**Waterfall Project Part 1**

**by Tarun Kumar Deshmukh**

**Document -1** **Business Case Document Template**

**Question -1 Why is this Project initiated?**

**Answer** – The current version (6.8) of the FLEXCUBE Universal Banking Solution is outdated and incompatible with modern financial systems and technological requirements. The integrated payments module in version 6.8 has become cumbersome and inefficient, highlighting the need for a more robust and scalable solution. By upgrading to version 11.8, the bank can utilize the advanced capabilities of the new version to stay competitive in a rapidly evolving financial landscape, streamline operations and reduce the burden of legacy system constraints, achieve higher profitability, offer better services to customers.

**Question- 2 What are the current problems?**

**Answer** – Current problems in this project includes:

* The absence of an integrated KYC feature limits transparency and compliance with regulatory standards.
* The inability to integrate electronic signatures into the database affects secure and efficient customer identification processes.
* Customers do not have access to a seamless and dedicated application for account operations, leading to inconvenience and lack of digital engagement.
* The system does not support innovative features like cardless withdrawals via mobile numbers and PAN cards, reducing customer convenience.
* The current payment system lacks UPI ID integration, which is essential for modern and efficient transaction handling.
* Without a daily transaction limit for UPI payments, there are potential risks to customer security and financial control.

**Question- 3 With this project how many problems could be solved?**

**Answer** – By implementing this project, below problems can be resolved:

1. **Implementation of the KYC Facility**:
   * Ensures transparency and compliance with regulations, resolving the lack of an integrated KYC system.
2. **Integration of Electronic Signatures**:
   * Strengthens customer identification and resolves the issue of secure and efficient verification.
3. **Introduction of Mobile Banking Features**:
   * Provides seamless access to banking services, resolving the absence of a dedicated mobile banking application.
4. **Enablement of Cardless ATM Withdrawals**:
   * Adds convenience for customers, addressing the lack of innovative withdrawal options.
5. **Incorporation of UPI ID Functionality**:
   * Facilitates smooth transactions to UPI accounts, resolving the absence of this feature in the current payment system.
6. **Setting a UPI Daily Transaction Limit**:
   * Enhances security and compliance by restricting transactions beyond a predefined limit.

Ultimately, this project will align the bank with contemporary digital banking trends, fostering customer satisfaction, operational efficiency, and competitive advantage.

**Question – 4 What are the resources required?**

**Answer –** In current project, below resources may require achieving the task:

**1. Human Resources**

* **Technical Team**:
  + Delivery Manager (Leadership and oversight)
  + Project Manager (Planning, execution, and coordination)
  + Java Developers (Development of custom features and functionalities)
  + Senior Java Developer (Mentoring the team and resolving complex coding issues)
  + Testers (Quality assurance and bug identification)
  + Network Administrator (Infrastructure setup and maintenance)
  + Database Administrator (Data migration and system optimization)
  + Business Analyst (Requirement gathering, documentation, and communication with stakeholders)
* **External Auditors**:
  + For compliance evaluations and validation.

**2. Financial Resources**

* Approved project budget: ₹2 Crores.
* Breakdown:
  + Training personnel.
  + Software and hardware procurement.
  + Managed services (if required).
  + Miscellaneous expenses (₹10,00,000 allocation for audits, compliance, financial reporting, team-building activities).

**3. Technical Resources**

* **Software**:
  + FLEXCUBE Universal Banking Solution (Version 11.8).
  + Oracle Banking Payments (OBPM) for payments module.
  + Testing tools for QA.
* **Hardware**:
  + Upgraded server infrastructure.
  + Systems and networking equipment for deployment.
  + Backup and storage devices for data migration.

**4. Time Resources**

* A timeline of 12 months to cover:
  + Requirement gathering and analysis.
  + System design and development.
  + Implementation, testing, and deployment.
* Regular progress tracking (e.g., monthly and quarterly reviews).

**5. Training Resources**

* Training programs for personnel to ensure familiarity with the new FLEXCUBE system and Oracle Banking Payments.

**6. Compliance Resources**

* External compliance checks and evaluations to meet government mandates and banking regulations.
* Preparation and validation of financial reports.

**7. Logistical Resources**

* Site visits and client interactions.
* Team-building activities to maintain morale and collaboration during the project.

**Question – 5** Observation Technique – Explain both Active and Passive approaches.

**Answer** – Observation Technique - Observation is an elicitation technique where a business analyst or stakeholder observes users or stakeholders as they perform their tasks in real-world environments to gather insights about processes, workflows, and requirements. This technique helps in understanding actual behaviours, challenges, and inefficiencies that may not be articulated during interviews or meetings.

The Observation technique involves two main approaches: **Active observation** and **Passive observation**. Both approaches aim to understand workflows, user behaviour, and real-world task execution, but they differ in the level of interaction between the observer and participants.

**Active Observation**

* **Definition**: In active observation, the observer interacts with participants during the process being observed. They may ask questions, seek clarifications, or engage in discussions to gain deeper insights.
* **Purpose**: To understand not just what is being done, but why specific actions are taken and how participants perceive the process.
* **Use Cases**: Useful when processes are complex, undocumented, or require immediate clarification.
* **Advantages**:
  + Provides richer, more detailed insights into user actions and motivations.
  + Allows real-time clarification of ambiguities.
* **Challenges**:
  + May interrupt the natural workflow of participants.
  + Risk of observer bias influencing participant actions.

**Passive Observation**

* **Definition**: In passive observation, the observer does not interact with participants but watches quietly as they perform their tasks.
* **Purpose**: To capture an unbiased view of how tasks are performed without altering participant behaviour.
* **Use Cases**: Ideal for understanding habitual processes, identifying inefficiencies, or observing tasks in high-pressure environments where interruptions may be disruptive.
* **Advantages**:
  + Minimizes influence on participant behaviour.
  + Provides an authentic view of real-world task execution.
* **Challenges**:
  + Observer may miss the reasons behind certain actions if they cannot ask questions.
  + Requires more follow-up to clarify observations.

Below are the key differences between Active and Passive Observation techniques –

|  |  |  |
| --- | --- | --- |
| **Aspect** | **Active Observation** | **Passive Observation** |
| **Interaction Level** | High: Observer interacts with participants. | Low: Observer remains silent and detached. |
| **Purpose** | Understand actions and motivations. | Observe actions as they naturally occur. |
| **Disruption Risk** | Higher due to active questioning. | Minimal, as the workflow is undisturbed. |
| **Data Collected** | Detailed, with explanations for actions. | Purely behavioural, requiring follow-up for context. |
| **Suitability** | Complex, dynamic tasks needing clarification. | Routine or habitual tasks with minimal variance. |

**Question – 6** How do you conduct the Requirements Workshop?

**Answer –** Workshop - The Workshop elicitation technique is a structured, collaborative approach used to gather, refine, and prioritize requirements or solve specific problems in a project. It involves bringing together key stakeholders, subject matter experts, and team members in a facilitated session to ensure direct communication, diverse viewpoints, and consensus-building. Workshops typically follow a predefined agenda and use techniques like brainstorming, role-playing, or prioritization to achieve their objectives. Visual aids and collaborative tools are employed to document ideas and requirements in real time. This technique is particularly effective for aligning stakeholders, addressing complex issues, and producing comprehensive, prioritized outputs in a time-efficient manner.

Process to conduct Requirements Workshop is described below –

**Prepare for the Requirements Workshop –**

* Clarify the stakeholder needs, and the purpose of the workshops.
* Identify critical stakeholders who should participate in the workshop.
* Define the workshop agenda.
* Determine what means will be used to document the output of the workshop.
* Schedule the session.
* Arrange room logistics and equipment.
* Send materials in advance to prepare the attendees and increase the productivity at the meeting.
* Conduct pre-workshop interviews with attendees.

**Co conduct/Run the requirements workshop –**

* Elicit, analyse and document requirements.
* Obtain consensus on conflicting views.
* Maintain focus by frequently validating the session’s activities with the workshop’s stated objectives.

The facilitator has responsibility to –

* Establish a professional and objective tone for the meeting.
* Enforce discipline, structure and ground rules for meeting.
* Introduce the goals and agenda for the meeting.
* Manage the meeting and keep the team on track.
* Facilitate a process of decision-making and build consensus but avoid participating in the content of the discussion.
* Ensure that all the stakeholders participate and have their input heard.
* Ask the right questions, analyse the information being provided at the session by the stakeholders and follow-up with probing questions if necessary. The Scribe’s role is to document the business requirements in the format determined prior to the workshop.

**Post Requirements Workshop wrap-up done by Facilitator –**

* Follow up on any open action items that were recorded at the workshop.
* Complete the documentation and distribute it to the workshop attendees and the sponsor.

**Question- 7** In which context, Interview Technique can be conducted by a BA? How many approaches are there in conducting Interviews? (Structured – Unstructured) Explain them. Explain the difference between Open Ended Questions and Closed ended Questions

**Answer –** Interviews - The Interview elicitation technique is a method used by Business Analysts (BAs) to gather information, insights, and requirements by conducting one-on-one or group conversations with stakeholders, subject matter experts (SMEs), or end-users. It involves asking questions to understand needs, identify challenges, and define project requirements. Interviews can be structured, semi-structured, or unstructured, depending on the objectives and the level of detail required.

A Business Analyst (BA) conducts interviews in various contexts to gather information, clarify requirements, or validate project needs. These contexts include:

1. **Stakeholder Engagement**: To understand stakeholder expectations, objectives, and constraints.
2. **Requirement Gathering**: To identify functional and non-functional requirements.
3. **Problem Analysis**: To discover issues in existing systems or processes.
4. **Feedback Collection**: To validate requirements, prototypes, or deliverables.
5. **Domain Understanding**: To gain insights into the business domain or technical environment.
6. **Conflict Resolution**: To address and resolve conflicting stakeholder needs.

There are mainly two approached to conduct interviews – Structured and Unstructured Interviews. Both are described below –

1. **Structured Interviews**
   * Definition: The interviewer prepares a predefined list of questions and follows them in a fixed order.
   * Advantages:
     + Ensures consistency across interviews.
     + Easy to compare responses.
     + Suitable for quantitative analysis.
   * Limitations:
     + May restrict the depth of responses.
     + Does not allow flexibility to explore unexpected insights.
2. **Unstructured Interviews**
   * Definition: The interviewer has no predefined questions and lets the conversation flow naturally.
   * Advantages:
     + Encourages open discussion and in-depth exploration of ideas.
     + Useful for qualitative analysis and understanding complex topics.
   * Limitations:
     + Difficult to compare responses across interviews.

The differences between Open ended questions and Close ended questions are described below –

|  |  |  |
| --- | --- | --- |
| **Aspect** | **Open-Ended Questions** | **Closed-Ended Questions** |
| **Definition** | Questions that allow respondents to elaborate and provide detailed answers. | Questions that require specific, concise answers (e.g., yes/no or a choice from given options). |
| **Purpose** | To gather detailed insights, explore ideas, and understand underlying reasons. | To obtain specific information, validate facts, or make decisions. |
| **Example** | "What challenges do you face in your current workflow?" | "Do you use the current system daily?" |
| **Advantages** | - Encourages in-depth discussion. | - Easy to analyse and quantify. |
| - Provides qualitative insights. | - Saves time. |
| - Useful for uncovering unknown requirements. | - Reduces ambiguity in responses. |
| **Disadvantages** | - Time-consuming to analyse. | - Limits the depth of information. |
| - Responses may be irrelevant or overly broad. | - May miss important nuances. |
| **Use Cases** | Exploring requirements, understanding stakeholder needs, and gathering feedback. | Validating facts, confirming requirements, and gathering structured data. |

**Question- 8** Questionnaire Technique – Where we will use? Give one example.

**Answer-** Questionnaire Technique - The questionnaire elicitation technique is a method used to gather information, requirements, and feedback from a large group of stakeholders by distributing a structured set of questions. It is particularly effective when direct interaction with all participants is not feasible due to time, geographic, or resource constraints. Questionnaires can include a mix of open-ended and closed-ended questions to capture both qualitative and quantitative data.

There are four types of questionnaires –

1. Online Questionnaire.

2. Telephone Questionnaire.

3. Paper Questionnaire.

4. Face-to-face interview.

The Questionnaire technique is ideal in situations where input is required from a large, diverse, or geographically dispersed group of stakeholders. It is commonly used in the following contexts:

* **Requirement Validation**: To confirm or validate a set of proposed requirements.
* **User Research**: To gather insights into user preferences, behaviours, or satisfaction.
* **Market Analysis**: To collect feedback on a product or service from potential customers.
* **Prioritization**: To determine which features or functionalities stakeholders value the most.

For example – We have to gather feedback for new software feature for an enterprise application.

Use Case: Gathering feedback on a new software feature for an enterprise application.  
Context: A business analyst is tasked with determining which features of a proposed customer support portal are most important to end-users.  
Implementation:

* A questionnaire is designed with closed-ended questions (e.g., "Rate the importance of live chat support on a scale of 1 to 5") and open-ended questions (e.g., "What additional features would you like to see?").
* The questionnaire is distributed to a large group of current users via email.
* Responses are analysed to prioritize features and identify unmet needs.

**Question – 9** How to Sort the Requirements – Where we will use? Give one example

**Answer –** Sorting requirements is a crucial step in the requirements management process, helping to organize, prioritize and categorize them for effective analysis and implementation. Sorting is often done during the requirements elicitation and documentation phase of project.

Sorting requirements involves organizing and prioritizing them to ensure that the project focuses on the most critical and valuable elements. Sorting can be done using various methods, such as:

1. Prioritization Techniques:
   * MoSCoW Method: Categorize requirements into Must Have, Should Have, Could Have, and Won’t Have.
   * Kano Model: Identify requirements as basic needs, performance needs, or delight features.
   * Weighted Scoring: Assign scores based on factors like business value, cost, risk, and feasibility.
2. Grouping:
   * Organize by type (functional vs. non-functional requirements).
   * Sort by stakeholder, business area, or process workflow.
3. Dependency Analysis:
   * Sequence requirements based on dependencies to ensure logical implementation order.
4. Alignment with Goals:
   * Ensure requirements align with business objectives, user needs, and project scope.

Also based on Functional Vs. Non-Functional Requirements, User Role Sorting, Time Dependency Sorting we can sort the requirements.

We have to use the techniques for Sorting the requirements where –

* Multiple stakeholders provide input, leading to a long list of potential requirements.
* Resources (time, budget, or manpower) are limited, requiring prioritization of the most critical needs.
* Incremental or phased project delivery is planned.

For example – Suppose we have to develop a mobile banking application-

Use Case: Developing a mobile banking application.  
Context: The project team has gathered a list of 50 requirements from stakeholders.  
Implementation:

* Use the **MoSCoW** Method to prioritize features:
  + Must Have: Secure login, account summary, fund transfer.
  + Should Have: Budget tracking, multi-language support.
  + Could Have: Personalized themes, financial news integration.
  + Would Have: Blockchain wallet integration (deferred to future phases).
* Align the prioritized list with project timelines and budget.

Sorting ensures that the development team focuses on delivering high-priority features first, optimizing resource usage and stakeholder satisfaction.

**Question – 10** Prioritise the Requirements –Where we will use? Give one example.

**Answer –** Prioritising the requirements is the critical step in the requirement management process, helping teams focus on what is most important for the success of the project. Prioritization is typically done based on the factors such as business value, impact, dependencies.

There are various techniques to prioritise requirements which are described below –

1. MoSCoW Method
   * Categorizes requirements as Must Have, Should Have, Could Have, and Would Have.
   * Focuses on delivering the most critical features first.
2. Kano Model
   * Classifies requirements into Basic Needs, Performance Needs, and Delight Features based on their impact on customer satisfaction.
3. Weighted Scoring
   * Assigns weights to requirements based on criteria like business value, cost, risk, and feasibility.
   * Generates a prioritized list based on the total score.
4. 100-Dollar Test
   * Stakeholders are given 100 virtual dollars to allocate across requirements, indicating their perceived importance.
5. Value vs. Complexity Matrix
   * Plots requirements on a matrix to assess their business value and implementation complexity.
   * Prioritizes high-value, low-complexity requirements.

Areas in which we use Prioritization techniques –

* Project Planning: To focus on high-impact requirements within limited budgets or timelines.
* Agile Development: To identify the backlog items for upcoming sprints.
* Feature Roadmaps: To decide which features should be developed in initial vs. later phases.
* Conflict Resolution: To address differing stakeholder opinions on requirement importance.

For example – Suppose we have to build one e-commerce website.

**Use Case**: Building an E-commerce Website.  
**Context**: A business analyst has gathered a list of requirements for a new e-commerce platform. The project budget is limited, so prioritization is necessary to decide which features will be included in the first release.  
**Implementation**:

* Techniques Used:
  + Apply the MoSCoW Method:
    - Must Have: Product catalogue, shopping cart, secure payment gateway, user registration.
    - Should Have: Product reviews, discount codes, and wishlist functionality.
    - Could Have: AI-based product recommendations, live chat support.
    - Would Have: AR-based virtual try-on (planned for future releases).
  + Conduct a stakeholder voting session to ensure alignment on priorities.
  + Use a Weighted Scoring Matrix to evaluate requirements based on business value, user needs, and development effort.

**Outcome**: High-priority requirements (e.g., product catalogue and secure payment) are delivered in the first phase, ensuring core functionality while deferring less critical features to later phases.

**Question – 11** Weekly status reporting – How we will drive?

**Answer-** Weekly status reporting - Weekly status reporting is a structured communication process to provide updates weekly on a project's progress, achievements, risks, and next steps. Here's how to effectively drive weekly status reporting:

Steps to Drive Weekly Status Reporting

1. Define the Purpose
   * Communicate progress to stakeholders.
   * Highlight completed tasks and milestones.
   * Identify and address risks or roadblocks.
   * Align the team on upcoming priorities.
2. Create a Reporting Template -  
   Use a consistent format to ensure clarity and alignment. Key sections often include:
   * Project Overview: High-level project status (on track, delayed, etc.).
   * Achievements: Completed tasks and milestones from the past week.
   * Challenges/Risks: Issues affecting progress and their mitigation plans.
   * Next Steps: Upcoming tasks and deliverables.
   * Metrics: KPIs or progress indicators (e.g., percent completion).
3. Collect Inputs
   * Gather updates from team members or sub-teams.
   * Use tools like project management software (e.g., JIRA, Trello, Asana) to track tasks and progress.
   * Summarize information to maintain clarity and avoid overwhelming details.
4. Consolidate and Share the Report
   * Compile the inputs into the reporting template.
   * Share the report with stakeholders via email, collaboration tools (e.g., MS Teams, Slack), or in a weekly meeting.
5. Facilitate a Weekly Status Meeting (Optional)
   * If needed, conduct a brief meeting to review the report, address questions, and discuss roadblocks or next steps.
6. Follow Up on Action Items
   * Document action items and assign owners during the reporting process.
   * Track these items in the next report to ensure accountability.

**Question – 12** Meeting Minutes Document – prepare one Sample.

**Answer –** Minutes of Meeting (MoM) - Minutes of Meeting (MoM) is a formal record of the discussions, decisions, and action items from a meeting. It serves as a documented summary that provides clarity and accountability for all participants and stakeholders. MoM ensures that everyone is aligned on what was discussed and agreed upon during the meeting.

**Importance of MoM**

* **Accountability**: Tracks decisions and assigns responsibilities to specific individuals or teams.
* **Clarity**: Eliminates misunderstandings by providing a clear record of discussions and agreements.
* **Reference**: Acts as an official document for future reference, especially in case of disputes.
* **Progress Tracking**: Ensures follow-ups on action items and monitors ongoing tasks.

A sample of MoM is shown below –

|  |  |  |  |
| --- | --- | --- | --- |
| Meeting / Project Name | Sprint review Meeting | | |
| Date of meeting | 20-Dec-24 | Time | 10:00 AM |
| Meeting Facilitator | Business Analyst | Location | Pune |

|  |
| --- |
| 1. Meeting Objectives |
| Discuss the status of Sprints |
| Discuss the progress report of the project |
| Discuss about impediments if any |
| Suggest solutions |

|  |  |  |  |
| --- | --- | --- | --- |
| 2. Attendees | | | |
| Name | Department / Division | E-Mail | Phone |
| Raj Khemani | Dev Team | [raj.k@abc.com](mailto:raj.k@abc.com) | 8765348909 |
| Priya Shukla | Technical Team | [priya.k@abc.com](mailto:priya.k@abc.com) | 7653902176 |
| Sriram Sao | Business Analyst | [Sriram.s@abc.com](mailto:Sriram.s@abc.com) | 8752764981 |

|  |  |
| --- | --- |
| 3. Meeting Agenda | |
| Topic | Owner |
| Decision about action and sprints | Development Team |
| Discussion on WIP items | Development Team |

**Question – 13** Change Tracker – Document - – prepare one Sample.

**Answer –** Change Tracker - A Change Tracker Document is a tool used to record, monitor, and manage changes made to the scope, requirements, deliverables, or any other aspects of a project. It serves as a centralized record that captures the details of each change request, its impact, the decision made, and its implementation status.

**Importance of a Change Tracker Document -**

* **Traceability**: Ensures all changes are documented and can be tracked over time.
* **Transparency**: Keeps stakeholders informed about requested changes and their outcomes.
* **Impact Management**: Helps evaluate how changes affect the project timeline, budget, and deliverables.
* **Accountability**: Assigns responsibilities for reviewing, approving, and implementing changes.
* **Risk Reduction**: Prevents scope creep by enforcing a structured change management process.

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**Question – 14** Difference between Traditional Development Model and Agile Development Models.

**Answer –** Traditional Development Model - The Traditional Development Model of the Software Development Life Cycle (SDLC) refers to structured and sequential approaches for software development, often characterized by well-defined phases. It is typically represented by the Waterfall Model, where progress flows downward through a series of steps. This model emphasizes thorough planning, documentation, and adherence to predefined processes.

Agile Development Model - The Agile Development Model is a modern, iterative, and incremental approach to the Software Development Life Cycle (SDLC) that emphasizes flexibility, collaboration, and customer satisfaction. Unlike the traditional Waterfall Model, Agile focuses on delivering small, functional pieces of software (increments) frequently, allowing teams to adapt to changes and gather feedback throughout the project lifecycle.

Major differences between these two models are described below –

|  |  |  |
| --- | --- | --- |
| **Aspect** | **Traditional Development Model** | **Agile Development Model** |
| **Approach** | Linear and sequential (e.g., Waterfall model). | Iterative and incremental. |
| **Flexibility** | Inflexible; changes are difficult to accommodate. | Highly flexible; adapts to changing requirements. |
| **Planning** | Detailed planning upfront for the entire project. | Minimal upfront planning; evolves throughout. |
| **Delivery** | Delivers the complete product at the end of the cycle. | Delivers small, functional increments regularly. |
| **Customer Involvement** | Limited to initial requirements and final delivery. | Continuous involvement and feedback throughout. |
| **Documentation** | Extensive documentation is required at each phase. | Focus is on working software; documentation is minimal. |
| **Testing** | Testing occurs after development is complete. | Testing is continuous and integrated into development. |
| **Team Collaboration** | Teams often work in silos (e.g., developers, testers). | Cross-functional teams collaborate closely. |
| **Risk Management** | Risks are identified and addressed later in the cycle. | Risks are identified and mitigated early. |
| **Timeline** | Fixed and predetermined timelines. | Flexible timelines based on iterations/sprints. |
| **Cost Effectiveness** | Changes increase costs significantly. | Changes are cost-effective due to incremental updates. |
| **Scope of Requirements** | Requirements are fixed and well-defined upfront. | Requirements evolve based on feedback and priorities. |
| **Best Suited For** | Projects with stable, well-defined requirements. | Projects with evolving requirements or high uncertainty. |
| **Examples** | Payroll systems, banking systems. | Mobile apps, SaaS applications, e-commerce platforms. |

**Question – 15** Explain Brainstorming Technique – Where to use?

**Answer –** Brainstorming - Brainstorming is a collaborative elicitation technique used to generate a large number of ideas, solutions, or requirements in a short amount of time. It involves a group of participants, typically stakeholders and team members, who discuss and contribute freely without criticism or judgment. The goal is to encourage creative thinking and capture as many perspectives as possible.

**Where to Use Brainstorming**

Brainstorming is particularly effective in scenarios where:

1. **Generating New Ideas**:
   * When starting a project and identifying potential features, solutions, or requirements.
   * Example: Identifying possible features for a new mobile app.
2. **Solving Problems**:
   * When tackling complex issues or bottlenecks in a project.
   * Example: Finding ways to improve system performance or user experience.
3. **Exploring Multiple Perspectives**:
   * When involving diverse stakeholders to gather varied opinions and insights.
   * Example: Brainstorming customer pain points with marketing, sales, and support teams.
4. **Prioritizing Requirements**:
   * When narrowing down a broad set of ideas to focus on high-value items.
   * Example: Selecting the top 5 features for an upcoming product release.

**Question – 16** What reports Accounts Departments will generate (minimum 5 reports)

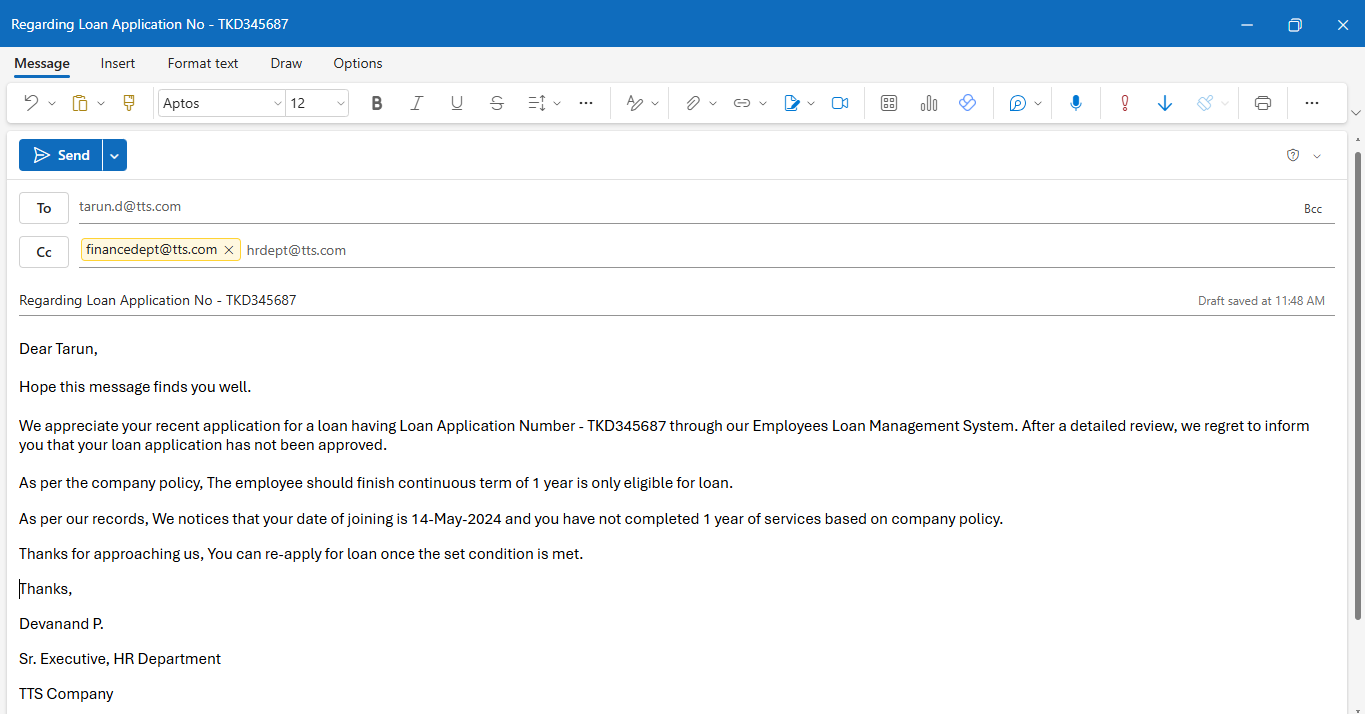
**Answer –** Accounts and HR will be reviewing the request and generate various reports and that will be sent to Employees.

Following are the reports which will be generated by an employee –

* Loan Approval Report - This will be Reviewed and sent by HR department in coordination with Accounts Department.
* Loan Rejection Report: Here, employee would be informed about the status of the Request which is rejection in this case.
* Loan Approval terms and Conditions: Once the loan is approved it will be informed to employee, along with that it will also be communicated the terms and conditions it will have to oblige.
* Loan Repayment Schedule Report: Here, Numbers are shared with employee about the tenure for which loan is approved, ROI, EMI and tenure for which he will be repaying the loan.
* Loan Offer Report: In this Report HR Department will inform employee the amount sanctioned by HR department, tenure and EMI employee will have to bear for.

**Question – 17** What is the structure of the message/mail communicated from the HR department to the employee in case the Loan is rejected??

**Answer –** The structure of the message/mail communicated from the HR department to the employee in case the Loan is rejected is shown in below screenshot.



**Question – 18** What is the structure of the message/mail communicated from the HR department to the employee in case the Loan is approved.

**Answer –** The structure of the message/mail communicated from the HR department to the employee in case the Loan is approved is shown in below screenshot.

A screenshot of a computer

Description automatically generated

**Question – 19** Design a sample report on the Loans applications Received by the accounts department.

**Answer –** Sample report on the Loans applications Received by the accounts department is shown below –

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**Question – 20** Which reporting Tools we will use for generating reports.

**Answer –** There are various reporting tools available to help organizations generate reports efficiently. The choice of a reporting tool depends on factors like the complexity of the data, the audience, and integration with existing systems.

Here we are using Business Intelligence Reporting Tools like Tableau and Power BI to generate reports which are explained below.

**Tableau -** Tableau is a leading data visualization and business intelligence (BI) tool designed to transform raw data into meaningful, interactive, and visually appealing dashboards and reports. It is widely used for data analysis and reporting across various industries due to its intuitive drag-and-drop interface, robust integration capabilities, and support for a wide range of data sources.

Its Key features include –

* Interactive Dashboards
* Data Connectivity
* Easy to use
* Advanced visualization
* Real time reporting
* Collaboration
* Custom Calculation

Advantages of Tableau –

* Intuitive and easy-to-learn interface.
* Handles large datasets efficiently.
* Enables non-technical users to perform advanced analytics.
* Supports both live and extracted data.
* Highly customizable and scalable for enterprise needs.

Limitations of Tableau –

* Can be expensive for large-scale deployments.
* Limited support for advanced statistical and programming features compared to tools like R or Python.
* Performance may slow down with extremely complex dashboards or large datasets.

**Power BI -** Power BI is a powerful Business Intelligence (BI) and data visualization tool developed by Microsoft. It is designed to help organizations transform raw data into interactive and insightful reports and dashboards. Power BI is part of Microsoft’s ecosystem and integrates seamlessly with other Microsoft tools like Excel, Azure, and SharePoint, making it a popular choice for businesses of all sizes.

Key features include –

* Interactive Dashboards
* Data Integration
* Ease of use
* Advanced analytics
* AI and ML
* Real time reporting
* Cross platform access

Advantages of Power BI –

* Seamless integration with Microsoft products like Excel and Azure.
* Affordable pricing, especially for small and medium businesses.
* Easy to learn and user-friendly interface.
* Scalable for enterprise-level reporting needs.
* Regular updates and feature enhancements from Microsoft.

Limitations of Power BI –

* Performance issues with very large datasets or highly complex calculations.
* Limited customization for visualizations compared to tools like Tableau.
* Relies heavily on internet connectivity for Power BI Service.