly Interface	The system should provide a user-friendly interface for entering, viewing and managing data.	Yes	Pending	Pending	Ye s	Pendin g	Pendin g	8
FR001 6	User Feedback	The system should allow user to provide feedback on the portal functionality.	Yes	Pending	Pending	Yes	Pendin g	Pendin g	7
FR001 9	Data Security	Data shall be secure	Yes	Pending	Pending	Ye s	Pendin g	Pendin g	8

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# 1. Document Revision

Revision Number	Date	Document Changes
1	01/12/2024	Initial draft of the project documentation
2	07/12/2024	Added project objectives and success criteria
3	15/12/2024	Included stakeholder analysis and elicitation technique
4	21/12/2024	Completed functionality requirement and requirement traceability matrix
5	23/12/2024	Updated priority and status in requirement traceability matrix
6	24/12/2024	Added detailed business requirement
7	29/12/2024	Incorporated Appendices and final requirement
8	05/01/2025	Final Review and formatting adjusting.

# 2. Approvals

Role	Name	Signature	Date
Project Sponsor	Nitin Choudhary	[ Signature]	01/12/2024
Business Owner	Sanjiv Kumar	[ Signature]	01/12/2024
Project Manager	Himanshu Pandey	[ Signature]	01/12/2024
Business Analyst	Vishal Singh	[ Signature]	02/12/2024
System Architect	Ajay Singh	[ Signature]	02/12/2024
Development Lead	Kunal Kapoor	[ Signature]	04/12/2024
User Experience	Jatin Lele	[ Signature]	04/12/2024
Lead			
Quality Lead	Aditya Singh	[ Signature]	05/12/2024
Content Lead	Ankita Singh	[ Signature]	05/12/2024

# 3. RACI Chart for this Document Codes used in RACI Chart:

- R: Responsible
- A: Accountable
- C: Consulted
- I: Informed

Stakeholder	Responsible	Accountable	Consulted	Informed
Company		A	С	Ι
Administrator				
Employees	R		С	1
IT Staff			С	Ι
Project	R	A		
Manager				
Business	R			
Analyst				
UI/UX Designer	R			

Tester	R		
Trainers	R		

In this RACI Chart:

The company administrator is accountable and has ultimate authority over any changes in the requirement.

Employees, IT staff, Project manager, Business Analyst. UI/UX Designer, Tester, and Trainer are responsible for their respective role.

The project manager is accountable for document management.

Company Administrator, Employees, and IT staff are consulting during the document process.

# 4. Introduction:

Pennant App helps the employee to upload the document and enter the data of the client so that it can be analyze and provide the loan according to their requirement. It also helps to track the performance of the employee. It provide the contact information of the employee so that they can communicate with each other.

# **Business Goal:**

The purpose of this project is to enhance the app's features so that employees can easily manage their tasks, decrease the duplication of documents, make contact with each other, and review their performance. The app also helps salespersons track their case stages.

### **Business Objective:**

- Data Entry: Entering the data of client in the system with accuracy and validity.
- Analysis: The system helps to analyze the data of clients and give he loan amount as per their eligibility.
- Security: It should store the data with the security so that unauthorized cannot reach to that data.
- Streamline Process: The process should be simple and easy to follow.

# **Business Rules:**

Role Based Access Control: User can access only functionality and data relevant to their role.

Data Validation: All data entered in the system must validate automatically and must ensure that they are within the acceptable range before being saved.

Automatic Logout: User should automatically logout if the user is not using the system for a longer time.

# Background:

Pennant app is the in house app that helps the company to manage the data of the clients. In this app salesperson upload the documents and on the basis of available information credit officer decide the eligibility of the client for the loan amount. In this process we faces the problem of duplicity of documents, lack of communication, analysing the performance of employees and cases. This project helps to remove all this challenges and make the flow of work easy.

# Project Objective:

- Free Flow of Communication: Every employee can contact with each other and discuss their query.
- Document management: Manage the document so that it can easily accessible to the every employee who are working on it.

- Maintain Transparency: The APP should able to maintain transparency so that employees can see the stage of the employee.
- Track Performance: Employers can track employees' performance to provide incentives and give them suggestions.
- Time Saving: Easy communication and availability of documents can save the time of employee.

## Project Scope:

The project scope outlines the boundaries and deliverables of the Pennant App project. It defines what features and functionalities will be included in the final product and what aspects are considered out of scope. The project scope encompasses both the in-scope functionality that will be developed as part of the project and the out-of-scope functionality that will not be addressed.

In Scope functionality:

- User Authentication and Authorization: Secure login and role-based access control.
- Data Entry and Management: Functions for entering, updating, and managing student marks.
- Data Validation: Automated checks to ensure data entered or document upload are valid or not.
- Reporting Tools: Customizable performance reports of employees.
- Integration with SIS: Seamless integration with the existing Company Information System.
- User Interface (UI): Responsive design for desktops.
- Security Measures: Data encryption, audit trails, and automatic logout.
- Training and Support: User guides, training materials, and technical support.
- Scalability: Design for increased data volumes and user loads.

Out Scope Functionality:

- Hardware Procurement: No hardware for end-users.
- Legacy System Overhaul: No major upgrades to existing systems beyond SIS integration.
- Extended Customization: No customizations outside predefined features.

### 5. Assumptions:

1. User Readiness: All users are the employees of the company.

2. SIS Integration: The existing Company Information System (SIS) has stable APIs for seamless integration.

### 6. Constraint:

- Budget: The project must stay within the budget.
- Timeline: The project must completed within the timeframe.

### 7. Risk:

Technological Risks:

- Integration Challenges: Difficulty in integrating Pennant APP with existing systems.
- Scalability: Ensuring that the portal can handle large volumes of data and users simultaneously.
- Data Security: Protecting sensitive client information from breaches and unauthorized access.
- Reliability and Uptime: Ensuring the system is robust and consistently available.
- Technology Obsolescence: The chosen technology stack becoming outdated quickly.

Skill Risk

- Technical Expertise: Availability of skilled developers and IT staff proficient in the required technologies.
- Training and Support: Ensuring Employees can effectively use the new system.
- Project Management: Ensuring the project managers have the necessary experience in managing large-scale IT projects.

### Business Risk

- Cost Overruns: The project exceeding budget due to unforeseen issues or scope changes.
- Return on Investment (ROI): The project may not deliver the expected financial benefits or improvements in efficiency.
- Vendor Dependence: Over-reliance on third-party vendors for critical components, which could lead to delays or additional costs.

# **Requirements Risk**

- Changing Requirements: Evolving needs from stakeholders leading to scope creep and potential delays.
- Incomplete Requirements: Initial requirements may not fully capture the needs of all users, leading to rework.
- Requirement Conflicts: Different stakeholders might have conflicting requirements, complicating the development process.

### Other Risks

- Project Timeline: Unanticipated delays extending the project timeline.
- User Adoption: Resistance from teachers or students in adopting the new system, leading to underutilization.
- Maintenance and Support: Ensuring ongoing support and maintenance post-launch to address bugs, updates, and user issues.

# 8. Business Process Overview:

# Legacy System (AS-IS):

The legacy system for data updation, document upload and management in the company is characterized by manual processes, basic digital tools, and significant inefficiencies. This system poses several challenges, including data inconsistency, limited accessibility, security risks, and scalability issues. A transition to a modern, integrated system like PENNANT APP aims to address these challenges by automating and streamlining the entire process, thereby improving efficiency, accuracy, and accessibility for all stakeholders.

- Document Upload: Sales Person upload same document many time.
- Data entry: Data entered manually so it cause some errors.
- Report generation: system should able to generate performance report
- Communication: In current situation employees did not able to contact each other.

# **Proposed Recommendation:**

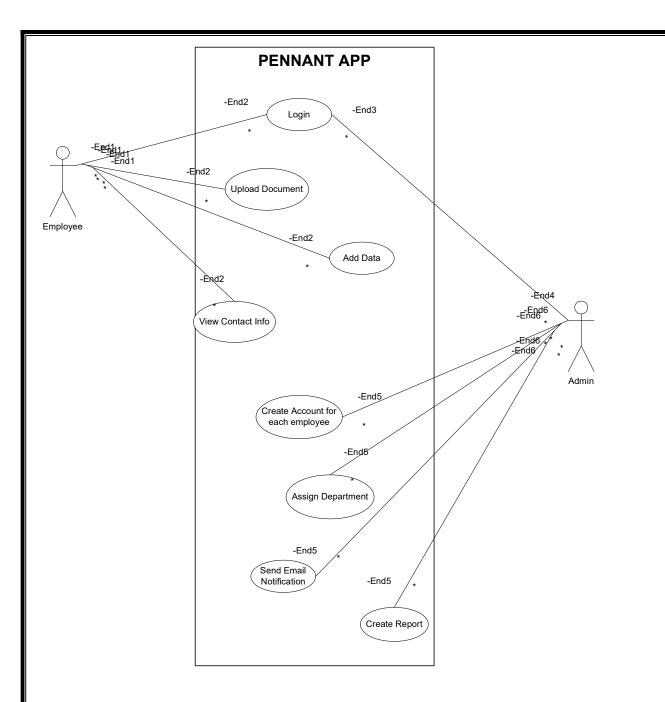
To address the challenges identified in the legacy system and improve employee management processes, the proposed recommendations (TO-BE) include implementing enhancements and solutions aimed at streamlining operations and maximizing efficiency. Key recommendations include:

- Availability of document: It should remove the duplicate document by prompting message of the available document to the person who uploading the document.
- User information: All users' information should be easily manageable.
- Report generation: The app should generate a report on the performance of the employees.
- Built-in telephony: The app should have built in telephony so that they can contact with each other easily.
- Tracking of Cases: It should provide transparency of the process so that employee can track their respective cases.

### 9. Business Requirement:

Req. ID	Req. Name	Req. Description	Priority
BR0001	User Authentication and authorization	The system should provide a secure login to employees, administrators, and IT staff.	High
BR0002	Role-based access control	The system should provide role-based access control restricting functionality based on the user's role	High
BR0003	Document Upload	The system should allow user to add document	High
BR0004	Document Validation	It should validate the document and restrict duplicate documents from being uploaded.	High
BR0005	Contact Information	System should store contact information of employees that can accessible to every user.	High
BR0006	Case Stage	Employee can able to track the stage of cases.	Medium
BR0007	Employee Performance	System should generate report on the performance of employee.	Medium
BR0008	Download Documents	It allow the employee to download the documents.	Low
BR0009	Data encryption	The System should encrypt sensitive data to ensure confidentiality.	High
BR0010	User Friendly Interface	The system should provide a user- friendly interface for entering, viewing and managing data.	Medium
BR0011	Alerts	The system shall alert user on any discrepancies or error in data entry.	Low

BR0012	Technical Support	The system shall provide access to	Medium
		technical support for troubleshooting.	
BR0013	Compliance reporting	The system should generate	Loa
		compliance report for regulatory bodies.	
BR0015	Training Material	The system shall provide access to	Medium
	Access	training material for users.	
BR0016	User Feedback	The system should allow user to	Low
		provide feedback on the portal	
		functionality.	
BR0017	Help Section	The system shall include help section	Low
		for any kind of enquiry.	
BR0018	Notification	The system shall give notification to	Medium
		employee on pending task.	
BR0019	Data Security	Data shall be secure	Medium
BR0020	Auto Logout	The system should be logout	High
	_	automatically if the system is open for a	-
		while and user is not active.	



# 10. Appendices

# List of Acronyms:

**UAT-User Acceptance Testing** 

**BRD- Business Requirement Document** 

**BR-** Business Requirement

**UI-User interference** 

# **Glossary of Terms**

API (Application Programming Interface)

Data Validation: Procedures implemented to ensure the accuracy, consistency, and quality of data entered into the system.

User Role: A set of permissions that define what actions a user can perform within the system.

# **Related Documents:**

- •Functional Specifications
- •Technical Design Document

•This Business Requirements Document (BRD) provides a comprehensive overview of the objectives, scope, requirements, and other relevant aspects of the project.

•Stakeholder Analysis