**WATERFALL MODEL DOCUMENTS PART – 1**

**Project Title:** Project Progress Tracking Feature in Sparsh Application

**Document – 1: Business case document**

1. **Why is this project initiated?**

**Ans:** This projects is initiated to enhance a Sparsh application by introducing a feature **project progress tracking** aiming to improve efficiency in real time tracking of tasks and milestones and project status. The existing system lack of a structured tracking features leads to visibility gaps, inefficiencies, delays in execution and monitoring. By implementing this features, the organization seeks to enhance productivity, ensure timely project completion and supports better decision making.

1. **What are the current problems?**

**Ans:** Here are the few current challenges that organization faces during project progressed,

* Lack of real time project tracking and milestone visibility.
* Dependency on manual methods, leading to errors and inefficiencies.
* Difficulty in generating reports and analyzing project progress.
* No automated notification for pending task or delays.
* Poor collaboration between teams due to the absence of a centralized tracking system.

1. **With this project how many problems could be solved?**

**Ans:** Here are the few solutions listed for this project that can be solved after developing the feature,

* Enhances Collaboration by allowing multiple users to monitor progress.
* Provides real time updates which improves visibility for stakeholders.
* Ensures timely notifications and alerts for milestones and deadlines.
* Simplifies report generation, enabling better decision making.
* Automates tracking of project tasks reducing manual dependency.

1. **What are the resources required?**

**Ans:**

**People Resources**

* Project manager (1) , developers (4) , testers (2) , business analysts (1), UI/UX designers (2), IT supports (2), Trainers (1)
* External consultants for specialized support like SME’s, delivery Head if required.

**Technical Resources**

* Development tools, testing software, design tools, servers & database systems, security tools and project management tools.

**Budget & Time Resources**

* Development and training costs, licensing fees, and contingency budget.
* Budget : ₹ [90 Lakhs].
* Time: Six months for development, testing, and deployment.

**Physical Resources**

* Workspace like offices and hardware like computers, servers, and networks.

**Document Resources**

* User manuals for guidance and training materials.

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

**Ans:**

* Minimal process changes were needed where users will need to adapt to automated tracking instead of manual methods.
* Minor adjustments to ensure seamless integration with existing feature in the Sparsh app.
* Short training sessions required for project managers and employees to understand the new feature.

1. **Time frame to recover ROI?**

**Ans:** The expected ROI (return of investment) can be realized within 6 to 8 months post implementation considering increased efficiency, reduced project delays and improved resource utilization.

1. **How to identify Stakeholders?**

**Ans:** We can identify stakeholders by using impact analysis and some of the elicitation techniques like surveys, interview, etc.

* **Primary Stakeholders:** Project Managers, Developers, Business analysts and end users who will actively use the features.
* **Secondary Stakeholders:** Clients, IT support teams, senior management who will benefit from improved project tracking.

**Document - 2: BA Strategy**

* 1. **Steps to follows for project Initiation:**
* Understand the project objectives, goal and scope as well as constraints.
* Conduct requirement gathering sessions with key stakeholders and establish communication channels.
* Follow waterfall methodology with well-defined stages.
* Collaborate with technical teams to ensure alignment with business goals.
* Develop RTM to track changes and ensure stakeholder approval at each project phase.
  1. **Elicitation Techniques:**
* **Interviews –** Conduct one on one with discussion with project managers, clients and development teams to understand the expectations and existing challenges in project tracking.
* **Brainstorming –** Arrange session with business users and IT teams to explore necessary functionalities.
* **Surveys –** Collect insights from end users like employees and clients regarding their needs for tracking project progress.
* **Document Analysis –** Review the existing project tracking process and analyse historical reports to identify gaps.
* **Prototyping –** Create low fidelity mock ups of the proposed feature and gather feedback before development.
  1. **Stakeholder’s analysis (RACI/ILS):**
* Identify the stakeholders like business or project and who are responsible for which role of the project
* List the document for stakeholders which must contain all information about each stakeholders and their roles, impact for this project
* Analyze the stakeholder’s summary based on influence and interest framework, strategy.
* We perform RACI matrix, to ensure proper accountability and role clarity:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **RESPONSIBLE** | **ACCOUNTABLE** | **CONSULTED** | **INFORMED** |
| **Department Head** |  | **Y** | **Y** | **Y** |
| **Client** |  |  | **Y** | **Y** |
| **Project Manager** | **Y** | **Y** |  | **Y** |
| **Development Team** | **Y** | **Y** |  | **Y** |
| **Business Analyst** | **Y** | **Y** |  | **Y** |
| **Tester** | **Y** |  |  | **Y** |
| **IT Team** |  |  |  | **Y** |
| **Designer** | **Y** |  |  | **Y** |

* 1. **What Documents to write:**

**Ans:**

* **BRD (Business Requirement Document)**: It tells the high level business needs and goal of the projects), high level risk and mitigations, assumption and constraints.
* **FRD (Functional Requirement Document)**: It tells the details of the functional and technical solutions of project based on BRD such as visual dashboards, Gantt charts and milestone tracking.
* **NFRD (Nonfunctional Requirement Document):** Covers performance, security and usability constraints.
* **Use Case Document**: It includes Use case diagrams based on users perspective, use case description documents (precondition, post condition, assumptions, etc.) based on functional requirements.
* **RTM (Requirement Traceability matrix):** We ensure all the requirements from BRD and FRD are progressed through the project time. We mark the status of the reports, unique requirements, routing the test cases and deliverables.
* **Handle change request Log:** Track and manages changes in Requirements.
* **Test Cases and UAT document**: To define test case scenario and met the functional requirements. Includes Test case id, definition, output result, input and also UAT scripts for stakeholders to test functionality and UAT sign off from clients.
* **Training and End manuals**: Provide the detailed view of using the application to the users like troubleshooting tips, FAQ’s, step by step instructions
* **Client Project Acceptance form**: It is the overall completion status of the projects in formal document includes client feedback, summary of deliverable.
  1. **What process to follow on to sign off the documents:**
* **Step 1:** Prepare and draft the documents from gathering of requirements and ensure that it validates the stakeholder’s needs and project goal.
* **Step 2:** Share the Documents to PM/stakeholders for internal review and refine the documents based on their feedback.
* **Step 3:** Share the refined documents to stakeholders and set the review timelines.
* **Step 4:** Conduct and arrange the review meeting, ask their concerns and clarify their doubts.
* **Step 5**: Review the document based on stakeholder (incorporate) feedback suggestions and share the refined documents for final review.
* **Step 6:** Share the sign off application document and collect the email approval or sign of the stakeholders.
* **Step 7**: Communicate the sign off document to the project team and share the approved documents with all parties.
* **Step 8**: Store the approved version of documents in repository for future reference.
  1. **How to take approvals from client:**
* After Ensuring of all documents (BRD, FRD, UAT, prototypes) with client suggestions review with your PM and schedule the meeting to clarify their doubts. Refine the document based on their client suggestions.
* Share the updated document along with sign off formal acceptance sheet and request the email acknowledgement stating the approval and track the approval from the system using Project management tool like JIRA.
  1. **What Communication Channels to establish and implement**

Through emails, project management tools like JIRA or trello, scheduling meeting in MS teams, webex, Zoom etc.

* 1. **How to Handle Change Requests**
* **Step 1:** Record the change in LOG (description, request date, stakeholder change request)
* **Step 2:** Acknowledge the request with confirmation of PM and explain the process and its evaluation.
* **Step 3:** Analyse the impact including budget, timeline, resources, scope and share and discuss with stakeholders in meetings,
* **Step 4:** Obtain the approval from decision makers (PM, Department head) and sign off in formal document with them. Revise BRD, FRS and RTM to update the changes.
* **Step 5:** Inform the stakeholders about the changes with the tasks (development team) and monitor the progress to ensure time delivery.
* **Step 6:** Regularly update the change request from LOG to reflect the status and document the change related one for traceability and audits.
  1. **How to update the progress of the project to the Stakeholders**

Conduct Meeting: Having weekly meeting or bi week meeting to convey the issue, risk, progress and gather the feedback from them.

Communications Channels: Emails, Project management tools like JIRA, weekly meetings

* 1. **How to take signoff on the UAT- Client Project Acceptance Form )**
* **Step 1**: Prepare the UAT document (test case scenarios), align with requirements with validity functionality.
* **Step 2**: Schedule the UAT sessions: Inform them how to use the application with the test case for all key stakeholders and coordinate with them.
* **Step 3**: Conduct the UAT sessions: Facilitate the testing of the application features and validate the testing requirements against defined criteria.
* **Step 4:** Use Log issue report to note all the issue, bugs, and feedback during testing session. Address the issues and retest the bugs.
* **Step 5:** Create the UAT Sign off document which includes the test cases executed and status (In progress/ completed), list of resolved issues, stakeholder’s acknowledgement with system requirements.
* **Step 6:** Prepare the client project acceptance form includes project summary, objectives met, deployment for final approval with client comments and signatures.
* **Step 7**: Obtain official sign off from the stakeholders using digital sign with email acknowledgement after their review the document. Store the document in repository**.**

**Document 3- Functional Specifications:**

|  |  |
| --- | --- |
| Project name | Project Progress Tracking Feature in Sparsh Application |
| Customer name | Krishnan |
| Project Version | 2.1.2.1 |
| Project Sponsor | Sanmar Group |
| Project Manager | Gopalan |
| Project Initiation date | 11.03.2025 |

**Functional Requirement specifications:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Req ID** | **Req Name** | **Req Description** | **Priority** |
| FR0001 | Task Progress Status | Each task should have statues like In progress, completed or delayed | 10 |
| FR0002 | Gantt Chart Integration | Graphical Representation of project tasks with dependencies and timelines | 09 |
| FR0003 | Project Dashboard | A centralized dashboard displaying project progress, milestones and key metrics | 10 |
| FR0004 | Comments & Collaboration | Enable users to add comments, updates and discussion on project tasks | 07 |
| FR0005 | Automated Progress Calculation | System should auto calculate project completion percentage based on completed tasks | 09 |
| FR0006 | Milestone Tracking | Ability to define, update and visualize project milestones with timelines | 09 |
| FR0007 | Team member Assignment | Assign specific tasks to team members with role based access | 08 |
| FR0008 | Customizable Progress Indicators | Users should be able to define their own project progress indicators eg color coding, thresholds | 07 |
| FR0009 | Alerts and Notifications | Send real time alerts for approaching deadlines, tasks assignments and delays. | 09 |
| FR0010 | Report Generation | Generate progress projects reports in PDF and Excel Format | 08 |
| FR0011 | Historical Data and Trends | View Past project performance and compare progress trends over time | 07 |
| FR0012 | Mobile Friendly Interface | Ensure the feature is accessible via mobile devices with a responsive UI | 06 |
| FR0013 | Data Export and API | Allow exporting project data to external tools and provide API endpoints for integrations | 08 |
| FR0014 | UAT tracking & Sign OFF | Capture UAT results with approval workflows | 09 |
| FR0015 | Audit Trail and Logs | Maintain a History of all changes made to project progress data for accountability | 09 |
| FR0016 | Role based access control | Define who can edit, view or approve project progress updates | 09 |
| FR0017 | Risk & Issue Logging | To log project risk, issues and mitigation plans | 08 |
| FR0018 | KPI tracking | Define and measure key performance indicators for each project phase | 08 |
| FR0019 | Integration with Existing modules | Seamless integration with other modules in Sparsh such as project finance and resource allocation | 08 |
| FR0020 | Change Request Management | Enable users to submit and track change requests related to project progress | 07 |

|  |  |  |  |
| --- | --- | --- | --- |
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| --- | --- | --- | --- |
|  |  |  |  |

**Document 4- Requirement Traceability Matrix**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Req ID** | **Req Name** | **Req description** | **Design** | **D1** | **T1** | **D2** | **T2** | **UAT** |
| FR0001 | Task Progress Status | Each task should have statues like In progress, completed or delayed | Yes | Yes | Yes | Yes | Yes | YES |
| FR0002 | Gantt Chart Integration | Graphical Representation of project tasks with dependencies and timelines | Yes | Yes | Pending | No | No | No |
| FR0003 | Project Dashboard | A centralized dashboard displaying project progress, milestones and key metrics | Yes | Pending | No | No | No | No |
| FR0004 | Comments & Collaboration | Enable users to add comments, updates and discussion on project tasks | Yes | Yes | Yes | Pending | No | No |
| FR0005 | Automated Progress Calculation | System should auto calculate project completion percentage based on completed tasks | Yes | Yes | Yes | Yes | Yes | YES |
| FR0006 | Milestone Tracking | Ability to define, update and visualize project milestones with timelines | Yes | Yes | Yes | Yes | Yes | Pending |
| FR0007 | Team member Assignment | Assign specific tasks to team members with role based access | Yes | Pending | No | No | No | No |
| FR0008 | Customizable Progress Indicators | Users should be able to define their own project progress indicators eg color coding, thresholds | Yes | Yes | Yes | Yes | Pending | No |
| FR0009 | Alerts and Notifications | Send real time alerts for approaching deadlines, tasks assignments and delays. | Yes | Yes | Yes | Pending | No | No |
| FR0010 | Report Generation | Generate progress projects reports in PDF and Excel Format | Yes | Yes | Pending | No | No | No |
| FR0011 | Historical Data and Trends | View Past project performance and compare progress trends over time | Pending | No | No | No | No | NO |
| FR0012 | Mobile Friendly Interface | Ensure the feature is accessible via mobile devices with a responsive UI | Yes | Yes | Yes | Yes | Pending | No |
| FR0013 | Data Export and API | Allow exporting project data to external tools and provide API endpoints for integrations | Yes | Pending | No | No | No | No |
| FR0014 | UAT tracking & Sign OFF | Capture UAT results with approval workflows | Yes | Yes | Yes | Yes | Pending | No |
| FR0015 | Audit Trail and Logs | Maintain a History of all changes made to project progress data for accountability | Yes | Yes | Yes | Pending | No | No |
| FR0016 | Role based access control | Define who can edit, view or approve project progress updates | Yes | Yes | Yes | Pending | No | No |
| FR0017 | Risk & Issue Logging | To log project risk, issues and mitigation plans | Yes | Yes | Pending | No | No | No |
| FR0018 | KPI tracking | Define and measure key performance indicators for each project phase | Yes | Yes | Yes | Yes | Pending | No |
| FR0019 | Integration with Existing modules | Seamless integration with other modules in Sparsh such as project finance and resource allocation | Yes | Pending | No | No | No | No |
| FR0020 | Change Request Management | Enable users to submit and track change requests related to project progress | Yes | Yes | Yes | Yes | Yes | Pending |

**Document 5- BRD**

V2D2 August 2024

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**Project Progress Tracking Feature in Sparsh Application**

**PRJ - 20201**

**Version: 1.0.1.2.1**

**Sarath Guru Raj**

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4. **Document Revisions**

|  |  |  |
| --- | --- | --- |
| **Date** | **Version Number** | **Document Changes** |
| 05/02/2025 | 0.1 | Initial Draft of the project documentation |
| 11/02/2025 | 0.2 | Updated Project objectives and scope |
| 21/02/2025 | 0.3 | Stakeholder analysis and elicitation techniques |
| 27/02/2025 | 0.4 | Added risk assessment and mitigation strategies |
| 06/03/2025 | 0.5 | Finalized functional requirement and success criteria |
| 11/03/2025 | 0.6 | Updated priority and RTM status |
| 19/03/2025 | 0.7 | Incorporated appendices and Finalized documents |

1. **Approvals**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Role** | **Name** | **Title** | **Signature** | **Date** |
| Project Sponsor | Ram Kumar | Senior Vice President | Ram Kumar | 01/03/2025 |
| Business Owner | Sharma | Director of Operations | Sharma | 01/03/2025 |
| Project Manager | Vikram | IT Project Manger | Vikram | 02/03/2025 |
| System Architect | Neha Srider | Lead Architect | Neha Srider | 02/03/2025 |
| Development Lead | Arjun Rao | Lead Technical Manager | Arjun Rao | 03/03/2025 |
| User Experience Lead | Priya verma | Ux/UI lead | Priya verma | 03/03/2025 |
| Quality Lead | Desai kumar | QA manager | Desai kumar | 04/03/2025 |
| Content Lead | Kavita Raj | Documentation Specialist | Kavita Raj | 04/03/2025 |

1. **RACI Chart for This Document**

The 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]).

The following describes the full list of codes used in the table:

Codes Used in RACI Chart

\* Authorize Has ultimate signing authority for any changes to the document.

Responsible Responsible for creating this document.

Accountable Accountable for accuracy of this documents (for example, the project manager)

Supports Provides supporting services in the production of this document

Consulted Provides input (such as interviewee)

Informed Must be informed of any changes

**RACI Chart**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Position** | **\*** | **R** | **A** | **S** | **C** | **I** |
| Ram Kumar | Project Sponsor | X |  | X |  | X | X |
| Sharma | Business Owner | X |  | X | X | X | X |
| Vikram | Project Manager | X | X | X | X |  | X |
| Neha Srider | System Architect |  | X |  | X |  | X |
| Arjun Rao | Development Lead |  | X |  | X |  | X |
| Priya verma | User Experience Lead |  | X |  | X |  | X |
| Desai kumar | Quality Lead |  | X |  | X |  | X |
| Kavita Raj | Content Lead |  | X |  | X |  | X |

1. **Introduction**
   1. **Business Goals**

The primary goal of this project to enhance the Sparsh application with Project Progress features that enables users to track real time updates, monitor milestones and ensure seamless integration among stakeholders. By implementing this features the organization aims to improve project efficiency and allows teams to make data driven decision ensuring better resource utilization and timely project completion, also integrating with real time monitoring will provide a comprehensive view of project health, minimizing risk and bottlenecks.

* 1. **Business Objectives**
* **Transparency:** Enhancing clear vision by enabling team members to update and monitor tasks in real time
* **Dependency:** Reducing dependency on external tools or manual spreadsheets for milestone tracking.
* **Communication:** Streamlining contact across various project teams by ensuring centralized project status visibility.
* **Automated Notifications:** Allowing automated messages and alerts to keep stakeholders informed about project updates.
* **Interaction:** Establishing an intuitive and interactive interface for tracking project progress.
* **Analytics:** Providing project managers with analytical insights to identify delays, risks and dependencies proactively.
* **Alignment:** Allows the project tracking system aligns with organizational compliance and reporting standards
  1. **Business Rules**
* Milestone tracking should be automated based on task completion.
* Access Control should be role based such as admins, manager, user
* All project updates must be logged for audit purposes.
* Project data must be backed up every 12 – 15 hours to prevent data loss
* Notifications must be sent for task completion or delays either through any communication channels.
* User can edit their recent entries within a set timeframe of 1 minute and should not be able to delete past project updates which should be readability
* Only authorized users can update project progress
  1. **Background**

Currently, project progress tracking is done manually, the lack of centralized system also make it challenging to monitor dependencies ,managing resource allocation which leading to inefficiencies, communication gaps and delays in updating progress result in inaccurate reporting and hinder effective decision making. Project managers and teams often rely on multiple sources to track project status, making it difficult to maintain consistency.

Now, the new feature will provide a structured, automated way to monitor project progress and milestones, eliminating manual errors and ensuring a more efficient workflows

* 1. **Project Objective**
* Generate automated project reports and dashboards for better visibility
* Improve collaboration between different teams by providing a shared project tracking system
* Reduce errors caused by manual tracking and enhance project transparency
* Ensure seamless integration with other modules within the Sparsh app
* Track project status and milestone progress in real time
  1. **Project Scope**

The scope of this project includes the development and implementation of a project progress feature in the Sparsh Application to streamline project tracking, enhance collaboration and provide real time updates.

This feature aims to replace manual tracking methods, reduce errors and improves overall project efficiency. The system will ensure all the stakeholders have access to real time progress reports, milestone tracking and alerts to facilitate project execution also ensures user friendly navigation and secure access

* + 1. **In Scope Functionality**
* **Role based Access Control :** Allows different level of access for users.
* **User Friendly:** Drag and drop task management interfaces
* **Real Time tracking:** Development of real time project progress tracking dashboard with graphical representation
* **Automated milestone tracking:** Implementation of task completion
* **Automated Notifications and alerts:** For project updates, delays and task completions.
* **Data Security Protocols:** To ensure the safety of project related information.
* **Customized reports:** Generation of reports like PDF, Excel with project insights and key performance indicators (KPI’s)
* **Audit Logging System:** To maintain records of changes and updates
* **Compatibility:** Mobile and web access for seamless across devices
  + 1. **Out Scope Functionality**
* **Third Party Management:** Integration the tools such as JIRA, Trello or Asana
* **Workflow Automation:** Custom the workflow beyond milestone tracking and basic reporting
* **Voice Chat:** Voice command based updates for task progress
* **External Resources:** Integration of other resources management and budgeting modules.
* **API’s:** Development of Custom API’s for third party software integration beyond the Sparsh ecosystem

1. **Assumptions**

* All Stakeholders will be available for timely communication and feedback during each project phase
* Users of Sparsh application will have basic familiarity with digital tools for tracking progress
* The technology stack used for this application is robust enough to support the new feature without requiring a major system overhauling
* All data related to project progress is available which can be integrate from various sources without major data migration issues into Sparsh App.

1. **Constraints**

* **Budget:** The project must adhere to a predefined budget for development and deployment
* **Time Limitations:** Feature needs to be developed within a set timeframe
* **Data Privacy & Compliance:** Any data handling should comply with local regulation and internationals standards especially when dealing with client data
* **Technical Constraints:** the new feature must be integrated into the exiting module, which might have architecture or compatibility limitations.

1. **Risks**

**7.1 Technological Risks**

* **Integration Risk:** Integration issues with existing module may affect the performance and reliability of progress tracking feature
* **Data Synchronization Risk:** Failure might occur when combines multiple sources for real time progress tracking, leading to incomplete reporting

Therefore, it needs High extra costs for re architecture, here come some mitigation ways,

* **Mitigation:** By running thorough testing during the development phase to ensure integration in smooth and secure

**7.2 Skills Risks**

* **Training Support:** Insufficient training could results ineffective of end users in the application
* **Executive Support:** Staff turnover lead to gaps in knowledge transfer impact the project timelines

Therefore, it needs medium costs to train and recruit the resources

* **Mitigation:** By investing in training and knowledge transfer or hiring specialists for critical areas.

**7.3 Political Risks**

* **Government Regulations:** Change in government policies could impose additional compliance limitations on the tracking feature in the application
* **Department Conflicts:** Scope and functionalities of the new feature potentially leading to scope creep or delay

Therefore, it needs low to medium costs

* **Mitigation:** By clearly defining the scope and maintain alignment with organization goals.

**7.4 Business Risks**

* **Client Dissatisfaction:** The new feature could be delayed resulting in lost competitive advantage or client dissatisfied
* **Misalignment needs:** Between the progress tracking tool and business goals leading to low adoption rate and inefficient resources

Therefore, it needs medium to high costs for wasted investment or reputation

* **Mitigation:** Conducting frequent user feedback sessions to ensure the tracking feature aligns with business goals

**7.5 Requirements Risks**

* **Conflict Requirements:** Unclear requirement from different stakeholders could result in a feature that does not conditioned the key needs
* **Undetailed documentation:** Lack of detail documentation regarding the exact specifications of the progress tracking feature causing misalignment in development.

Therefore, it needs High costs leads to poor feature quality, time delays

* **Mitigation:** Validating and revisiting requirements with stakeholders frequently to ensure they are aligned.

**7.6 Other Risks**

* **Economic Factors:** External marker conditions could affect the project budget or to proceed with the development of the feature
* **External dependencies:** Third party software or vendors could face issues that impact the progress tracking features developments

Therefore, it needs medium to high for reduced user engagement or delays

* **Mitigation:** Involve users early in the testing phase and providing ongoing support and training.

1. **Business Process Overview**

Let’s see the overview of the business process both in current state and proposed changes, outlining how the project progress tracking feature will improve the existing processes.

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

Refers to the current way projects are tracked and managed before implement the new feature in the Sparsh application such as manual method, use disconnected tools leading to inefficiencies, error and lack of visibility

**Process Overview:**

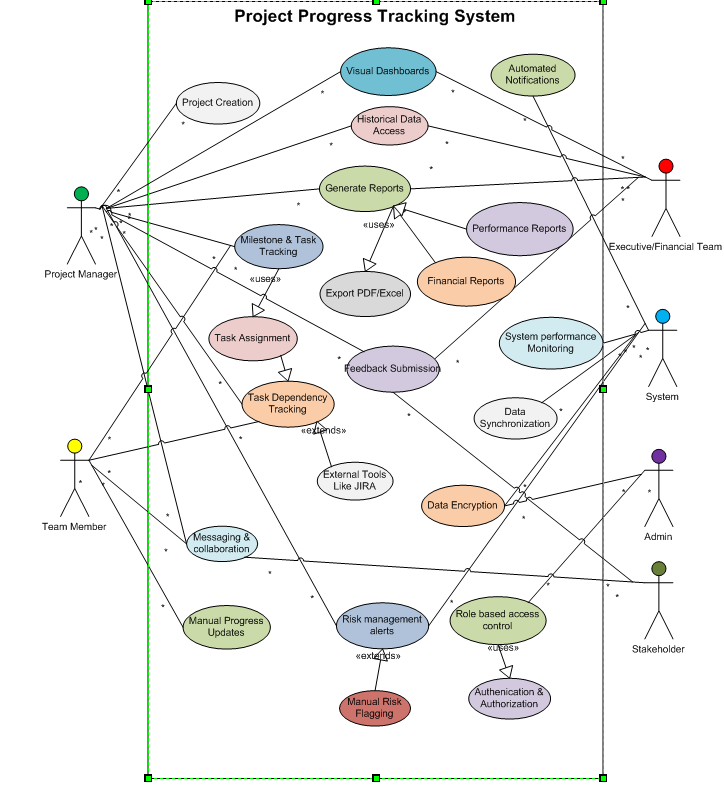
1. **Project Initiation:** The information is done manual input into spreadsheets or other tools which might not provide real time updates leads to delay in tracking progress.
2. **Manual Data Entry:** Project manager or other stakeholders manually update the status of the various tasks where data will be updated periodically during the meetings which can cause communication gaps.
3. **Tracking Milestones:** Milestones and Progress are typically tracked vis static reports which results outdated and causes issues where addressed lately
4. **Reporting:** Reported are generate manually by extracting data from multiple sources and might share via email but the information not updated by the time they reviewed.
5. **Project Monitoring:** No centralized dashboard or integrated system is available for comprehensive project monitoring
6. **Stakeholder communication:** Clients or upper management are updated via manual reports leads to miscommunication are not updated in real time which reflect the current project status
   1. **Proposed Recommendations (TO-BE)**

The changes and improvements made by the new feature in the Sparsh application will aim to automate, streamline and centralize project tracking, improving visibility, accuracy and communication.

##### **Process Overview:**

1. **Automated Data Collection:** The project progress will automatically update from various sources such as task management system in the application which reduce human error and reduce the manual data entry
2. **Real Time Tracking:** System will provide real time , dynamic updates of project milestone and overall progress where stakeholders will stay updated without waiting for scheduled reports
3. **Centralized Dashboard:** A comprehensive dashboard offers visual representations of project progress, milestone or potential risks to show customize information relevant to specific stakeholders
4. **Advance Reporting and Monitoring:** Reporting will be automated by ensures that reports are up to date and accurate reflect the current state of the project. Also the system will include a proactive monitoring feature that flags any issues before they become critical.
5. **Automated Notifications and Alerts:** System will send notifications to relevant stakeholders when milestones are reach of if they are any issues that need attention and alerts are set for upcoming deadlines or critical task to ensure teams stays on stack
6. Business Requirements

|  |  |  |  |
| --- | --- | --- | --- |
| **Req ID** | **Req Name** | **Req Description** | **Priority** |
| BR001 | Project Creation | System must allow project managers to create and initiate new projects within application | High |
| BR002 | Real-Time Tracking | System must support real-time progress tracking for tasks and milestones, updated automatically from connected tools. | High |
| BR003 | Manual Progress Updates | System must allow project team members to manually input progress updates. | Medium |
| BR004 | Visual Dashboard | System must display project progress on a visual dashboard with graphs and charts showing completion status. | High |
| BR005 | Automated Notifications | System must send automated notifications for task completion, delays, and risks. | High |
| BR006 | Customizable Reports | System must allow generation of detailed progress reports and exporting in formats like PDF, Excel, and CSV. | Medium |
| BR007 | Role-based Access Control | System must support role-based access control for stakeholders to access relevant project data. | High |
| BR008 | Milestone Tracking | System must allow project managers to set and track milestones for each project phase. | High |
| BR009 | Task Dependency Tracking | System must allow users to track and update project dependencies and interdependencies. | Medium |
| BR010 | External Tool Integration | System must support integration with external project management tools like Trello and Jira. | High |
| BR011 | Multi-language Support | System must support multi-language options for users across different regions. | Low |
| BR012 | Data Encryption | System must encrypt sensitive project data like financials, client information both in transit and at rest. | High |
| BR013 | Performance and Scalability | System must handle at least 1,000 concurrent users without performance degradation. | High |
| BR014 | Mobile and Desktop Accessibility | System must be accessible on both mobile and desktop platforms. | Medium |
| BR015 | Alerts for Critical Tasks | System must provide alerts for critical tasks nearing deadlines. | High |
| BR016 | User Interface Customization | System should allow for customizable user interfaces for different stakeholder roles. | Low |
| BR017 | Project Feedback | System must allow stakeholders to provide feedback on progress and milestones. | High |
| BR018 | Automated Risk Management | System must automatically flag risks or delays based on project progress data. | Medium |
| BR019 | Data Synchronization | System must synchronize data across multiple platforms for consistency. | High |
| BR020 | Historical Data Access | System must allow users to view historical project data for trend analysis and reports. | High |
| BR021 | Task Progress Visualization | System should offer visual indicators for task completion | Low |
| BR022 | Task Assignment Tracking | System must track and display task assignments and their completion status in real-time. | High |
| BR023 | Custom Alerts | System should allow users to set custom alerts for specific project milestones or tasks. | Medium |
| BR024 | Reporting Customization | System must allow for customized reports based on user roles and project criteria. | High |
| BR025 | Stakeholder Communication | System should enable project managers to communicate with team members and clients via in-app messaging. | Medium |



1. **Appendices**
   1. **List of Acronyms**
      * + **GUI –** Graphical User Interface
        + **KPI –** Key Performance Indicator
        + **QA –** Quality Assurance
        + **BRD –** Business Requirement Document
        + **UAT –** User Acceptance Testing
        + **FRD –** Functional Requirement Document
        + **NFRD –** Nonfunctional Requirement Document
        + **CRM –** Customer Relationship Management
        + **UI /UX –** User Interface / User Experience
        + **API –** Application Programming Interface
        + **ERP –** Enterprise Resource Planning
   2. **Glossary of Terms**
      * + **Progress Tracking -**  Process of monitoring and reporting the status of various tasks
        + **Real Time Tracking –** Continuous Monitoring and reporting of progress as it happens without delays
        + **Role Based Access Control –** A security mechanism that restricts system access based on a user’s role within the organization
        + **Dependency –** Relationship between two task where one must be completed before the other can start
        + **Risk management –** Identification, assessment and prioritization of risk followed by coordinated efforts to minimize or control their impact
   3. **Related Documents**

* Sparsh Application Technical Design Document
* Change Management Plan Document
* BRD
* Project Plan document
* Testing application document
* Sparsh application User Manual
* Risk Management Document
* UAT plan document