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# INTRODUCTION

## Purpose

This document will serve as a guide for the process of developing a Content Management System (CMS) for schools located in Indigenous reserves in Canada. Through an analysis of management requirements of the project, it will provide a structured roadmap of the approach to deliver the project. This document aims to provide clarity for readers to facilitate a successful development and implementation of the CMS.

## Document Overview

This document will go over the development strategy of the CMS project. It will first provide a breakdown of the stakeholders involved and the business analysis approach. From that, it will provide a roadmap structure for stakeholder engagement, communication, and collaboration. Then the Requirements management plans and finally a risk analysis and mitigation strategies of the project.

## Project Overview

In response to the unique needs of educational institutions within Indigenous reserves in Canada, our organization is embarking on a collaborative initiative with a local school to develop a specialized Content Management System (CMS). This project is designed to address the specific requirements of tracking student attendance and grades, with a keen focus on enhancing educational processes and data management within these communities.

Central to the success of this initiative is the cultivation of a user-friendly and efficient CMS that aligns seamlessly with the operational workflows of schools in Indigenous reserves. The intended users of this system encompass educators, administrators, and other stakeholders within these communities, emphasizing a collaborative and user-centric approach to system design. By leveraging our organization's expertise in technology and educational support, we aim to empower these schools with a robust tool that streamlines administrative tasks, promotes data accuracy, and contributes to the overall improvement of educational outcomes.

As we embark on this venture, our commitment to cultural sensitivity, collaboration, and the highest standards of technological innovation will drive the successful delivery of a tailored CMS solution. This initiative not only signifies a technological advancement but also underscores our dedication to fostering positive educational experiences in Indigenous communities, thereby contributing to the broader landscape of educational excellence in Canada.

# BUSINESS ANALYSIS APPROACH

This section will go over the approach that has been selected to complete the business analysis work, as well as why it was selected.

## Purpose

The objective of the Business Analysis Approach Plan is to evaluate and determine the best strategy that aligns best with the project's strategic aims and the context in which it will be executed. This approach informs the choice of tools, methodologies, and procedures for the project's progression.

## Description of the approach

Scrum will be applied to all elements of the project.

Scrum involves a small, cross-functional team working in short cycles called Sprints, typically lasting two to four weeks. The team, including a Product Owner, Scrum Master, and development team, collaborate to define what needs to be done in a prioritized list called the Product Backlog. At the start of each Sprint, the team selects a portion of the backlog and commits to completing the tasks in it. They then work on these tasks, holding daily meetings to keep everyone informed. At the end of the Sprint, the team delivers a potentially shippable product increment and review their process of creating it. Regular feedback from stakeholders and continuous improvement through retrospectives help refine the product in subsequent Sprints.

### Rationale:

Scrum is effective in managing complex projects and delivering value quickly. It provides a framework that fosters collaboration, transparency, and adaptability. Scrum's short, time-boxed iterations (Sprints) allow teams to respond quickly to changing requirements, ensuring flexibility in dynamic environments. The framework also promotes clear communication and shared understanding among team members and stakeholders. Overall, Scrum mitigates the risks a development team may face when dealing with complex projects in which the scope may not be fully understood initially.

### Roles:

The project will involve three key roles for the development team:

* The **Scrum Master** oversees the process throughout. They ensure the project is running through and ensure the team focused throughout. The business analyst will conduct this role.
* The **Product Owner** is responsible for representing the organization’s needs. They make sure the development team delivers value to the business by defining and prioritizing the features that will appropriately add value to the product.
* The **Development team** are a group of subject matter experts responsible for delivering the product. They collaborate and self organize in order deliver value to the company.

### Process:

1. **Project Initiation:**

The project will commence through a meeting with the Product Owner, Scrum Master, and development team. In this meeting the team will produce a Product Backlog. The Product backlog is prioritized list of features the product should include based on what the Product Owner wants and what the development team can accomplish. The Product Backlog is created through a list of *user stories.* User stories are a list of requirements for the product to satisfy diverse types of the product users. Thus, the user stories are also a list of features for the product. The meeting is complete the Team has determined that the Product Backlog meets their Definition of Ready. The Definition of Ready means that the Product Backlog meets the informational standards to be able to use for future sprints. This meeting sets the stage for future meetings where the team will select items from the Product Backlog to work on in iterations (or sprints).

\**Note:* This meeting may or may not also be when the team are introduced to one another. If so, this meeting may also when they start forming team dynamics.

The collaborative nature of this meeting helps ensure s the entire team has a shared understanding of the product vision, goals and the work that needs to be done, promoting transparency and alignment within the Scrum team. The absence of a clear project vision and defined roles will result in a lack of direction and understanding among team members. Thus, without a Product Owner to represent those organizational needs with, would be ambiguity regarding project goals and priorities. This could lead to a disorganized and inefficient development process, hindering the development team's ability to deliver a valuable product increment in each Sprint. This would also result in the development team assuming project details and producing their own ideas about it. This would affect the value of the project increments they deliver as they would not have understood organizational needs.

1. **Sprint Planning Meeting:**

The Sprint Planning meeting is a reoccurring meeting where the team will come together to define a Sprint Backlog. A Sprint Backlog is a version of the Product Backlog in which the features for the following sprint will be defined. The team work together increment the features into smaller tasks to complete for the following sprint.

Sprints may only last up to a total of 2 weeks or 4 weeks. Depending on the time the team has allotted, the sprint planning meeting may only take to a total of 4 hours (2-week sprint) or 8 hours (4-week sprint).

A Sprint Planning meeting sets the foundation for a successful and focused Sprint. It enables the team to collaboratively define and commit to the work they will undertake during the upcoming Sprint. By aligning the team with the priorities set by the Product Owner, discussing the scope of the upcoming Sprint, and breaking down tasks, the Sprint Planning meeting fosters a shared understanding among team members. Thus, this meeting enhances communication, establishes a clear plan, and promotes a collective commitment to delivering a potentially shippable product. The time-boxed nature of Sprint Planning also ensures efficiency and allows the team to adapt and respond to changing requirements effectively.

Without a sprint planning meeting, the team would not have a clear understanding of what the end goal of each sprint will be. They would not have a clear roadmap of how they would even achieve the feature they plan to take on from the Product Backlog. This may result in inefficient and delayed results and may hinder the value delivered at the end of every sprint, potentially causing the entire timeline of the project to be delayed. Thus, the sprint planning meeting is an important part of the framework of the process to delivering a high value product and efficiently at it as well.

1. **Sprint Execution:**

Once a plan has been laid out, the sprint will begin. The development team will complete their tasks to curate a potentially shippable product increment. Each day they will participate in daily stand-up meetings to monitor their progress and address any impediments in the process. The team may also refine their user stories set based evolving needs they learn of during the sprint. They may collaborate with other stakeholders to assess their products and gain stakeholder feedback as well, including the considerations they will have to take to ensure a proper change management.

During the Sprint, the team is working to transform prioritized backlog items into a potentially shippable product increment. This process not only delivers tangible value at the end of each iteration but also allows for frequent inspection and adaptation. In the brief time frame of a Sprint, usually two to four weeks, teams can quickly respond to changing requirements, gather user feedback, and make course corrections. This ensures that the product also evolves in alignment with stakeholder needs. Without this step, there would not only be no product to deliver, but the team would also not be able to pivot their delivery with changing stakeholder needs.

1. **Sprint Review & Retrospective:**

Once the product meets the Definition of Done, a checklist of items that categorizes the product increment as complete, or the sprint timebox has expired, the team will hold a meeting with stakeholders to review their results. During this meeting, the team will go over what they have produced and gain feedback from the stakeholders. This meeting may also hold a Product Backlog refinement process if the Product Owner decides to add or take out features or reprioritise them with the team.

Once complete, only the team will then gather to discuss their process during the sprint, including what went right and what went wrong, and notes for future sprints or projects.

The Sprint Review Meeting is an opportunity for the team to gain clarity on the value of the product increment they have produced based on stakeholder buy-ins.’ Stakeholders are the reason are project is being taken up. There is some kind of need of theirs am the project aims to fulfill. Thus, If the showcase is a success, the team knows that they are on right track to producing a valuable and highly usable product. If not, the team will now be aware that they need to pivot their approach in to deliver a valuable product. Thus, collaborating with stakeholders allows the team to gather feedback to ensure they are in alignment with business goals. This transparency also enhances collaboration and fosters a shared understanding between the development team and stakeholders.

The Sprint Retrospective, on the other hand, promotes a culture of continuous improvement and enabling the team to adapt and enhance their practices in the next Sprint. By combining the external feedback from the Sprint Review with the internal insights gained from the Retrospective, Scrum teams can refine their approach, optimize their workflow, and consistently deliver higher value products with each iteration. These ceremonies contribute to the efficiency, and overall success of the development process. Without a proper sprint retrospective, the team would lack a clear understanding of the mishaps or areas of improvement for the next sprint, making them vulnerable to repeat past mistakes causing unnecessary delays, instead of growing past them.

\*This process from sprint planning to sprint review & retrospective (steps 2-4) will be iterated based on what the team’s planning to complete the project within their given time.

1. **Project Release & Closure:**

After each sprint review meeting with the stakeholders, the product will be released if the stakeholders approve it. If not, the team will reevaluate their sprint process and move the item for the next sprint. This process will continue incrementally with every sprint until a full product is created that has been approved by the stakeholders, at which point the project is complete. Yet, while the project delivery may require user training, training documentations, and ongoing maintenance. At the last meeting, the Team will go over their process and celebrate their wins as well.

Project closure ensures that all objectives have been met and stakeholders are satisfied with the delivered product. Without it, users would gain a product that they would not understand exactly how to use because they would be missing key user information. Thus, the product would not be very usable after. The project closure step also allows the Team to celebrate their successes. This fosters a culture of growth and may motivate the team by recognizing their efforts.

## 

## 

## Work Schedule & Deliverables

The table below outlines key activities in the schedule for requirements analysis, communication, and management. It covers all four phases of the Scrum adopted for this project and aligns with the Project Management Plan.

*Note: This is not an actual work schedule.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Phase** | **Deliverable** | **Activity** | **Frequency** |
| Project Initiation | Product Backlog | Define high-level requirements and user stories. | Once |
| Develop a prioritized Product Backlog with the Product Owner. | Once |
| Establish release goals and timelines with stakeholders. | Once |
|  |  |  |  |
| Sprint Planning\* | Sprint Backlog | Select work for the upcoming Sprint | Once every Sprint |
| Define Sprint goals | Once every Sprint |
| Create a Sprint Backlog. | Once every Sprint |
|  |  |  |  |
| Sprint Execution\* | Potentially Shippable Product (or Product Increment) | Conduct Daily Stand-up meetings | Daily |
| Develop product | Once every Sprint |
| Conduct product testing | Once every Sprint |
| Update and integrate features | Once every Sprint |
| Refine Product backlog (Reprioritize and add details) | Anytime during Sprints |
|  |  |  |  |
| Sprint Review\* | Stakeholder Feedback & Buy-in | Demonstrate completed work to stakeholders. | Once every Sprint |
| Gather feedback on the product increment. | Once every Sprint |
|  |  |  |  |
| Sprint Retrospective\* | Process information | Reflect on the Sprint and identify areas for improvement | Once every Sprint |
| Define action items to enhance team processes. | Once every Sprint |
|  |  |  |  |
| Project Closure | Product Delivery (including training) | Create training materials | Once |
| Train users | Once |
| Deploy product | Once |
| Continue product maintenance | Once |

*Note: Phases That have been marked with a (\*) are iterative and are susceptible to repeat more than once.*

## 

## Requirements Resourcing

The following table outlines the resources required for this project to be completed successfully.

|  |  |  |  |
| --- | --- | --- | --- |
| **Resource Type** | **Resource** | **Required From Date** | **Required To Date** |
| Human Resources | Project Sponsor | October 1, 2024 | March 31, 2025 |
| Project Director | October 1, 2024 | March 31, 2025 |
| Project Manager | October 1, 2024 | March 31, 2025 |
| Business Analyst | October 1, 2024 | March 31, 2025 |
| Subject Matter Experts | October 1, 2024 | March 31, 2025 |
| Project Sponsor | October 1, 2024 | March 31, 2025 |
| System Developers | October 1, 2024 | March 31, 2025 |
| Testers | October 1, 2024 | March 31, 2025 |
| Trainers | January 1, 2025 | February 28, 2026 |
|  |  |  |  |
| Physical Resources | Portable Computers for Team Members | October 1, 2024 | March 31, 2025 |
| Projector for Meetings and Presentations | October 1, 2024 | March 31, 2025 |
| Training Room with Workstations for Training Sessions | February 1, 2025 | February 28, 2026 |
|  |  |  |  |
| Software Resources | Requirements Management Software | October 1, 2024 | March 31, 2025 |
| Development Tools and Software | October 1, 2024 | March 31, 2025 |
| Testing Tools | October 1, 2024 | March 31, 2025 |
|  |  |  |  |
| Documentational Resources | Access to Educational Materials if required for the Indigenous communities | October 1, 2024 | March 31, 2025 |
| Resources for ensuring data security and compliance with privacy regulations | October 1, 2024 | March 31, 2025 |

# STAKEHOLDER ENGAGEMENT

This section will go over the roles and responsibilities of each team member and their stake the project. It features a stakeholder matrix that outlines stakeholder interests, attitudes, and responsibilities, a stakeholder influence chart.

## Purpose

The stakeholder engagement plan aims for team members to understand how each stakeholder ties into the project and what they need from it. It will help gain an understanding of the motivations and influence a stakeholder has so that we may propose a project that will aim to benefit them. Without it, the project would lack clarity on the ultimate purpose of why the project is being taken-up in the first place. It would miss the needs of each stakeholder regarding the project, and thus creating project that is not valuable.

## Requirements Roles & Responsibilities

The purpose of the Requirements Roles and Responsibilities table is to ensure that all project team members are aware of the duties and accountabilities of team members. It will allow team members to gain an idea of stakeholder needs and motivations.

The table below describes how requirements management responsibilities will be distributed among project team members. This table currently is susceptible to changes however as the process continues and more information is being learned.

|  |  |
| --- | --- |
| **Requirements Role** | **Requirements Responsibilities** |
| [stakeholder role] | [ List of specific duties, tasks, and expectations associated with each role] |
| Project Sponsor | Ensure that the project aligns with the broader strategic goals and objectives of the organization.  Provide guidance and support to the project manager and the project team, helping overcome obstacles and ensuring resources are available.  Communicate project progress and key updates to other stakeholders, including higher management and relevant departments, fostering transparency, and understanding. |
| Project Director | Providing strategic direction and oversight to ensure that the project aligns with organizational objectives and goals.  Leading and coordinating the efforts of the project team, ensuring effective communication, collaboration, and successful project delivery.  Engaging with key stakeholders, including executives and project sponsors, to communicate progress, address concerns, and maintain alignment with organizational priorities. |
| Project Manager | Ensure that the project meets its objectives within the approved timeline and budget.  Engage with and manage stakeholders, providing regular communication, addressing concerns, and ensuring alignment between project goals and organizational objectives.  Identify, assess, and mitigate project risks. |
| Business Analyst | Collaborate with stakeholders to gather, document, and analyze business requirements, ensuring a clear understanding of needs and objectives.  Translate gathered requirements into well-defined user stories, use cases, or specifications that serve as a foundation for development.  Engage with stakeholders to manage expectations, address concerns, and ensure that the delivered solutions meet business needs.  Facilitate effective communication and ensuring alignment between business goals and technical implementation.  Identify opportunities for process improvement within the organization by analyzing existing workflows and systems.  Work collaboratively with the team to solve business problems, offering insights and recommendations for enhancing efficiency and effectiveness. |
| Subject Matter Experts | Collaborate with the team to ensure a comprehensive understanding of domain-specific requirements and intricacies.  Assist in defining and refining project requirements by offering expert insights into domain-specific needs.  Participate in the review and approval of project documentation, ensuring that deliverables align with the organization's goals and industry standards.  Provide feedback on proposed solutions and ensure they meet the criteria necessary for success in the specific domain. |
| System Developers | Write and maintain code to implement system requirements.  Collaborate with the development team to ensure the successful delivery of software components.  Conduct unit testing to ensure the quality and functionality of developed components.  Identify and resolve software defects through systematic debugging and troubleshooting. |
| System Architect | Develop and document a comprehensive system architecture that aligns with project requirements.  Collaborate with other stakeholders, such as system developers and testers, to address technical challenges and ensure a coherent and scalable solution. |
| Testers | Create detailed test cases and scenarios based on functional and non-functional requirements.  Execute test cases to verify the functionality and performance of the software.  Report defects and issues, providing clear and concise information to aid developers in resolution.  Work closely with developers, business analysts, and other team members to ensure a shared understanding of requirements and test scenarios. |
| Trainers | Create comprehensive training materials, including user guides and documentation, tailored to the specific features and functionalities of the Content Management System (CMS).  Facilitate training sessions for end-users, ensuring effective communication of CMS usage, features, and best practices.  Provide ongoing support to users after the system is deployed, addressing queries, clarifying doubts, and assisting with any challenges related to CMS usage. |

## Stakeholder Matrix

The stakeholder matrix is allowing team members to understand current stakeholder attitudes towards the projects, the interests, and their constraints in terms of their responsibilities. This table allows team members to better pivot the project to meet more stakeholder needs.

Below is iteration one of the stakeholder matrixes as the project progresses, roles will become better defined and the matrix will expand to include a full range of key project stakeholders.

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Attitudes** | **Interests** | **Constraints** |
| [Stakeholder name (if known) – Role] | [Feelings regarding the change (project) and why] | [What stakeholder is seeking from the project to ensure their requirements are addressed] | [Limitations that stakeholders may impose on the project] |
| Project Sponsor | Enthusiastically supports the project vision and goals, advocating for its alignment with organizational objectives. | Project success leading to increased market share. | Adherence to budget and timeline constraints. |
| Project Director | Proactively oversees project activities, ensuring alignment with strategic objectives. | Successful completion of the Claims Management System (CMS) project. | Managing resources efficiently and mitigating risks effectively. |
| Subject Matter Expert: Member Enrollment Management System (MEMS) | Cautiously optimistic about integrating MEMS with the new CMS, emphasizing data accuracy and system synergy. | Smooth integration of MEMS with the new CMS for enhanced functionalities. | Maintaining the integrity and security of Member Enrollment Management System data. |
| Subject Matter Expert: Claims Processing | Analytically assesses the impact of CMS on claims processing, emphasizing efficiency and accuracy. | Optimized claims processing through the implementation of the new CMS. | Ensuring compliance with industry regulations and standards in claims processing. |
| Subject Matter Expert: Customer Experience | Emphasizes the importance of user-friendly features in the CMS, actively participating in user-centric design discussions. | Enhanced user experience and satisfaction with the new CMS. | Ensuring that the CMS aligns with customer expectations and usability standards. |
| Member | Actively engages with the project, expressing openness to change and a desire for improved educational processes through the CMS. | Access to accurate attendance and grade information for personal and child's benefit. | Continuous access to educational data and user-friendly interfaces in the CMS. |
| COTS Claims Management Software Vendor | Seeks to understand the unique requirements of Indigenous communities, tailoring the CMS to align with their cultural and operational needs. | Successful implementation of the CMS in Indigenous schools. | Adapting the COTS software to meet specific cultural and operational constraints. |

## Stakeholder Influence Chart

The stakeholder influence chart is a tool that may help project members understand the importance of each stakeholder regarding the influence they have on a project. Understanding their influence allows members to gauge project approvals based on decision making powers of each stakeholder. Without it, members may not understand who is truly able to impact the change they are trying to make in terms of the project.

Below is iteration one of a stakeholder Influence chart. As the project progresses, roles will become better defined and the matrix will expand to include a full range of key project stakeholders.

**Power Rating: 1 - Weak 2 - Medium 3 - Strong**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **​** | | **Position & Core Functions of the Stakeholder​** | | | **​** | |
| **STAKEHOLDER** | **LEGITIMATE POWER**  (Institutional position, ascribed or acquired rights)​ | | **RESOURCE POWER​**  (Knowledge, expertise, and capabilities, & material resources) | **CONNECTIONS​**  (number & quality of relationships to other actors**)** | | **KEY STAKEHOLDER**  **INVOLVEMENT**  **DISCUSSION​** |
| [Stakeholder name (if known) – Role] | [1-3 institutional power rating] | | [1-3 capital power rating] | [1-3 relationship power rating] | | [Why you gave them that rating based on your knowledge about their role] |
| Project Sponsor | **3** | | **3** | 2 | | Strategic decision-making, budget approval, organizational goals |
| Project Director | **3** | | 2 | **3** | | Project planning, execution, coordination |
| Project Manager | **­3** | | **3** | 2 | | Day-to-day project management, team coordination |
| Business Analyst | 1 | | **3** | **3** | | Requirements analysis, communication with stakeholders |
| Subject Matter Experts | 1 | | **3** | 2 | | Providing expertise on MEMS, Claims Processing, Customer Experience |
| System Architect | 1 | | **3** | 2 | | Designing system architecture, providing guidance |
| System Developers | 1 | | 2 | **3** | | Coding, development, implementation |
| Testers | 1 | | 2 | **3** | | Conducting testing, identifying issues |
| Trainers | 1 | | 2 | **3** | | Providing training sessions, user support |

### Influence Graphic

Once complete, we may create a visual representation of the stakeholder influence chart using a Venn diagram. This diagram will help gain clarity on our key stakeholders who have.

A diagram of a company

Description automatically generated

Stakeholders S1 to S4 are key stakeholders.

They have at least two important core functions that distinguish them as outstanding.

Here is an example of one using the stakeholder influence chart above.



# COMMUNICATIONS MANAGEMENT PLAN

This section outlines how communication will be facilitated during the project and why that approach has been taken.

## Purpose

The Communication Management Plan aims to ensure that all stakeholders involved in requirements are aligned with the agreed-upon approach for communicating requirements throughout the project. This minimizes the impact potential risks may impose on the project because it organizes well coordinated responses for various topics.

## Communication Strategy

Scrum facilitates communication throughout its process consistently. It does so through the incorporation of its artifacts, and ceremonies into its process. These items help stakeholders and team members better understand what is going on in the project.

Some ceremonies include:

**Daily Stand-up Meetings (Daily Scrum):**

The daily stand-ups are brief, daily meetings where team members share updates on their progress, plans for the day, and any impediments they are facing. This allows the team to solve problems as they arise and gain an understanding of where the project is standing.

**Sprint Planning Meetings:**

Sprint Planning meetings occur at the beginning of each sprint. It involves the Product Owner and the development team. The team collaborates to plan the work that will be done for the upcoming sprint. This ensures a shared understanding of the sprint’s goals and priorities.

**Sprint Review:**

At the end of each sprint, the team conducts a Sprint Review to showcase the completed work to stakeholders. This meeting not only facilitates transparency between stakeholders and developers, but also provides an opportunity for stakeholder’s feedback which helps better align the project to the organization’s values.

**Sprint Retrospective:**

The Sprint Retrospective, held at the end of each sprint, allows the team to reflect on the sprint and discuss what went well and what could be improved. This fosters open communication within the team and contributes to better future processes.

Some artefacts include:

**Product Backlog:**

The product backlog is a prioritized list of product features that have been set up by the Product Owner and discussed by the Development team. Members may refer to the backlog at anytime to gain a shared understanding the items up for construction. This Backlog is also constantly refined by the Product Owner and the development team. These sessions allow for discussions about upcoming work, including addressing questions or concerns, ensuring a clear understanding.

**Sprint Backlog:**

The contains the set of tasks and work items that the development team identifies as necessary to meet the goals and deliverables of a specific sprint. This backlog allows the team to understand what they will be doing for the subsequent sprint. Like the Product backlog, the Sprint Backlog is also shared amount team members which ensures that everyone has a shared understanding of the project's progress and goals.

**Use of Collaboration Tools:**

Scrum teams often use collaboration tools, such as project management software, instant messaging platforms, and video conferencing tools. These tools facilitate real-time communication, document sharing, and virtual collaboration, especially for distributed teams.

So, because communication in scrum is consistently managed, it does not require as many formal documentations. As these ceremonies and artefacts facilitate open, transparent communication regularly between team members and stakeholders. The communication management plan may be updated as the project progresses as some processes may come up or be better suited for the plan.

Below is iteration one of a chart that will describes how communication will be facilitated for the duration of the project. It describes the when, how often, and where a type of communication will occur.

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of Communication** | **When it Will Take Place** | **How Often** | **Meeting Location (if applicable)** |
| [method of communication] | [Time period of the communication] | [Date &Time of occurrence, frequency if needed] | [where the communication will be conducted] |
| Project Kick-off Meeting | Project initiation phase | At the beginning of the project | Conference Room A |
| Weekly Status Meetings | Throughout the project | Every Monday at 10:00 AM | Virtual Meeting (Zoom) |
| Monthly Progress Reports | End of each month | Last working day of the month | Project Management Office |
| Requirement Workshops | During requirement gathering phase | As required based on project needs | Collaboration Room B |
| Stakeholder Updates | Throughout the project | Every other Friday at 3:00 PM | Virtual Meeting (Teams) |
| Training Sessions | Before system launch | Two weeks prior to system launch | Training Room C |
| Post-Implementation Review | After system launch | Two weeks after system launch | Conference Room A |
| Bug/Issue Reports | Throughout the project | Immediately upon discovery | Project Management Tool (e.g., Bugzilla) |

# 

# REQUIREMENTS REPOSITORY

This section of the document describes how the documentation of requirements will be managed.

## Purpose

The Requirements Repository provides a centralized and organized platform for storing, managing, and tracking requirements throughout the project lifecycle. A Requirements Repository helps account for information losses, and inconsistencies as it enhances transparency, traceability, and collaboration, ensuring that all stakeholders have access to a unified set of requirements and facilitating effective change management.

## Requirements Management Approach

In Scrum, requirements are captured in the form of user stories, which are short, customer-centric descriptions of a desired feature or functionality. These user stories are then organized through prioritization and stored within the product backlog; a dynamic list that evolves as the project progresses. Throughout the project the Team, including the development team, Product Owner, and Scrum master will have access to the Product Backlog to refer to. This Backlog will be continuously refined thorough the user stories as more information is being learned.

During sprint planning, the development team selects a set of features to work on during the upcoming sprint. They break down their deliverables to create the features into tasks through discussions with one another. These tasks are then stored in then the Sprint Backlog, which the whole team will have access to and may refine as needed.

Thus, in Scrum requirements are captured through user stories. These user stories communicate features that will add value to the product. They are then organized and transformed into deliverables and then tasks to create the feature. The user stores are often organized stored within the Product and Sprint Backlogs and can be easily accessed by anyone on the team.

## Requirements Prioritization

When organizing the requirements, or the user stories, the Team does so through prioritization. Requirements are prioritized collaboratively based on what the Product Owner decides, and what the Development team deems they can accomplish within their given timeline. The Product Owner represents the businesses needs, so they prioritize the featured based on the estimated Return on Investment (ROI) they have calculated for each feature. Once the Product Owner has completed this, the Development team then looks at the prioritized features and adds the top accomplishable one into the Product Backlog through a discussion with the Product Owner. Sometimes, the Development Team are not able to accomplish just the top priorities, thus they may add to some smaller priorities to the Backlog as well.

As mentioned earlier The Product Backlog however is suspectable to changes as it is being continuously reprioritized during the Sprint process as the Team and Stakeholders understand more about the project.

## Requirements Traceability

In Scrum, maintaining requirements traceability is crucial for ensuring transparency and accountability throughout the development process. While Scrum places a strong emphasis on adaptability and responsiveness to change, it also recognizes the need for tracking and understanding the evolution of requirements. Requirements traceability in Scrum is primarily achieved through the following practices:

1. **User Stories and Product Backlog:** User stories, representing individual requirements, are the building blocks of Scrum. These user stories are captured and prioritized in the product backlog. Each user story is a concise description of a specific functionality, and it serves as a traceable unit of work.
2. **Acceptance Criteria:** To ensure clarity and understanding of each user story, acceptance criteria are defined. These criteria outline the conditions that must be met for a user story to be considered complete. They provide a basis for testing and validation, contributing to traceability by linking back to the original requirements.
3. **Task and Sprint Backlog:** During sprint planning, the development team breaks down user stories into tasks. These tasks are then tracked in the sprint backlog, which is a dynamic representation of the work to be done in the current sprint. This breakdown helps in maintaining traceability between the high-level requirements and the detailed tasks that contribute to their fulfillment.
4. **Daily Scrum Meetings:** The daily Scrum meetings, or stand-ups, provide an opportunity for team members to discuss progress and any challenges. This regular communication ensures that everyone is aware of the status of the work, promoting traceability by highlighting any deviations from the original plan and allowing for adjustments as needed.
5. **Burndown Charts:** Burndown charts visually represent the progress of work throughout the sprint. They show the remaining effort against time. By tracking the completion of tasks and user stories, burndown charts contribute to traceability by offering a snapshot of how requirements are being addressed over the course of the sprint.
6. **Sprint Review and Retrospective:** At the end of each sprint, a review is conducted to demonstrate the completed work to stakeholders. This provides an opportunity to validate that the delivered product aligns with the original requirements. The retrospective allows the team to reflect on the sprint, fostering continuous improvement and contributing to traceability by informing future planning.

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# CHANGE MANAGEMENT PLAN

This section presents complete plans, including plans for required artifacts, for managing change throughout the project.

## Purpose

The change management plan provides a method to manage oncoming changes in a controlled and effective manner. This allows stakeholders to better understand and feel comfortable with the new instantiated processes. This allows for a better integration of the system and alleviates many misunderstandings of the new system for users.

## Change Request Procedure

Due to its iterative process, scrum continuously handles new changes as they come. These iterations occur through the sprints, including the processes in doing a sprint such as the Sprint planning meeting and retrospectives. Scrum also manages its communication with stakeholders continuously in these processes, which allows for changes to be reviewed quicker. This allows the project to adapt quickly to evolving requirements, feedback, or other considerations as they are recognized. The following is the procedure for handling changes when they are noted:

1. **Change is requested.**

The Originator identifies a need for change. This Originator may be a stakeholder, team member, or even the Product Owner. Changes to the product refer to a change in the existing Product Backlog. So, the change request is documented as a Product Backlog Item. This item includes a clear description of the change, its purpose, and the expected benefits. If a similar item already exists in the Product Backlog, it may be modified or refined.

1. **Product Backlog is refined/re-prioritized.**

The Product Owner is responsible for prioritizing the Product Backlog. When a change request is added, the Product Owner assesses its priority relative to other items in the backlog. Priority is often determined based on the perceived value, urgency, and impact on the project.

1. **Change is considered in the following Sprint Planning Meeting**

During the following Sprint Planning, the team and the Product Owner discuss the upcoming work and may decide to include the approved change request in the next sprint. If the change is time-sensitive, it might be prioritized for the next available sprint.

1. **Change is incorporated into sprint.**

If the change is approved for sprint, the development team incorporates it into the sprint backlog. The team collaborates to understand the requirements, estimate effort (if needed), and ensure they have a shared understanding of the change.

1. **Change is continuously clarified during the sprint if needed.**

Throughout the sprint, there is continuous communication within the team. The Scrum Master facilitates communication and removes impediments, while the team and Product Owner collaborate to address any issues or clarifications related to the change.

1. **Sprint product is reviewed by stakeholders.**

At the end of the sprint, the team showcases the completed work, including any approved changes. The Product Owner and stakeholders provide feedback, and the change is assessed based on whether it meets the intended goals.

1. **Sprint process is reviewed by the Team.**

The team discusses the effectiveness of the change implementation during the sprint retrospective. This discussion includes insights into the impact on the team's productivity, collaboration, and overall project goals. This along with stakeholder insights, future changes and the overall product gets refined.

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# RISK MANAGEMENT PLAN

This section describes the plan for managing risks.

## Purpose

The Risk Management Plan considers potential problems the project may encounter and makes plans to mitigate their potential effects. Without an excellent risk management plan, project members would not be clear on identifying if there is a problem, and how to resolve or mitigate its problematic effects. This could lead to risks having higher impacts on the project, which could lead to resource loss and delays.

## Risk Management Strategy

Scrum manages potential risks of the projects throughout the project by managing traceability, transparency, and priorities in its process. And because Scrum is iterative, it’s process has more control of managing these things.

Traceability describes how the project got where it’s at, and what decisions created certain impacts. This helps locate the roots of problems as they arise.

Transparency or honesty allows the team to catch misalignments and misunderstandings during the construction process. This ensures that the team are making informed decisions by maintaining a shared understanding of the project's goals, which reduces the likelihood of unforeseen circumstances and improving overall project outcomes.

Prioritization enables the team to understand the value of items. This ensures that they are know and are accounting for the highest value items when problems when they occur. This ensures that members have an idea of the impact levels of problems when they occur regarding various things.

Scrum manages these aspects through the following ceremonies:

**Risk Identification & Assessment:**

The Scrum Team identifies potential risks during the Sprint Planning, Sprint Review, Sprint Retrospective, and Product Backlog Refinement. Risks can be related to technical challenges, dependencies, or changes in requirements.

**Product Backlog Refinement:**

Regular refinement sessions of the Product Backlog allow the team to assess and prioritize backlog items based on risk considerations. This ongoing process ensures that risks are identified and addressed early in the project.

**Daily Stand-up Meetings:**

Daily Stand-up meetings provide a forum for the team to discuss progress, impediments, and potential risks. This regular communication helps in identifying emerging risks and allows the team to address them promptly.

**Sprint Review and Retrospective:**

The Sprint Review provides an opportunity for stakeholders to provide feedback, uncovering any risks or concerns. The Sprint Retrospective allows the team to reflect on the sprint, discuss what went well, and identify areas for improvement, including potential risk mitigation strategies.

**Incremental Delivery:**

Scrum's incremental approach to product delivery reduces the risk of misalignment with customer expectations. Regular increments allow stakeholders to provide feedback, ensuring that the product is on the right track and enabling adjustments based on evolving requirements.

## Risk List

Below is iteration one of a chart that will describes how communication will be facilitated for the duration of the project. It describes the when, how often, and where a type of communication will occur.

**Legend: Impact Level:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Impact** | High | High | Low | Low |
| **Likelihood** | High | Low | High | Low |
| **Level** | 1 | 2 | 3 | 4 |

| **Risk ID** | **Risk Type** | **Description** | | **Consequence (Short Term)** | **Business Impact (Long Term)** | | **Likelihood** | | **Impact** | **Status** | **Risk Management Strategy** | **Risk Owner** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| R001 | Collaboration | Lack of effective communication and collaboration among team members during the development phase | | Increased number of misunderstandings and errors in the product found | Negative impact on product quality, customer satisfaction, and project timelines | | Moderate | | High | Monitor | The Scrum Master will proactively foster team collaboration by facilitating regular communication channels, conducting team-building activities, and addressing any issues hindering effective collaboration | Scrum Master |
| R002 | Coordination | Insufficient coordination among team members from different departments leading to integration challenges | | Integration issues arise during product development | Delays in project timelines and increased risk of defects | | High | | High | Monitor | Project Manager takes charge of monitoring and implementing corrective measures. The strategy involves a vigilant approach to monitor integration issues, coupled with actions to improve cross-departmental coordination. | Project Manager |
| R003 | Team  Dynamics | Poor team dynamics resulting in low morale and motivation among team members | Decreased productivity and creativity noticed in Daily Stand-ups | | | Long-term impact on team cohesion and project success | | Moderate | Moderate | Monitor | Scrum Master will closely monitor the situation and implement strategies to foster positive team dynamics. This includes conducting regular team-building activities, addressing conflicts promptly, and providing necessary support to enhance team cohesion. | Scrum Master |
| R004 | Knowledge Sharing | Inadequate sharing of domain knowledge among team members | Increased of incorrect assumptions and decisions made by members | | | Risks of implementing suboptimal solutions and project delays | | High | High | Monitor | Subject Matter Expert (SME) takes responsibility for implementing a knowledge-sharing strategy. This involves organizing regular knowledge-sharing sessions, encouraging collaboration, and documenting critical domain knowledge. | Subject Matter Expert |
| R005 | Communication Breakdown | Breakdown in communication channels leading to misunderstandings and lack of clarity | Increased errors and misaligned deliverables noticed | | | Negative impact on product quality, customer satisfaction, and timelines | | Moderate | High | Monitor | Scrum Master will monitor communication channels and enhancing them as needed to ensure effective information flow. | Scrum Master |

# Marking Key

| **Criteria** | **Comment** | **Marks** |
| --- | --- | --- |
| **Action Plan discussed with Senior BA** |  | **Y/N** |
| **Document Formatting** | 3/5  . | **5** |
| * Title page contains useful information |
| * Table of Contents is correctly formatted |
| * Page numbers are correctly formatted |
| * Headings are descriptive and useful |
| * Font/text styles are useful and consistently applied |
| * Margins and white space are consistent |
| * All formatting is formal, consistent, and useful to the reader |
| * Zero marks will be rewarded without the marking guide and reflection |
| **1 Purpose of the Project** |  | **Y/N** |
| **Collaboration/Communication Approach** | 10/15 | **15** |
| * Purpose of this section |
| * Communication plan including   + What will be communicated?   + When/how frequent will each communication be   + Communication method   + Where will communication take place (if applicable) |
| **Review Requirements Repository Approach with S. BA** |  | **Y/N** |
| **Requirements Repository** | 23/30 | **30** |
| * Purpose of this section |
| * Description of how requirements will be documented |
| * Plans for organization, storage, and access of business analysis information |
| * Traceability plan |
| * Prioritization plan |
| * Plan for requirements acceptance |
| **Review Change Management with S. BA** |  | **Y/N** |
| **Change Management** | 13/15 | **15** |
| * Purpose of this section |
| * Description of how change will be managed |
| **Review Risk Management with S. BA** |  | **Y/N** |
| **Risk Management** | 18/25 | **25** |
| * Purpose of this section |
| * Risk Management Plan |
| * Risk management register |
| **Spelling & Grammar** |  | **(-10)** |
| * A deduction of 10 points will be awarded if there are more than two spelling/grammar errors. |
| **Total** | | **100** |

## Reflection:

While for this part of the assessment we did not have as much time, I believe that one required more thinking than the last. Because now I had to really think about how scrum does things in terms of the topics given. Whereas in the first part it was just a basic overview of scrum which was quite easy.

I also struggled with the formatting for both parts 1 &2 which even with the help of the internet I could not figure out, and just opted to leave in my frustrations.

I found the requirements repository the hardest in terms of figuring out what was required.