**Business Analysis Plan**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PPM #** |  | **Project Name** | | Implementation Of Audio Captions |
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# **1. Introduction**

The **Business Analysis Plan (BAP)** for the **Audio Captions Feature** on Instagram outlines the approach, strategy, and methodology to be followed for business analysis throughout the project lifecycle. This plan will guide how we gather, analyze, document, and validate business requirements, ensuring that all stakeholders' needs are met and that the feature delivers the intended business value.

This plan serves as a reference document for all parties involved in the project, ensuring a clear understanding of the business analysis activities, timelines, and responsibilities. By aligning the team around a shared approach, this document helps to ensure that the project remains on track and meets its objectives, while also staying flexible to adapt to changes as the feature evolves.

## Purpose of the Plan

The purpose of this Business Analysis Plan is to:

* Define the approach for conducting business analysis for the Audio Captions Feature on Instagram.
* Identify key stakeholders and their roles in the business analysis process.
* Provide a clear timeline and deliverables for business analysis activities.
* Outline the methodology for collecting, analyzing, and validating requirements.
* Establish guidelines for managing changes, risks, and communication related to the business analysis process.

## Scope of the Plan

This plan will cover all business analysis activities related to the development and implementation of the Audio Captions Feature. These activities include:

* Requirements gathering and documentation
* Stakeholder management and engagement
* Analysis of user needs, market trends, and technical feasibility
* Defining business rules and processes
* Validation and verification of requirements
* Ongoing communication and feedback loops with stakeholders

## Stakeholders

| **Stakeholder** | **Department** | **Role** | **Responsibilities** |
| --- | --- | --- | --- |
| **Product Manager** | Product Management | Lead Stakeholder | Oversee feature implementation, validate business impact. |
| **Business Analyst** | Business Analysis | Lead Analyst | Gather, analyze, document, and manage requirements. |
| **Lead Developer** | Development | Technical Lead | Ensure technical feasibility and development of the feature. |
| **UX/UI Designer** | Design | Lead Designer | Define user experience and interface design for the feature. |
| **Marketing Lead** | Marketing | Marketing Strategy Lead | Ensure alignment of the feature with marketing campaigns and user engagement. |
| **Legal & Compliance** | Legal and Compliance | Legal Counsel | Ensure the feature complies with privacy, security, and regulatory standards. |
| **Operations Manager** | Operations | Operations Support | Oversee operational impacts and deployment strategies. |
| **Accessibility Lead** | Accessibility | Accessibility Expert | Ensure the feature is accessible to users with disabilities. |
| **Senior Leadership** | Executive Leadership | CEO/Product Lead | Final approval of feature alignment with business goals. |

# **Stakeholder Engagement And Communication Approach**

## Stakeholder Engagement Strategy

The strategy for stakeholder engagement includes:

* **Regular Check-ins:** We will hold regular meetings (weekly or bi-weekly) to update stakeholders on progress, challenges, and next steps. These meetings will provide an opportunity for stakeholders to raise concerns, ask questions, and ensure their input is incorporated.
* **Workshops/Collaborative Sessions:** Workshops will be organized at key milestones (e.g., initial requirements gathering, design reviews) to allow stakeholders to provide in-depth feedback and validate the direction of the feature. These workshops will be highly interactive to facilitate open communication.
* **User Story Reviews:** During the requirements gathering and refinement phases, the business analyst will conduct user story reviews with stakeholders to ensure the features being developed meet the business needs and priorities.
* **Feedback Loops:** A formal feedback loop will be established to capture input and suggestions throughout the project. Stakeholders will be encouraged to provide both formal (via meetings or surveys) and informal (via email or direct conversation) feedback at every stage.

## Communication Approach

The communication approach will define how information will be shared, who will be involved, and the tools or platforms used for communication.

| **Communication Activity** | **Audience** | **Frequency** | **Communication Method** | **Purpose** |
| --- | --- | --- | --- | --- |
| **Kickoff Meeting** | All Key Stakeholders | Once, at the start | In-person or Virtual Meeting | Introduce the project, establish goals, and align expectations. |
| **Project Progress Updates** | All Key Stakeholders | Weekly or Bi-weekly | Email, Virtual Meetings, Reports | Keep stakeholders informed on progress, risks, and challenges. |
| **User Story Review** | Product Manager, Marketing, Developers, UX/UI Designers | As required, every 2 weeks | In-person or Virtual Meeting | Review detailed user stories and gather feedback. |
| **Design/Prototype Reviews** | Product Manager, Marketing, UX/UI Designers | At design milestones | In-person or Virtual Meeting | Review wireframes, mockups, and prototypes. |
| **Risk and Issue Updates** | All Key Stakeholders | As required | Email, Virtual Meetings | Discuss new risks or issues and decide on mitigation strategies. |
| **Final Review and Sign-off** | Senior Leadership (CEO, Product Lead) | At project completion | In-person or Virtual Meeting | Review final deliverables and secure formal approval. |

**Tools and Platforms:**

To ensure seamless communication, we will use the following tools:

* **Project Management Tool:** Tools like **Jira** or **Trello** will be used for tracking tasks, user stories, and milestones.
* **Document Sharing:** Google Drive or Microsoft SharePoint will be used to store and share project documentation (e.g., BRD, FRD, design files).
* **Communication Tools:** **Slack** for quick updates and team chat, **Zoom** or **Teams** for virtual meetings, and **Email** for formal communication.
* **Survey/Feedback Tools:** Tools like **Google Forms** or **SurveyMonkey** will be used to gather formal feedback from stakeholders.

## **Stakeholder Register**

| **Stakeholder Name** | **Role** | **Department** | **Contact Information** | **Influence** | **Engagement Strategy** | **Expectation** | **Priority** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **John Doe** | Product Manager | Product Management | [john.doe@instagram.com](mailto:john.doe@instagram.com) | High | Regular Meetings, Feedback | Ensures feature aligns with business strategy and product roadmap. | High |
| **Jane Smith** | Business Analyst | Business Analysis | [jane.smith@instagram.com](mailto:jane.smith@instagram.com) | High | Weekly Updates, Workshops | Gathers and documents requirements; ensures alignment with business goals. | High |
| **Alice Brown** | Lead Developer | Development | [alice.brown@instagram.com](mailto:alice.brown@instagram.com) | High | Daily Standups, Review Sessions | Develops the feature according to technical specifications. | High |
| **Mark Wilson** | UX/UI Designer | Design | [mark.wilson@instagram.com](mailto:mark.wilson@instagram.com) | Medium | Design Reviews, Collaborative Sessions | Defines user experience and interface design. | Medium |
| **Lily Green** | Marketing Lead | Marketing | [lily.green@instagram.com](mailto:lily.green@instagram.com) | Medium | Marketing Alignment Meetings | Ensures feature aligns with user engagement goals and marketing initiatives. | Medium |
| **Ethan Blue** | Legal & Compliance Officer | Legal and Compliance | [ethan.blue@instagram.com](mailto:ethan.blue@instagram.com) | High | Compliance Review Sessions | Ensures feature complies with legal, privacy, and regulatory requirements. | High |
| **Sophia White** | Operations Manager | Operations | [sophia.white@instagram.com](mailto:sophia.white@instagram.com) | Medium | Operational Impact Review | Ensures smooth deployment and operational support. | Medium |
| **Lucas Black** | Accessibility Lead | Accessibility | [lucas.black@instagram.com](mailto:lucas.black@instagram.com) | Medium | Accessibility Testing Sessions | Ensures the feature is accessible to all users. | High |
| **CEO Mark Zuckerberg** | Senior Leadership | Executive Leadership | [mark.zuckerberg@instagram.com](mailto:mark.zuckerberg@instagram.com) | Very High | Final Approval, Executive Updates | Final decision-maker for feature alignment with business strategy. | Very High |

**\*\*\*Imaginary Names\*\*\***

# **Elicitation Approach**

1. **Interviews**
   * **Description:** One-on-one interviews with key stakeholders (e.g., Product Manager, UX/UI Designers, Marketing Lead) to gather in-depth insights and clarify requirements.
   * **Goal:** Understand specific business needs, technical constraints, user expectations, and any legal or accessibility requirements.
   * **Frequency:** As needed, typically at the beginning of the project and as new requirements emerge.
2. **Workshops**
   * **Description:** Collaborative workshops with a cross-functional team to define requirements and validate assumptions. These sessions will involve stakeholders from product, design, development, and other relevant departments.
   * **Goal:** Discuss and refine features, user stories, and business rules. Achieve consensus on the final requirements.
   * **Frequency:** At key milestones (e.g., initial requirements gathering, design phase, testing phase).
3. **Surveys and Questionnaires**
   * **Description:** Surveys and questionnaires distributed to a larger audience of stakeholders or users, especially to gather data on user preferences and feedback on existing features.
   * **Goal:** Collect feedback on user experience, feature priorities, and potential issues with current captioning functionality.
   * **Frequency:** At the start of the project and later during the validation phase.
4. **Focus Groups**
   * **Description:** Small group discussions with a representative sample of Instagram users (both internal and external) to gather their thoughts on the new feature.
   * **Goal:** Test initial feature concepts, gather qualitative feedback, and understand user pain points related to captioning and accessibility.
   * **Frequency:** Early stages of the project, following prototype designs.
5. **Document Analysis**
   * **Description:** Review of existing documentation, including current Instagram product requirements, user behavior reports, and any existing accessibility guidelines.
   * **Goal:** Identify existing processes, any regulatory compliance needs, and relevant data from prior features to support the new development.
   * **Frequency:** Ongoing, as new information becomes available or is needed.
6. **Prototyping**
   * **Description:** Creating mockups and prototypes for the **Audio Captions Feature** and testing them with users and stakeholders.
   * **Goal:** Validate design ideas and functionality early on by getting direct user feedback.
   * **Frequency:** After initial design concepts have been created, to ensure alignment with user expectations.

## Elicitation Schedule:

| **Elicitation Activity** | **Stakeholders Involved** | **Timeline** | **Outcome/Deliverables** |
| --- | --- | --- | --- |
| **Interviews** | Product Manager, Marketing, Legal, UX/UI Designers | Week 1-2 | Initial Requirements Document, Stakeholder Insights |
| **Workshops** | Product Manager, UX/UI Designers, Developers, Accessibility Lead | Week 3-4 | Refined Requirements, User Stories |
| **Surveys and Questionnaires** | Instagram Users, Marketing, Product Team | Week 4-5 | User Feedback, Preferences Data |
| **Focus Groups** | Instagram Users, Marketing, Product Team | Week 5 | Usability Feedback, Feature Validation |
| **Document Analysis** | Business Analyst, Product Team, Legal | Ongoing | Compliance Review, Analysis of Existing Features |
| **Prototyping** | UX/UI Designers, Product Manager, Users | Week 6-7 | Design Prototypes, User Testing Feedback |

## Elicitation Goals:

* **Clarify the Scope:** Clearly define the feature set, user goals, and business objectives for the **Audio Captions Feature**.
* **Identify and Address Requirements Gaps:** Ensure no critical user or business needs are missed.
* **Align Stakeholders:** Bring together cross-functional teams to validate feature priorities and agree on solutions.
* **Mitigate Risks Early:** Identify potential risks early (e.g., technical limitations, compliance issues) and address them through stakeholder feedback.

## Elicitation Roles and Responsibilities:

* **Business Analyst:** Lead the elicitation activities, facilitating workshops and interviews, documenting requirements, and ensuring alignment with business objectives.
* **Product Manager:** Provide insights into the product vision, prioritize features, and validate requirements.
* **UX/UI Designers:** Offer expertise in design requirements, ensuring user needs and accessibility standards are met.
* **Developers:** Provide input on technical feasibility and identify constraints during the elicitation process.
* **Marketing Lead:** Ensure the feature aligns with marketing objectives and user engagement strategies.
* **Legal and Compliance Team:** Advise on privacy, security, and regulatory concerns.

# Analysis Approach

This stage is vital to ensure that all stakeholder needs are aligned, that technical feasibility is assessed, and that the final feature design is optimal.

**1. Requirements Classification**

* **Description:** Once the requirements are gathered, the next step is to classify them based on their importance, priority, and categorization. Requirements will be grouped into two major categories:
  + **Functional Requirements:** These define what the **Audio Captions Feature** must do. They include user stories, use cases, and detailed descriptions of feature functionality.
  + **Non-Functional Requirements:** These focus on the performance, reliability, security, and scalability of the feature.

**Outcome:** A categorized list of requirements, ready for further breakdown and analysis.

**2. Requirements Prioritization**

* **Description:** After classification, we’ll prioritize the requirements based on their importance to the business and user needs. We will use a **MoSCoW** (Must-have, Should-have, Could-have, Won’t-have) method to help us decide what to focus on in the immediate development cycle and what can be deferred for future releases.

**Method:**

* + **Must-Have:** Essential to the feature's core functionality (e.g., voice recording for captions).
  + **Should-Have:** Important but not critical for the initial release (e.g., adding custom language support).
  + **Could-Have:** Desirable but not necessary (e.g., different voice tones for captions).
  + **Won’t-Have:** Not considered for this release (e.g., integration with third-party voice recognition APIs).

**Outcome:** A prioritized list of requirements that provides a roadmap for the development and design phases.

**3. Gap Analysis**

* **Description:** Gap analysis will be conducted to identify any gaps between the current Instagram functionality and the new feature. We will evaluate the existing captioning system and determine what modifications or additions are needed to support the **Audio Captions Feature**.

**Steps:**

* + Assess current capabilities related to captioning (manual text entry vs. audio captions).
  + Identify technical gaps in the system architecture, user experience, or data storage requirements.
  + Address any potential performance issues with the introduction of audio-based captions (e.g., file size, processing time, or language compatibility).

**Outcome:** A gap analysis report that outlines the changes required to implement the feature.

**4. Risk Assessment**

* **Description:** We will perform a risk assessment to identify potential risks that could affect the implementation of the **Audio Captions Feature**. These could include technical limitations, user adoption challenges, legal/regulatory risks, or operational hurdles.

**Method:**

* + Work with stakeholders (e.g., Legal, UX/UI, Development) to identify potential risks.
  + Use a **Risk Matrix** to assess the likelihood and impact of each risk.
  + Develop mitigation strategies for high-priority risks.

**Outcome:** A risk register with identified risks, impact assessments, and mitigation plans.

**5. Feasibility Analysis**

* **Description:** A feasibility analysis will be conducted to assess whether the proposed feature is technically, financially, and operationally viable. We will analyze:
  + **Technical Feasibility:** Can the existing infrastructure and technology stack support the new feature? What new tools or platforms are required?
  + **Financial Feasibility:** Will the project stay within budget? Are there any hidden costs associated with the feature (e.g., server storage for audio files)?
  + **Operational Feasibility:** Can the organization support the feature in terms of customer support, training, and maintenance?

**Outcome:** Feasibility report outlining potential challenges, estimated costs, and required resources.

**6. Requirements Validation and Verification**

* **Description:** The final analysis step will involve validating and verifying the requirements with stakeholders. This ensures that:
  + The requirements meet the business objectives.
  + The requirements are feasible, clear, and achievable.
  + Stakeholders are aligned with the final set of requirements before moving forward with development.

**Method:**

* + Review requirements with product managers, designers, and development teams.
  + Organize review meetings with stakeholders to ensure alignment.
  + Adjust requirements based on feedback.

**Outcome:** A validated set of requirements that are ready for the design and development phases.

**7. Traceability Matrix**

* **Description:** A traceability matrix will be developed to ensure that all requirements are met during the design, development, and testing phases. This matrix links each requirement to its corresponding test cases, ensuring that all requirements are tested and validated before release.

**Outcome:** A comprehensive traceability matrix that ensures full coverage of requirements and testing.

***Analysis Deliverables:***

* **Categorized Requirements Document:** Organized by functional and non-functional requirements.
* **Prioritized Requirements List:** A roadmap for what will be developed and delivered.
* **Gap Analysis Report:** Identifies the changes and additions needed to support the new feature.
* **Risk Register:** Identifies, assesses, and mitigates project risks.
* **Feasibility Analysis Report:** Evaluates the technical, financial, and operational viability of the project.
* **Validated Requirements Document:** Final set of business and user requirements, ready for the design phase.
* **Traceability Matrix:** Ensures all requirements are tested during development.

***Analysis Approach Roles and Responsibilities:***

* **Business Analyst:** Lead the analysis process, ensuring that all requirements are accurately captured, classified, and prioritized.
* **Product Manager:** Provide insights into product strategy and help with prioritization and validation.
* **Development Team:** Assess technical feasibility and provide feedback on potential challenges or limitations.
* **UX/UI Designers:** Ensure that the user experience aligns with business goals and user needs.
* **Legal Team:** Ensure that requirements adhere to legal and compliance standards.

## Create and Analyze Model

| **Model Type** | **Description** | **Purpose** | **How it will be Used in the Project** |
| --- | --- | --- | --- |
| **Scope Model** | Defines the boundaries of the **Audio Captions Feature**. It identifies what is included and excluded from the feature set. | To establish the scope of work for the project, ensuring alignment with stakeholder expectations. | - Clarify feature scope during initial planning - Set clear boundaries to avoid scope creep - Serve as a reference for prioritization and project timelines |
| **Process Model** | A visual representation of the user interactions and system workflow when creating a post with audio captions. Includes the sequence of actions involved. | To document and analyze the workflow of how users will interact with the new feature. | - Ensure that the feature is intuitive for users - Identify potential bottlenecks or issues in the workflow - Inform the design and development process |
| **Rule Model** | A set of business rules that govern the behavior of the **Audio Captions Feature**. Includes rules for caption creation, length limitations, and language options. | To ensure the system behaves in accordance with the business requirements and policies. | - Define rules for audio caption length, file size, and format compatibility - Create a baseline for functional requirements - Validate design and development |
| **Data Model** | Defines how data related to the audio captions will be stored, managed, and processed in the system. It includes the schema for audio files and associated metadata. | To determine how data (audio files and captions) will be structured and stored in the system. | - Guide database design - Define data relationships for efficient storage and retrieval - Ensure scalability for future feature enhancements |
| **Interface Model** | Describes how the **Audio Captions Feature** will interact with other systems or APIs (e.g., speech recognition systems, accessibility features). | To define and document the interfaces between the new feature and other systems or third-party services. | - Identify the systems or services the feature will interface with (e.g., voice-to-text API) - Guide technical implementation for integrating external services |

**Explanation of Each Model's Purpose and Usage:**

1. **Scope Model:**
   * **Purpose:** To ensure all stakeholders have a clear understanding of what the **Audio Captions Feature** will and won’t include, preventing scope creep and setting proper expectations.
   * **Usage:** This model will guide the entire project, ensuring that we only focus on the necessary features for this release. It will be used to help prioritize requirements and functionalities.
2. **Process Model:**
   * **Purpose:** To visualize the steps a user will take to create a post with audio captions, ensuring a seamless experience.
   * **Usage:** This model will inform the user interface design and development process. It will help identify pain points or areas for improvement in the user experience (UX).
3. **Rule Model:**
   * **Purpose:** To set clear business rules governing the behavior of the **Audio Captions Feature**.
   * **Usage:** This model will ensure that all technical development adheres to the rules, such as caption length limitations, language restrictions, or compliance with accessibility standards. It will be reviewed and adjusted as necessary during the development cycle.
4. **Data Model:**
   * **Purpose:** To structure how data related to audio captions will be stored, ensuring data integrity, scalability, and smooth retrieval.
   * **Usage:** This model will influence the database design and will be essential for developers when implementing data storage solutions. It will also help to ensure that metadata like caption text, timestamps, and audio file references are managed effectively.
5. **Interface Model:**
   * **Purpose:** To identify the external systems that will integrate with the new feature (such as third-party APIs, accessibility tools, etc.) and document their functionality.
   * **Usage:** This model will assist the technical team in integrating the **Audio Captions Feature** with necessary APIs, ensuring proper communication between systems and that all external dependencies are accounted for during development.

## Acceptance Criteria

| **Category** | **Acceptance Criteria** | **Description** |
| --- | --- | --- |
| **Functionality** | Audio captions can be recorded and saved for posts. | Users should be able to record their captions as audio files and attach them to their posts. |
| **Audio Quality** | Recorded audio should be clear and legible. | Audio files must be of sufficient quality for users to easily understand the captions. |
| **User Interface** | Audio recording button is accessible within the caption creation area. | The option to record audio captions should be easily accessible to the user while composing a post. |
| **Audio Length** | Audio caption length should be limited to a maximum of 60 seconds. | There should be a cap on the maximum length for audio captions to ensure compatibility and usability. |
| **Audio Format** | Supported audio file formats must include MP3 and WAV. | The system must accept common audio formats like MP3 and WAV for caption recordings. |
| **Transcription** | Audio captions should be transcribed to text for accessibility. | The feature must include automatic transcription for accessibility, ensuring visually impaired users can understand the content. |
| **Performance** | Audio captions should load within 3 seconds when a post is opened. | The system must process and load audio captions without significant delay when a user accesses the post. |
| **Multi-Language Support** | Audio captions should support multiple languages. | The feature must allow users to record and transcribe captions in different languages (e.g., English, Spanish, etc.). |
| **Editing Capabilities** | Users can edit or delete their audio captions before posting. | Users should have the ability to listen to, re-record, and delete their audio captions before finalizing their posts. |
| **Integration** | The feature must integrate seamlessly with Instagram's existing post creation flow. | The audio captions feature must work smoothly with Instagram’s existing post interface, without breaking other functionalities. |
| **Mobile Compatibility** | The feature should be fully functional on both iOS and Android platforms. | Users should be able to record and add audio captions from both iOS and Android apps. |
| **Security** | Audio data must be stored securely and comply with data protection regulations. | All recorded audio files should be encrypted and stored following relevant data protection laws and regulations. |
| **Usability** | The recording feature should be intuitive and user-friendly. | Users should be able to intuitively navigate the process of recording, reviewing, and posting audio captions without needing extensive instructions. |

# Requirements Management

*1. Verifying Requirements*

**Description:** Verifying requirements ensures that the requirements are complete, consistent, and feasible. This process involves checking that all requirements have been captured correctly, are understandable, and align with the project goals.

**Steps:**

* **Review sessions:** Conduct review meetings with stakeholders, including product managers, UX/UI designers, and technical leads, to ensure the requirements are correctly defined and understood.
* **Traceability:** Ensure that all requirements can be traced back to business goals or objectives. This will help ensure that each requirement has a valid reason for its inclusion.
* **Check against business goals:** Cross-check requirements to ensure they support the overall goals of the **Audio Captions Feature** and Instagram’s broader business strategy.
* **Conflict resolution:** Address any conflicts or contradictions in requirements by collaborating with stakeholders to resolve them.

**Outcome:** A **verified requirements document** that contains a clear, accurate, and consistent set of requirements, ready for validation and prioritization.

*2. Validating Requirements (Delphi Method):*

**Description:** Validating requirements ensures that the final set of requirements is accurate, feasible, and aligned with stakeholder needs and expectations. The **Delphi Method** is a structured process to gather expert opinions and feedback for requirement validation.

**Delphi Method Process:**

* **Round 1:** Present the gathered requirements to a panel of experts (e.g., business stakeholders, subject matter experts, technical leads, product managers) and ask them to provide feedback and suggestions for improvements.
* **Round 2:** Analyze the feedback from the first round, refine the requirements based on expert input, and share them with the panel again for further review.
* **Round 3 (if necessary):** Repeat the process until a consensus is reached among the panel of experts regarding the validity of the requirements.

**Purpose of the Delphi Method:**

* To gather diverse expert opinions and ensure that the requirements are robust and realistic.
* To uncover hidden risks or potential challenges before proceeding with development.
* To ensure that all stakeholder needs are met.

**Outcome:** A **validated set of requirements** that has been reviewed and approved by experts, ensuring that the feature aligns with the business and user needs.

*3. Prioritizing Requirements:*

Prioritizing requirements ensures that the project delivers the most valuable features first, aligning with business goals and user needs. The **MoSCoW** method and **Timeboxing** are two approaches that help with prioritization.

**MoSCoW Method:**

**Description:** The **MoSCoW** method is a prioritization technique that categorizes requirements based on their importance and necessity. The categories are:

* **Must-have:** Critical features required for the feature to function properly (e.g., the ability to record and attach audio captions).
* **Should-have:** Important but not critical features that would improve user experience (e.g., multiple language support).
* **Could-have:** Nice-to-have features that could enhance the product but are not essential for the initial release (e.g., different voice tones for captions).
* **Won’t-have:** Features that are explicitly excluded from this release (e.g., integration with third-party APIs for speech recognition).

**Usage:**

* Align stakeholders to prioritize features that deliver the most value early in the development cycle.
* Use this categorization to make informed decisions about what gets implemented first and what can be deferred for future releases.

**Outcome:** A **prioritized list of requirements** that ensures development resources are focused on the most valuable features first.

**Timeboxing:**

**Description:** Timeboxing involves allocating a fixed amount of time for completing a specific task or delivering a feature, and working within that timeframe to ensure timely delivery.

**Usage in Requirements Prioritization:**

* For each **requirement**, allocate a specific timeframe within which the development team must work to implement the feature.
* For example, features with high urgency may be given a shorter timebox (e.g., audio recording functionality), while less critical features (e.g., multilingual transcription) can be given a longer timebox.

**Outcome:**

* Ensures that the project delivers functional features within set deadlines, while still delivering value.
* Helps prevent scope creep by forcing developers to focus on what’s feasible within the given time.

# **Monitoring**

| **Risk ID** | **Risk Description** | **Risk Category** | **Probability** | **Impact** | **Mitigation Strategy** | **Monitoring Strategy** |
| --- | --- | --- | --- | --- | --- | --- |
| R1 | Audio quality may be poor due to low user device capabilities. | Technical Risk | Medium | High | Provide guidelines for users on optimal recording conditions (e.g., recommended device types, microphone usage). | Track the number of complaints regarding audio quality through in-app feedback. Use analytics to monitor audio quality across different devices. |
| R2 | Audio captions might have incorrect transcriptions (e.g., errors in speech-to-text). | Functional Risk | Medium | High | Integrate a reliable, high-quality speech-to-text engine. Include manual caption editing for users. | Monitor transcription accuracy through user feedback and bug reports. Evaluate system performance and identify recurring errors for algorithm improvement. |
| R3 | Users may not be able to access the audio captions feature due to device compatibility issues (e.g., older smartphones). | Compatibility Risk | Medium | Medium | Define minimum device specifications for the feature, and ensure backward compatibility with widely used devices. | Track device compatibility issues through user reports and app reviews. Monitor the number of failed attempts due to compatibility. |
| R4 | Audio files may be too large, causing slow load times or crashes. | Performance Risk | Low | High | Implement file size limits for audio recordings and optimize file compression techniques. | Continuously monitor file sizes, load times, and crashes related to audio uploads using app analytics and crash reporting tools (e.g., Crashlytics). |
| R5 | The feature may not be available in all regions, limiting the user base. | Geographical Risk | Low | Medium | Roll out the feature in phases, starting with regions where Instagram has a large user base and full infrastructure support. | Track the feature’s adoption rate by region and collect user feedback to ensure smooth rollout. Adjust based on demand in underserved regions. |
| R6 | Lack of proper security for audio data storage leading to data breaches. | Security Risk | Medium | High | Implement end-to-end encryption for audio data storage, and ensure compliance with global data protection laws (e.g., GDPR, CCPA). | Perform regular security audits and penetration testing. Monitor for any security incidents and track access logs for unauthorized activities. |
| R7 | The feature may not be integrated smoothly with Instagram’s existing post creation flow. | Integration Risk | High | High | Perform extensive integration testing and allocate resources for fixing issues early in development. | Continuously track integration issues through test environments and user testing. Monitor bug reports from QA teams for integration-related issues. |
| R8 | Negative user feedback on usability and accessibility of the audio captions feature. | Usability Risk | Medium | Medium | Conduct user testing with diverse groups to ensure the feature is accessible and easy to use across various devices. | Collect and analyze user feedback after launch via surveys, in-app feedback, and reviews. Monitor accessibility issues and respond to user concerns promptly. |
| R9 | Audio captions could become a source of misinformation if users misuse them. | Content Risk | Low | High | Implement a review process for flagged content and provide clear community guidelines around audio captions. | Set up content moderation systems to track flagged audio captions. Monitor user-generated content for inappropriate or misleading captions. |
| R10 | Misalignment of business objectives or changing market needs affecting the relevance of the feature. | Strategic Risk | Low | Medium | Continuously gather feedback from users and stakeholders to ensure alignment with business goals. Adjust the feature as needed based on market trends. | Monitor market trends, user feedback, and feature adoption rates. Regularly review alignment with business objectives to ensure strategic relevance. |

## Change Management

1. **Identify and Document the Change Request:**
   * Any change request, whether from a stakeholder, user feedback, or internal team member, must be **clearly documented**. The requester will need to provide details such as the nature of the change, the reason for the change, and any expected impact on the project’s timeline, cost, or functionality.
   * **Change Request Form** will be created to standardize this process and ensure that all necessary information is captured.
2. **Evaluate the Impact of the Change:**
   * Each change request will be evaluated based on its **impact** on the project in terms of:
     + **Time**: Does it impact the project timeline? How much additional time will be required for development and testing?
     + **Cost**: Will the change increase the project’s budget? What additional resources (e.g., staff, tools) are needed?
     + **Scope**: Does it affect the overall project scope? Is it in line with the project goals or is it a deviation?
     + **Quality**: Does the change introduce any new risks or impact the quality of the feature?
   * This evaluation will be done by the **Business Analyst**, **Product Manager**, and relevant **Stakeholders** to assess if the change is **feasible** and **valuable**.
3. **Approval and Authorization:**
   * Once the impact evaluation is complete, the change request will be submitted for approval to **key decision-makers**:
     + **Product Owner**
     + **Project Manager**
     + **Stakeholders** (Instagram team, including the development team, UX/UI team, marketing team, etc.)
   * The team will assess whether the change is **worth implementing** given the impact on resources, budget, and timeline.
   * **Change Approval**: If the change is approved, it will be communicated to all stakeholders, and an updated project plan will be created.
4. **Incorporate the Change into the Project Plan:**
   * If the change is approved, it will be added to the project scope, and the project plan will be updated to reflect any necessary adjustments.
   * The **requirements document** (FRD/BRD) will be revised, and the **project backlog** will be updated with the new requirements.
   * **Resource allocation** may need to be adjusted based on the scope of the change (additional team members, extended timelines, etc.).
5. **Communicate the Change:**
   * All team members, stakeholders, and affected parties will be notified of the approved changes. This includes:
     + **Development Teams**: So they can adjust their work and timeline.
     + **Design Teams**: So they can update design assets, if applicable.
     + **Marketing and Communications Teams**: So they can adjust their strategies if needed.
     + **Users**: Any change that impacts the user experience will be communicated effectively (e.g., through in-app notifications or blog posts).
6. **Track and Monitor the Change:**
   * **Change Implementation**: The change will be tracked throughout its implementation to ensure it’s completed on time and within the approved scope.
   * **Testing and Validation**: Once the change is implemented, it must be thoroughly tested to ensure it doesn’t introduce new defects or issues. This will be done through:
     + **Regression Testing** to ensure no existing functionality is broken.
     + **User Testing** to confirm the feature meets expectations and works as intended.
   * **Post-Implementation Review**: Once the change has been implemented, the team will review the results, gather feedback, and adjust if needed.
7. **Document and Close the Change:**
   * After implementation and validation, the change request will be **closed** in the change management system.
   * A **final report** will be generated to document:
     + The original request
     + The impact assessment
     + The approval and implementation details
     + Testing results
   * **Lessons Learned** will be recorded to improve the process for future changes.

# **Solution Evaluation Approaches**

## Key Evaluation Objectives:

1. **Assess Business Value:**
   * Determine if the feature meets the core business objectives, such as **increasing engagement**, **improving accessibility**, and **enhancing the user experience**.
   * Evaluate if the feature provides tangible business value in terms of **user retention** and **content engagement**.
2. **Evaluate User Satisfaction:**
   * Collect user feedback to assess **satisfaction levels**, **ease of use**, and **effectiveness** of the audio captions feature.
   * Identify any **usability issues** or concerns related to accessibility that need to be addressed.
3. **Measure Feature Adoption:**
   * Track how many users are actively utilizing the **audio captions** feature and assess the feature’s **adoption rate** over time.
   * Monitor user behavior to identify which demographics or regions are using the feature the most.
4. **Assess Impact on System Performance:**
   * Monitor the system's performance (e.g., **load times**, **audio processing time**, **server stability**) after the feature is implemented.
   * Evaluate the **scalability** of the solution if the feature needs to be rolled out to a larger audience or added to future updates.
5. **Evaluate Technical Quality:**
   * Conduct post-implementation testing, including **regression testing** to ensure the feature does not affect other parts of the system.
   * Ensure that the **accuracy** of speech-to-text is within acceptable thresholds and any **transcription errors** are reduced over time.

## Evaluation Criteria

| **Criteria** | **Description** | **Measurement Method** |
| --- | --- | --- |
| **User Engagement** | Degree of interaction and frequency of usage of the audio captions feature. | Analytics tools (e.g., Instagram Insights), usage reports. |
| **Feature Adoption Rate** | Percentage of users using the feature after it is introduced. | Metrics tracking, A/B testing, and in-app survey results. |
| **User Satisfaction** | Overall satisfaction with the audio captions feature. | Surveys, user feedback, in-app ratings, and sentiment analysis. |
| **Error Rate (Speech-to-Text)** | Percentage of audio captions that are incorrectly transcribed. | Speech-to-text analytics, user-reported issues. |
| **System Load and Performance** | How well the system supports the feature at scale without slowdowns. | Load testing, real-time performance monitoring, crash reports. |
| **Compliance with Business Objectives** | Whether the feature meets the business goals (e.g., accessibility, engagement). | Business KPI tracking (e.g., increased engagement, accessibility ratings). |

## Evaluation Process

1. **Pre-Implementation Evaluation:**
   * Before fully implementing the feature, ensure that the business goals are well-defined. This will create a baseline for comparison after the feature is deployed.
   * Conduct initial user testing (usability tests and pilot phases) to gather early feedback from a select user group.
2. **During Implementation:**
   * Continuously monitor system performance during the rollout to detect any potential issues.
   * Collect real-time feedback through in-app surveys or feature usage metrics, making adjustments to the feature where necessary.
   * Conduct regular team check-ins to ensure the feature is being built according to specifications and requirements.
3. **Post-Implementation Evaluation:**
   * After the feature has been rolled out to users, **gather quantitative data** (usage, error rates, performance) and **qualitative feedback** (surveys, user reviews).
   * Compare pre-established business goals and user expectations with actual results to evaluate success.
   * Conduct follow-up surveys and focus groups to better understand user reactions and any unaddressed issues.
4. **Continuous Monitoring:**
   * After the initial evaluation, continue tracking the feature’s performance. This will help in identifying long-term trends, areas of improvement, and opportunities for further refinement.
   * Regularly update the feature based on the feedback and continue optimizing its usability and performance.

# **Sign Off**

| **Stakeholder Name** | **Role** | **Date** | **Approval Status** | **Comments** |
| --- | --- | --- | --- | --- |
| **[Your Name]** | Business Analyst | [Insert Date] | Approved | Completed analysis. |
| **[Stakeholder 1 Name]** | Product Owner | [Insert Date] | Approved | Business goals confirmed. |
| **[Stakeholder 2 Name]** | Project Manager | [Insert Date] | Approved | Timeline and resources confirmed. |
| **[Stakeholder 3 Name]** | Development Team Lead | [Insert Date] | Approved | Technical feasibility confirmed. |
| **[Stakeholder 4 Name]** | Marketing Manager | [Insert Date] | Approved | Marketing integration confirmed. |
| **[Stakeholder 5 Name]** | UX/UI Designer | [Insert Date] | Approved | Design specs confirmed. |
| **[Stakeholder 6 Name]** | Instagram CEO | [Insert Date] | Pending | Awaiting final review. |