

# NewAp

## Project Management Plan

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**Prepared for:**

Primary beneficiary bank of NewAp

## **I. Introduction**

### **A. Purpose**

This document defines the project plan for the NewAp mobile application development project. It outlines the objectives, scope, schedule, resources, costs, quality, risks, and communication plan for the successful delivery of the project.

### **B. Project Overview**

NewAp will provide a mobile payment application for individual merchants to accept QR code payments without needing an EDC device. It will integrate with the bank's existing systems and aim to onboard 20,000 new merchants in the first year.

## **II. Project Scope**

### **A. Project Objectives**

1. Develop and implement the NewAp mobile application for individual merchants using Android devices.
2. Eliminate the need for EDC and integrate the NewAp application with existing Bank systems, including ESB, ITM, Email Server, SMS Gateway, Active Directory, and Internal User Management System.
3. Provide a comprehensive set of banking services, sales reporting, report extraction and delivery, promotional information, direct communication channels with the bank, and tutorials to enhance the value for individual merchants.

### **B. Specific Deliverables**

1. Develop the NewAp mobile application for Android, ensuring compatibility and optimal performance on merchant smartphones.
2. Integrate NewAp with specified Bank systems, facilitating smooth communication and data exchange.
3. Create comprehensive user manuals to guide merchants on how to use the NewAp application effectively.
4. Develop and implement training programs to ensure merchants can maximize the benefits of NewAp.

5. Conduct rigorous testing of the final system to ensure functionality, security, and adherence to requirements.

### **C. Project Milestones**

1. Milestone 1: Create a project plan based on the requirements within 4 weeks.
2. Milestone 2: Develop and release a prototype system for early user feedback within 10 weeks.
3. Milestone 3: Develop the NewAp system based on refined plans within 16 weeks.
4. Milestone 4: Conduct rigorous testing phases, ensuring functionality, security, and adherence to requirements within 20 weeks.
5. Milestone 5: Application deployment, training, and implementation phase for a smooth transition for merchants within 24 weeks.

### **D. Resources**

1. Team Formation
  - a) Project Manager
  - b) Mobile App Developers
  - c) Backend Developers
  - d) Frontend/Web Developer
  - e) System Integrators
  - f) QA/Testers
  - g) UX/UI Designers
  - h) Technical Writer
  - i) Security Expert
  - j) Cloud Infrastructure Specialist
2. Facilities and Equipment
  - a) Ensure access to high-speed communication channels.
  - b) Provide necessary testing tools and software
3. Organizational Resources
  - Collaborate effectively with various functions and departments within the Bank.

### **III. Information Systems Project Life Cycle**

#### **A. Initiation**

This phase starts off the project. The bank identifies the need for the NewAp application and outlines the high-level goals and scope. A project charter is created to authorize the project formally, appoint a project manager, and allocate initial funding and resources. The core project team is identified, including roles like the PM, developers, QA analysts, security analyst, etc. as mentioned in the draft. The project manager works with stakeholders to refine the objectives, scope, risks, assumptions and obtain buy-in. This provides the foundation to kick off the rest of the planning and design activities.

#### **B. Planning**

The project manager will work with the bank's business analysts to gather detailed requirements for the NewAp application and admin portal. This includes use cases, features, integrations needed, data, security, etc. as outlined in the BRD. The requirements will be documented in detail and reviewed with stakeholders before finalizing.

#### **C. Design**

The development team will review the finalized requirements and create high-level application architecture and interface designs. This includes designing the database schema, API specifications, integration points, cloud infrastructure design, security controls, etc. UI/UX designers will design the mobile app screens and admin portal pages.

#### **D. Execution**

##### **1. Development**

The development team follows an agile methodology with 2 week sprints to code the front end mobile app, backend APIs, integrations, admin portal, etc. per the application design. Unit testing is done as developers complete feature coding.

##### **2. Testing**

The QA analysts will conduct various testing on the completed sprints including integration testing, system testing, performance testing, UAT

testing. Any defects found will be tracked, reported and resolved by the developers.

### 3. Deployment

Once testing passes criteria, NewAp can be released to a pilot group of merchants for initial trial and feedback. It will then be incrementally rolled out to larger merchant groups in phases.

### **E. Closure**

After project closure, NewAp moves into maintenance mode with the live application being supported. The team continues to address issues, release enhancements, and monitor performance.

## **IV. System Development Methodology**

### **A. Agile Methodology with 2-Week Sprints**

The choice of an Agile methodology, featuring 2-week sprints for development and testing, facilitates a dynamic and iterative approach. This time-boxed framework promotes regular progress assessments, ensuring consistent and measurable advancements. The iterative nature allows for continuous refinement, aligning the development process with evolving project needs.

### **B. Continuous Integration and Delivery**

Incorporating continuous integration and delivery practices streamlines the development pipeline. By regularly merging code changes and automating the deployment process, potential issues are identified early, reducing the likelihood of integration challenges. This approach enhances the overall efficiency of the development lifecycle, enabling a more reliable and scalable system.

### **C. Close Collaboration Across Teams**

A key pillar of the methodology is the close collaboration between development, QA, and bank teams. This collaborative environment fosters effective communication, shared understanding of project goals, and rapid issue resolution. By breaking down silos and promoting cross-functional teamwork, the development process becomes more cohesive, ensuring a unified and well-coordinated effort.

#### **D. Iterative Design and Development with Feedback Loop**

The emphasis on iterative design and development, coupled with a robust feedback loop, ensures that the system evolves in response to user and stakeholder input. Regular feedback loops enable quick adjustments, enhancing the system's adaptability to changing requirements. This iterative approach promotes a user-centric design philosophy, aligning the final product more closely with the intended user experience.

### **V. Project Schedule and Costs**

#### **A. Project Schedule**

1. Phase 1: Initiation
  - Kickoff Meeting : 20-26 Nov 2023
  - Identify Stakeholders : 27 Nov - 3 Dec 2023
  - Develop Project Charter : 04-10 Dec 2023
2. Phase 2: Planning
  - Requirements Gathering : 11-17 Dec 2023
  - System Design : 18 Dec 2023 - 7 Jan 2024
  - Select Methodology : 08-28 Jan 2024
  - Resource Planning : 29 Jan - 4 Feb 2024
  - Risk Management : 5-11 Feb 2024
3. Phase 3: Development
  - Core App. Development : 12 Feb - 30 Jul 2024
  - Web Portal Development : 23 Apr - 1 Sep 2024
  - Mobile App Development : 4 Jun - 15 Oct 2024
4. Phase 4: Security testing\* : 31 Jul - 15 Oct 2024  
\*Executed at end of each development
5. Phase 5: Training
  - Training Materials : 16-29 Oct 2024
  - Training Sessions : 30 Oct - 5 Nov 2024
6. Phase 6: Deployment
  - System Installation : 6-19 Nov 2024
  - Data Migration : 20-26 Nov 2024
  - Go Live : 27 Nov 2024
7. Phase 7: Maintenance & Support
  - Ongoing after launch starting 28 Nov 2024
8. Phase 8: Project Closure : 4-10 Dec 2024

## B. Project Team

1. Project Manager: Responsible for overall project coordination, communication, and ensuring that the project stays on schedule and within budget. Active throughout all phases.
2. Mobile App Developers (2): To design and develop the NewAp mobile application for both iOS and Android platforms. Active during Core Application Development and Mobile App Development phases.
3. Backend Developers (2): To handle the integration with existing bank systems, set up the cloud infrastructure, and ensure seamless communication between the app and the backend. Active during the Core Application Development phase.
4. Frontend/Web Developer (1): Designs and develops web-based components, such as a merchant portal, to complement the mobile application and provide a complete user interface. Active during Web Portal and Mobile App Development phases
5. System Integrators (1): To work on integrating the app with various bank systems such as ESB, ITM, Email Server, SMS Gateway, etc.
6. QA/Testers (2): To ensure the quality and reliability of the application through thorough testing. Active during the Core Application Development phase.
7. UX/UI Designers (1): To create an intuitive and user-friendly interface for the mobile application. Active during the Core Application Development phase.
8. Technical Writer (1): To create documentation, tutorials, and other instructional materials for users. Active throughout all phases.
9. Security Expert (1): To address and implement security measures to protect user data and transactions. Active during the final testing phase.
10. Cloud Infrastructure Specialist (1): To manage the hosting on a cloud platform in Indonesia. Active during Core Application Development and Testing phases.

## C. Budget Allocation

### 1. Development & Testing Budget

No	Role	Salary	Qty.	Duration (month)	Total
1.	Project Manager	15.000.000	1	12	180.000.000

2.	Mobile App Developer	14.000.000	2	6	168.000.000
3.	Backend Developer	14.000.000	2	6	168.000.000
4.	Frontend Developer	14.000.000	1	6	84.000.000
5.	System Integrator	13.000.000	1	6	78.000.000
6.	QA/Tester	11.000.000	2	6	132.000.000
7.	UX/UI Designer	11.000.000	1	6	66.000.000
8.	Technical Writer	11.000.000	1	12	132.000.000
9.	Security Expert	17.000.000	1	3	51.000.000
10.	Cloud Infrastructure Specialist	15.000.000	1	6	90.000.000
Total fund allocated		IDR 1.149.000.000			

## 2. Cloud Hosting Budget

- Purpose: Covers cloud infrastructure costs to host the project.
- Fund allocated: IDR 150.000.000/year

## 3. Training and Rollout Budget

- Purpose: Covers expenses for training materials, sessions, and support during the rollout phase.
- Training Costs:
  - Training materials development: IDR 30,000,000
  - Internal staff training hours (considering time spent on training): Included in development costs
- Rollout Costs:
  - Communication and marketing materials for rollout: IDR 40,000,000
  - Rollout events or workshops: IDR 60,000,000
  - Technical support during rollout: Included in development and infrastructure costs
- Total fund allocated: IDR 130.000.000



4. Data Retention Costs:

- Purpose: Involve the expenses related to storing transaction data, implementing backup solutions, and ensuring data integrity.
- Storage and backup: IDR 75,000,000 per year

5. Ongoing Maintenance and Support Costs:

- Purpose: Ongoing support and maintenance expenses, covering activities such as bug fixes, updates, and general support to ensure the continued reliability of the application.
- Annual maintenance: IDR 180.000.000 per year

6. Contingency (10% of Total Cost):

- Purpose: Covers unforeseen expenses and contingencies.
- Total initial cost: IDR 1.279.000.000
- Annual recurring cost: IDR 405.000.000
- Total contingency fund allocated:  $\text{IDR } 1.684.000.000 \times 10\% = \text{IDR } 168.400.000$

## **VI. Project Plan**

### **A. Detailed Project Schedule**

Within this section, we present a comprehensive breakdown of the project tasks, deliverables, responsibilities, and due dates. The WBS serves as a roadmap, offering a clear and structured view of the project's components.

Work Breakdown Table				
Phase	Activity Description	Deliverables	Team Member	Due Date
1. Initiation	1.1 Project Kickoff Meeting	Meeting minutes, project plan	Project Manager	26-Nov-23
	1.2 Identify Project Stakeholders	Stakeholder register, communication plan	Project Manager	03-Dec-23
	1.3 Document Project Charter	Project charter document	Project Manager	10-Dec-23
2. Planning	2.1 Requirements Gathering	Requirements document	Project Manager	17-Dec-23
	2.2 System Design	Design documents	Developers	07-Jan-24
	2.3 Plan Development Approach	Development approach document	Project Manager	28-Jan-24
	2.4 Resource Planning	Project schedule, resource plan	Project Manager	04-Feb-24
	2.5 Risk Management	Risk assessment document	Project Manager	11-Feb-24
3. Development & Testing	3.1 Core Application Development	Source code, builds	Backend Developer	30-Jul-24
	3.2 Web Portal Development	Source code, builds	Web Developer	01-Sep-24
	3.3 Mobile App Development	Source code, builds	Mobile App Developer	15-Oct-24
	3.4 Implement Security Controls	Source code	Security Expert	04-Mar-24
	3.5 Unit Testing	Unit test cases and reports	QA Analyst	15-Oct-24
	3.6 User Acceptance Testing	UAT test cases and results	QA Analyst	15-Oct-24
	3.7 Security Testing	Security test reports	Security Expert	15-Oct-24
5. Training	5.1 Develop Training Material	Training materials, presentations	Training Team	29-Oct-24
	5.2 Deliver Training Environment	Completed sessions	Training Team	05-Nov-24
6. Deployment	6.1 System Installation	Production environment	IT Team	19-Nov-24
	6.2 Data Migration	Migrated data	IT Team	26-Nov-24
	6.3 Go-Live	Launched System	IT Team	27-Nov-24
7. Maintenance & Support	7.1 Provide Helpdesk Support	Helpdesk performance reports	Support Team	Ongoing
	7.2 Monitor System Performance	Performance reports	Support Team	Ongoing
8. Project Closure	8.1 Obtain Final Acceptance	User acceptance signoff	Project Manager	10-Dec-24
	8.2 Document Lessons Learned	Lesson learned report	Project Manager	10-Dec-24
	8.3 Archive Project Documents	Project document archive	Project Manager	10-Dec-24
	8.4 Handover project to bank	Project completed	Project Manager	10-Dec-24

## B. Risk Management Plan

### 1. Risk Identification

Risk identification is a critical aspect of project management, requiring a structured format for each identified risk. This includes a name, brief description, potential causes, probability assessment (high, moderate, or low), and impact evaluation (high, moderate, or low). This systematic approach ensures proactive mitigation of challenges throughout the project lifecycle.

### 2. Risk Monitoring and Control

A specialized risk management team will be established with the responsibility of continuous monitoring of identified risks. This team will consistently update risk registers and conduct reviews during scheduled project meetings. An early warning system will be implemented to facilitate swift corrective action in response to potential risks. Periodic reassessment of the risk landscape will be undertaken to adjust mitigation strategies as necessary. This proactive approach is intended to augment project resilience and promptly address unforeseen challenges.

### 3. Contingency Planning:

To enhance project resilience, comprehensive contingency plans will be developed to mitigate disruptions caused by high-impact risks. Alternative solutions, including backup cloud service providers, will be identified for

critical components to ensure a strategic response to unforeseen challenges. Furthermore, the establishment of a rapid response team will facilitate the prompt addressing of any issues that may arise, contributing to the overall effectiveness of the project management strategy.

4. Risk Reporting:

To ensure effective communication, a standardized risk reporting format will be developed, facilitating consistent updates on risk status and mitigation efforts. A regular reporting cadence will be established to provide stakeholders with timely information. Clear and concise communication will be maintained, emphasizing risk implications and potential impacts, particularly for key project sponsors.

5. Lessons Learned:

Following project implementation, thorough post-implementation reviews will be conducted to analyze the effectiveness of risk mitigation strategies. Lessons learned during the project will be documented, and feedback will be incorporated into future risk management processes. A continuous refinement of risk management practices will be undertaken based on valuable insights gained from project experiences. This iterative approach ensures an ongoing enhancement of risk management effectiveness over the course of the project lifecycle.

## **C. Communication Plan**

1. Objectives

The Communication Plan has three key goals. Firstly, it ensures that stakeholders stay informed about the project's progress, changes, and upcoming milestones. Secondly, it fosters a collaborative and transparent communication environment for effective engagement. Lastly, the plan provides a platform for addressing concerns and gathering valuable feedback from stakeholders, contributing to an adaptive and well-informed project environment.

2. Communication Channels

- Project Meetings: Regular project status meetings will be conducted to discuss progress, challenges, and upcoming tasks.
- Email Updates: Periodic email updates will be sent to stakeholders highlighting key achievements, upcoming events, and any changes in the project plan.
- Project Documentation: Project documentation, including Gantt charts, progress reports, and other relevant materials, will be shared through a central repository (project management tool).

- Instant Messaging: A dedicated instant messaging platform, such as Whatsapp, Slack or Microsoft Teams, will be used for quick updates, discussions, and issue resolution.
3. Frequency of Communication
    - Weekly: Regular project status meetings and email updates will be provided weekly.
    - Bi-Weekly: Detailed project reports will be shared bi-weekly.
    - As Needed: Instant messaging and ad-hoc meetings will be used as needed for urgent matters or quick updates.
  4. Feedback Mechanism

Regularly solicit feedback during project meetings and through email surveys. Maintain an open-door policy for stakeholders to voice concerns or suggestions. Conduct periodic one-on-one check-ins with key stakeholders to address specific concerns.

## **VII. Stakeholders**

The stakeholders themselves will play crucial roles in defining, developing, and implementing the NewAp application. Their collaboration and engagement are essential for achieving the project's objectives and delivering a high-quality final product. Listed Stakeholders:

### **A. Bank**

The company bank (the one initiating the project) is the key stakeholder, as it is the primary beneficiary of the NewAp applications. Thus, its objectives, requirements, and expected results are important to the project's success.

### **B. Merchants**

As the primary user of this application, merchants will need the project's product to be an easy way to accept payments without needing an EDC (Electronic Digital Capture) device. Thus, resulting in increased sales, reducing transaction costs, and improving the customer's overall experience.

### **C. Project Team**

The IT company receiving the project and its employees, including the project manager, development team, and quality assurance personnel, are part of the stakeholders who are responsible for delivering the project within the specified time and budget.

#### D. Regulators & Governments

Lastly, regulatory bodies overseeing financial technology and banking operations are crucial stakeholders. Compliance with regulations and standards is sufficiently essential for the project's success, and the involvement of regulatory authorities is necessary to ensure legal and ethical adherence in developing and deploying the NewAp application.

### VIII. Quality Assurance

NewAp aims to enhance merchant services for a more integrated communication channel by ultimately providing a cost-effective and user-friendly solution for individual merchants. Three qualities ought to be maintained consistently are:

- Performance & Scalability
- User Experience & Accessibility
- Security Compliance and Data Protection

The table below shows NewAp's Quality Management Plan to maintain the three qualities based on their external factors consistently:

External Factors	Performance and Scalability Concerns	User Experience and Accessibility	Security Compliance and Data Protection
People	- Insufficient Training - Lack of Performance Monitoring	- Limited User Feedback and Engagement - Insufficient Training and Knowledge for Merchants	- Lack of Security Training - Insufficient Access Controls
Technology	- Inefficient Code Optimization - Inefficient Networking & Server	- Incompatibility with other devices - Lack of Tutorials and User Documentation	- Weak Encryption for Sensitive Data - Insecure API Communication Channels
Process	- Inadequate Load Testing and Tuning	- Lack of Onboarding and Continuous Process - Inadequate User Testing	- Lack of Regular Security Audits and Testing

	- Inadequate Capacity Planning	during Design	- Inadequate Authentication Procedures
Environment	- External Network Conditions - External Dependencies	- External Environmental Factors - External Dependencies	- Lack of Compliance with Established Regulations - External Cyber Threats

Quality Control solutions for each qualities are:

#### **A. Performance and Scalability Concerns:**

Load Testing and Performance Optimization

Employ load testing to assess system performance under various conditions, optimizing code and infrastructure to meet the specified response time and scalability requirements

#### **B. User Experience & Accessibility:**

User Experience Testing and Accessibility Testing

Actively Conduct thorough user experience testing, ensuring the application is intuitive, compatible with different devices, and supported by clear tutorials for effective onboarding from a diverse group of users

#### **C. Security Compliance & Data Protection:**

Security Auditing and Penetration Testing

Implement regular penetration testing and security audits to identify and address vulnerabilities, ensuring continuous compliance with industry standards and regulatory requirements

### **IX. Project Closure**

The NewAp project commenced with the approval of its proposal and the appointment of a dedicated project manager. From the initiation phase, developmental activities

progressed with a defined scope, leading through implementing planned tasks until the successful attainment of goals and objectives. As outlined in the scope statement, the project's anticipated conclusion was established. Now that the NewAp application has been successfully delivered, it is imperative to undergo administrative closure.

This stage ensures the formal closure of the project, even in cases of premature termination or failure to complete, marking the culmination of the project life cycle and providing a structured approach for the transition into the post-implementation phase:

**A. Project Accounts Closure**

- Verify and reconcile all financial transactions related to the project.
- Close project-related bank accounts and financial instruments.
- Ensure all outstanding bills and payments are settled

**B. Delivery Acceptance**

- Confirm the successful deployment of the NewAp application.
- Obtain formal acceptance from stakeholders, especially from the Merchant Support and Operations teams.
- Validate that all project deliverables meet the specified requirements.

**C. Transition to Support & Maintenance**

- Establish a clear handover process to the support and maintenance team.
- Ensure that support mechanisms are in place for post-implementation issues

**D. Award and Acknowledgement**

- Recognize and acknowledge the efforts of the project team, stakeholders, and contributors.
- Consider providing awards or certificates to team members for outstanding contributions.

**E. Final Project Review**

- Schedule a final review meeting with key stakeholders to discuss the overall project, including successes, challenges, and outcomes.

#### **F. Legal and Compliance Check**

- Ensure that all legal and compliance requirements related to the project closure are met

#### **G. Monitoring Implementation**

- Monitor the execution of closure tasks to ensure they are completed as per the plan.
- Address any issues or roadblocks encountered during the closure process.

#### **H. Ending Closure Process**

- Formalize the closure by documenting the completion of all tasks.
- Hold a project closure meeting to discuss the overall project, and lessons learned, and celebrate successes.
- Archive project documentation and store it in a central repository for future reference.

### **X. Conclusion**

This project plan aims to deliver the NewAp mobile payment application and admin portal as per the business requirements in order to achieve the bank's goals of reduced costs, new merchant onboarding, and enabling future growth opportunities. The project team will use an agile approach to ensure the solution can adapt to evolving needs.