



FINAL REPORT

INTEGRATING RPA SOLUTIONS FOR FINANCIAL SYSTEM AT VPANDAS

Presented By:
TEAM 2



Instructors: Trieu Viet Cuong



TEAM 2 - MEMBERS

INDEX	FULL NAME	MSSV
1	Chu Thi Hoai Nu	K224060807
2	Phan Minh Hoang Ngoc	K224060804
3	Bui Dai Nhat Tan	K224060811
4	Pham Nguyen Thao	K224060812
5	Nguyen Anh Tuan (Team Leader)	K224060820



TABLE OF CONTENT



1

Overview

2

Execution, Monitoring, and Controlling

3

Project Closure



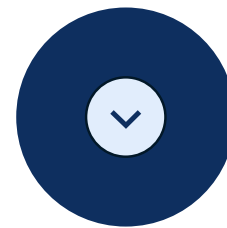
1. PROJECT OVERVIEW



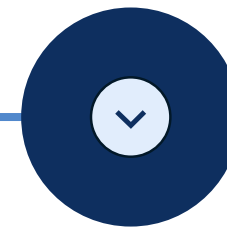


VPandas Financial Company is a **medium-sized** financial institution offering a range of services including **consumer financing, cash loans, credit card services, and insurance.**

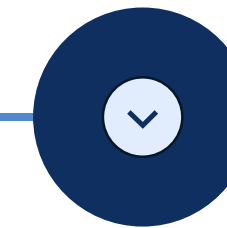
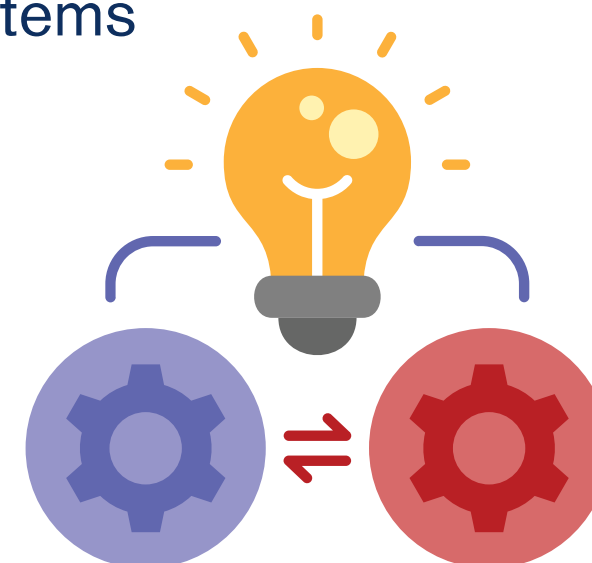
In the era of rapid **digital transformation**, VPandas aims to implement RPA to **improve and automate processes** to attract more customers, expand its market, and enhance operational efficiency.



Reduce **processing time**
and increase transaction
speeds by **30%**



**Integrate and
synchronize** data between
Core banking and CRM
systems



Reduce operational **costs**
by **20%**
Implement **automated audit**



Project development lifecycle

Waterfall



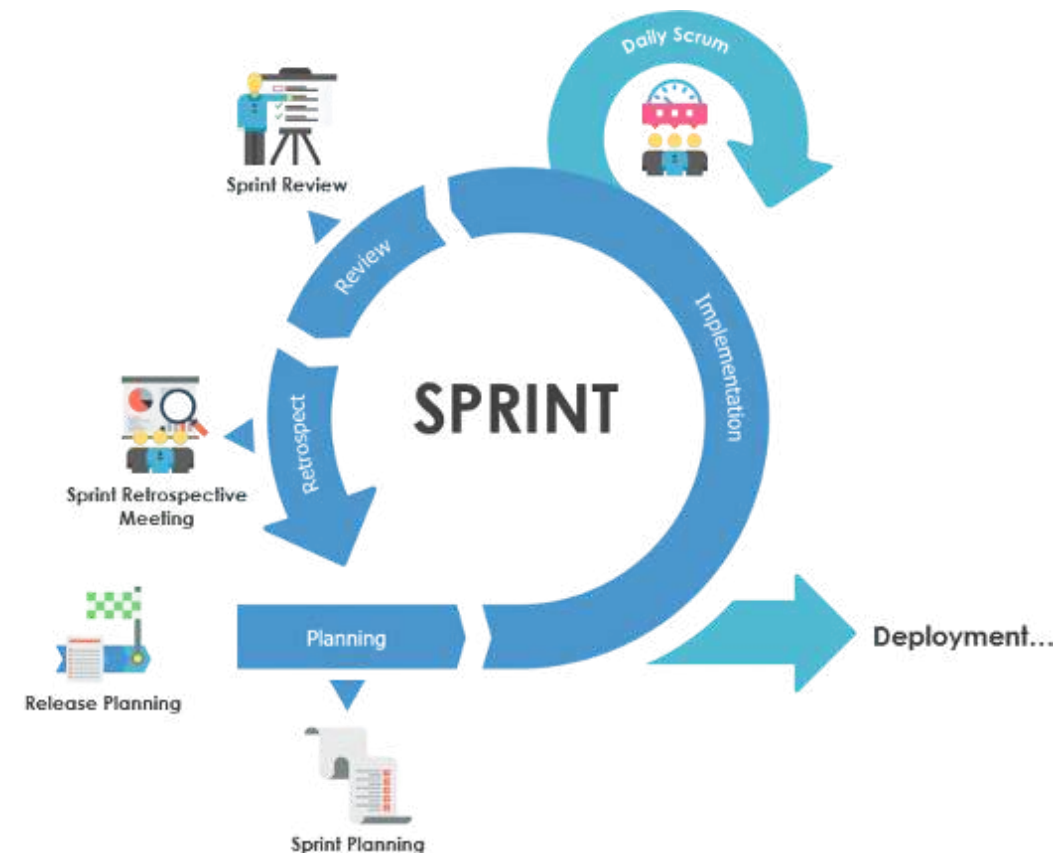
Waterfall



Waterfall is used in phases where requirements and constraints are **fixed**.

Agile/Scrum

→ used in the development phases where requirements can **change**.



Waterfall in the closure phase ensures systematic documentation, final validation of RPA bots, and formal handover to the operations team for **deployment and maintenance**.

Waterfall



Initiation

Planning

Execution & Monitoring

Closure

Fig. Agile/Scrum Process integrated into a Waterfall Deployment Schedule



Technical Risks

system integration, data security, and process complexity

Management Risks

stakeholder alignment, change management, and resource allocation

Other risks

regulatory compliance, workflow disruptions, and scope creep



Initial Risk Assessment

Risk matrix is populated based on risk score with the following thresholds:

- **1 - 6 (Low):** Low-rating risks most likely will not happen.
- **7 - 12 (Medium):** Some medium-rating risks might happen at some point.
- **13 - 25 (High):** High-rating risks are serious and very likely to happen.

With this information, we have created the matrix chart below for better visualization.

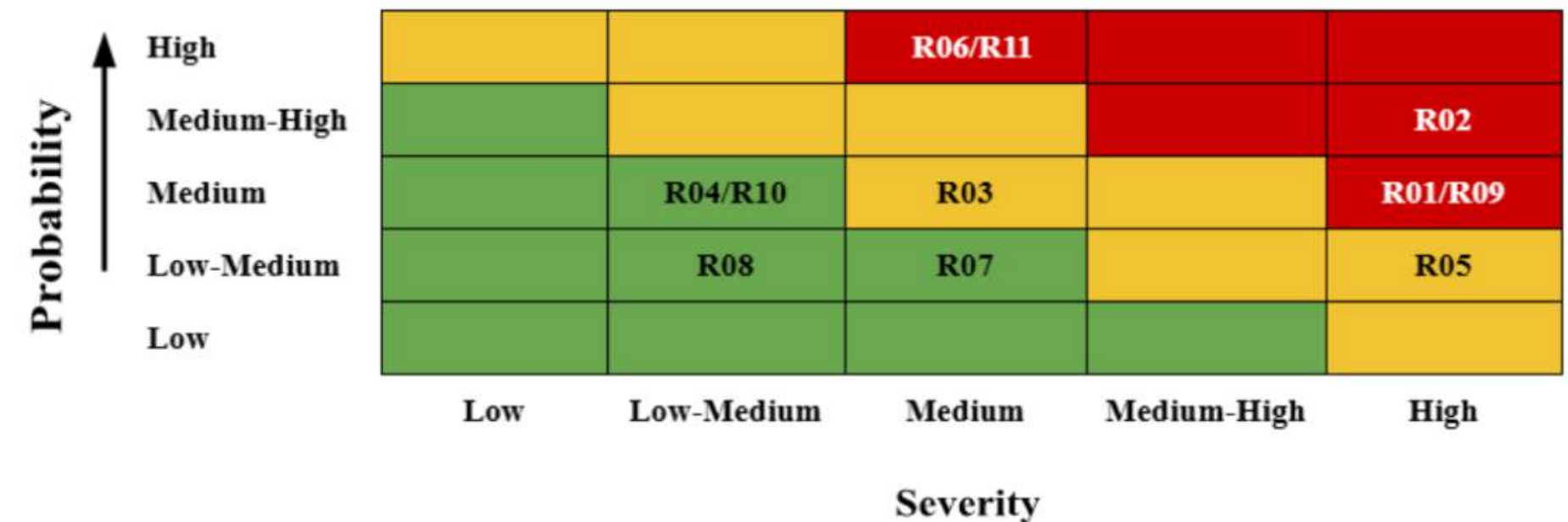
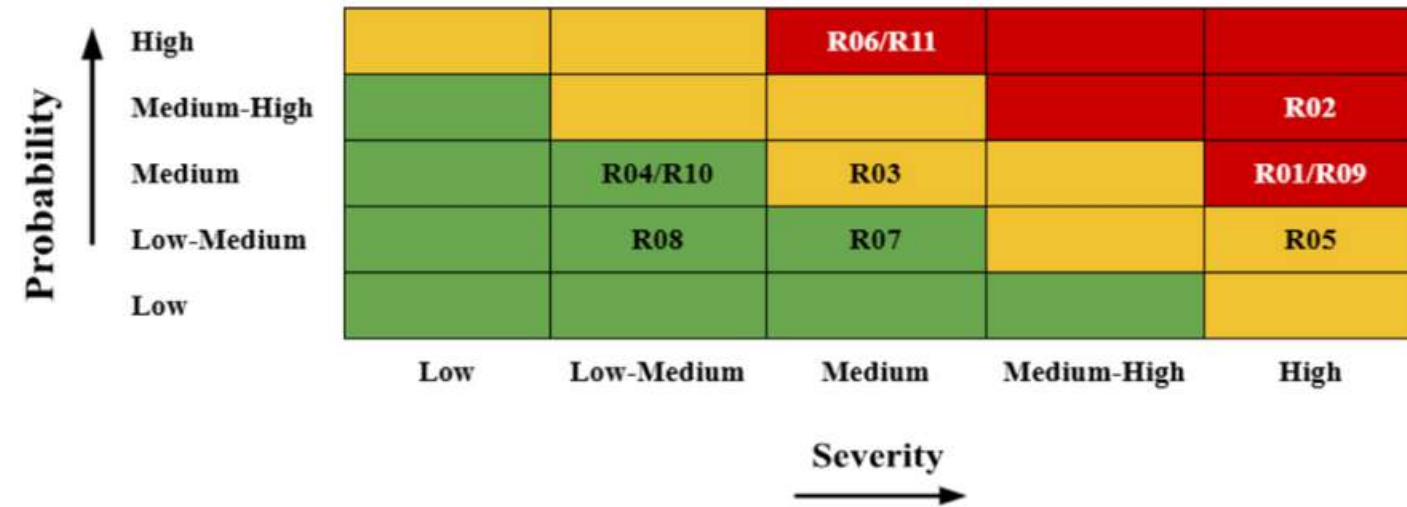
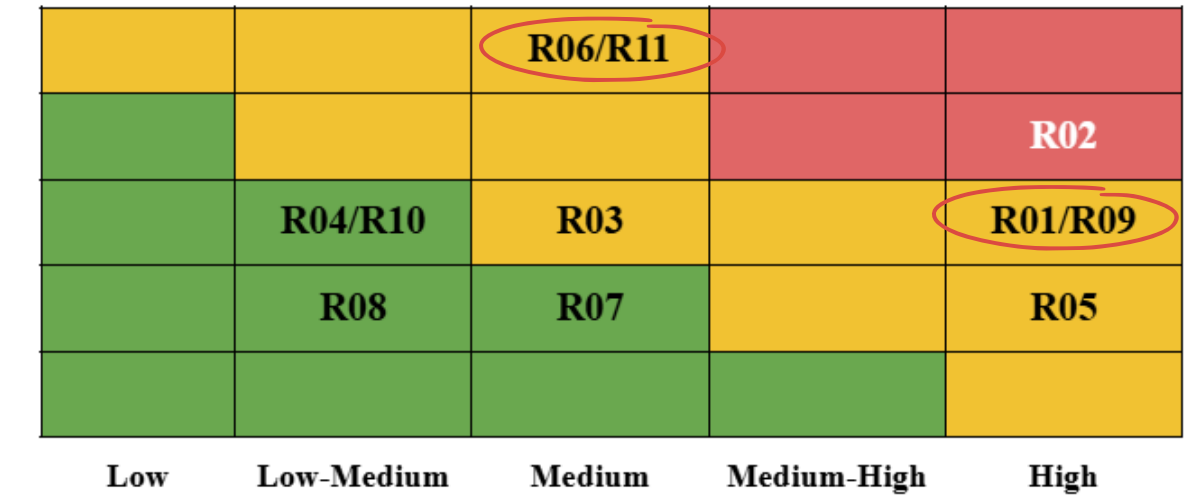


Fig. Risk Matrix

Risk Management Plan



Risk Control Plan



ID	Risk Description	Category	Likelihood	Severity	Initial Risk Score	Risk Control Plan	Final Risk Score
R01	System Integration Issues	Technical	Medium	High	15	Early testing, IT coordination	10
R02	Data Quality & Security	Technical	Medium-High	High	20	Enforce strict data validation, security checks	15
R03	Process Complexity	Technical	Medium	Medium	9	Simplify and document processes clearly	6
...							

2. Execution, Monitoring, & Controlling



2.1 Progress and performance report

Progress report

- 10-15 minutes **daily stand-up**
- Sprint review** at the end of sprint

Performance report

- Sprint completion progress table**
- KPIs**
- Velocity chart**



Performance report

Sprint number	Sprint name	Planned story point	Completed story point	Completion (%)	Comment
1	Business process analysis and Initial design	47	47	100%	All task completed as planned
2	Solution design and Integration planning	47	47	100%	All task completed as planned
3	Development Phase 1 - Core RPA features	42	40	95%	Encountered slight integration delays due to environment configuration; quickly resolved.

Sprint completion progress table

Performance report

Sprint 3 – Development Phase 1 (Core RPA features)

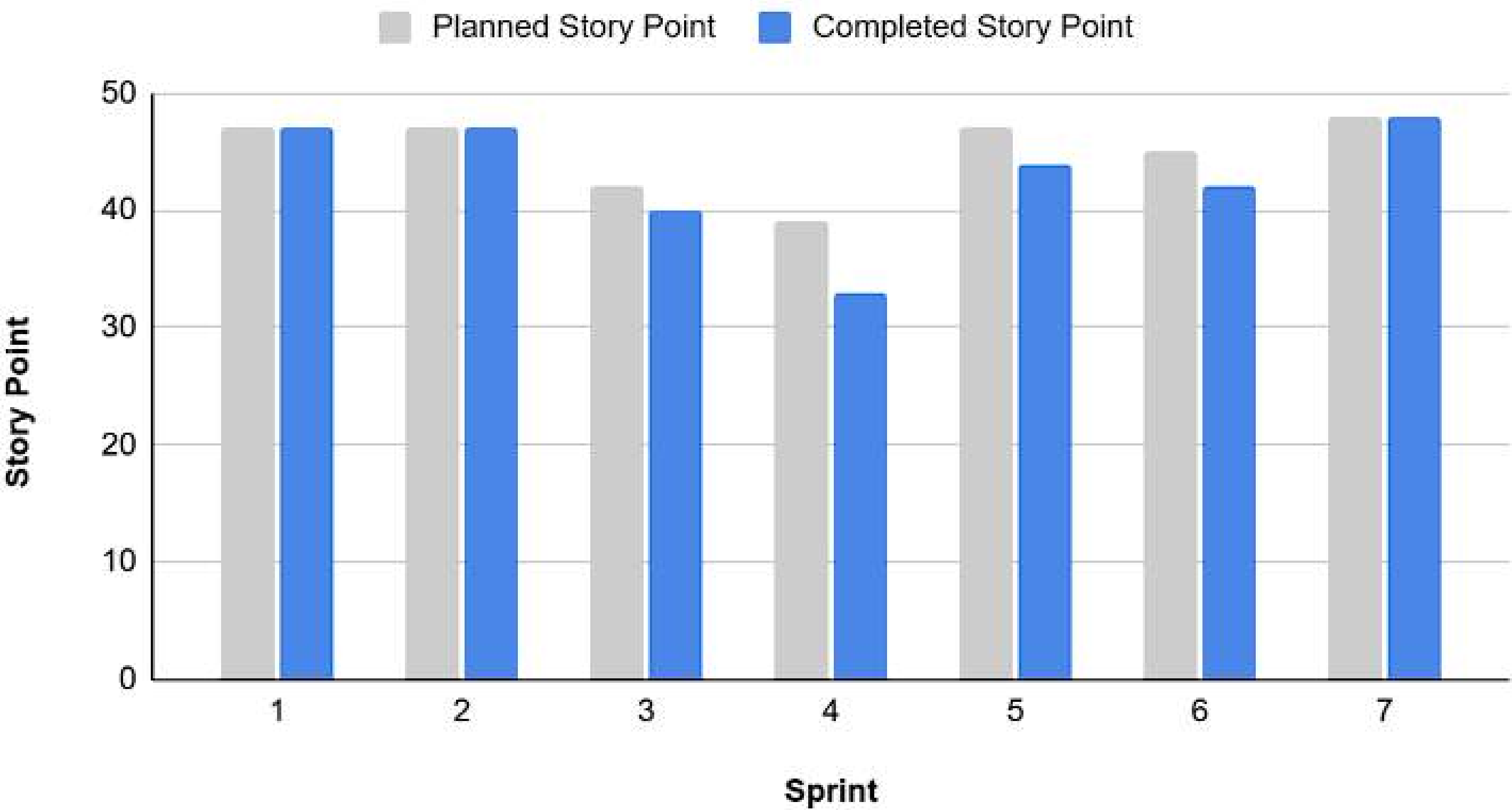
- **Requirement completion rate:** 88% (Slight integration delays)
- **Cycle time:** 3.2 days (Environment setup delays)
- **Defect rate:** 6% (Code refinements needed)
- **Rework and change requests:** 7% (Integration adjustments)
- **Effective participation in scrum:** 82% (Active debugging participation)
- **Weekly report submission compliance:** 100% (All reports submitted on time)
- **Stakeholder feedback score:** 4.3/5 (Some concerns on system stability)

KPIs report



Performance report

Velocity Chart



2.2 Stakeholder feedback records

Stakeholder feedback records are a record of feedback from both internal and external stakeholders.

No	Sprint/Feature	Stakeholder	Description	Priority	Action taken	Status	Feedback Phase	Meeting Source
1	Sprint 1: Analysis & Planning	Project Sponsor	Needs more detailed ROI analysis of RPA compared to the current manual processes.	High	Added a detailed ROI comparison section.	Done	Initiation phase	Project kickoff meeting

Stakeholder feedback records table



2.3. Test Report

The purpose of testing is to assess the accuracy, performance, security, and integration of the RPA system with the Core Banking and CRM infrastructure, ensuring that the system operates effectively and meets both technical requirements and user needs.

From Sprint 3 to the end

Data entry

99.8% accuracy,
2 formatting errors

Data Synchronization

99.9% accuracy

Financial Reporting

35% improvement
in processing time



>>>> Key problems from Test report

User Acceptance Testing (UAT)

40% of users faced difficulties using the system, mainly due to insufficient training and unclear documentation.
=> **20% of users** preferred to continue using manual processes instead of adopting the automated system.

Performance testing

15% performance degradation when handling large workloads

- Expected: **100,000** transactions/day
- Actual: **85,000** transactions/day

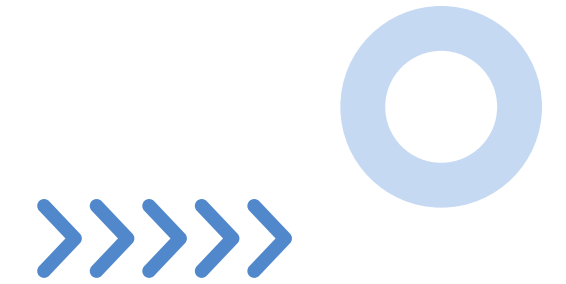
2.4. Change requests

Based on the test results, we assess the need for changes to optimize system performance and improve user experience, ensuring improved project efficiency.

ID	Description	Reason	Date	Impacted Area	Request Type	Priority	Status
C01	Extend project by 1 Sprint	Employees required more training time and improve performance	8/8/2025	Timeline, Costs	Corrective	High	Implementing

2.5. Change Logs

2.5.1. Minor changes



Will be recorded directly into the product backlog, where new requirements, enhancements, or bug fixes are added, prioritized, and refined through backlog grooming sessions.



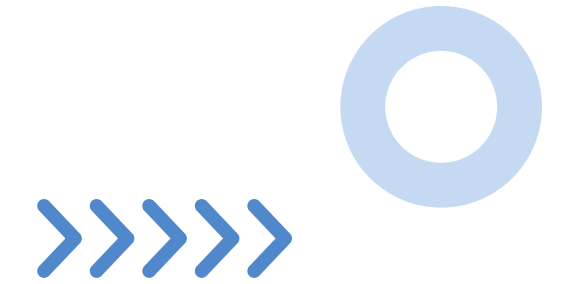
Before the Sprint begins: Minor changes will be evaluated and reprioritized during the **backlog refinement** session.



During an active Sprint: If a minor change occurs during an ongoing Sprint => will be adjusted in the **sprint backlog** without disrupting the current work.

2.5. Change Logs

2.5.2 Major changes



Major changes are those that significantly impact the scope, cost, or time of the project. These changes need approval from stakeholders.

1

Major change requirements

2

Approval and analysis, PERT estimate, division of work

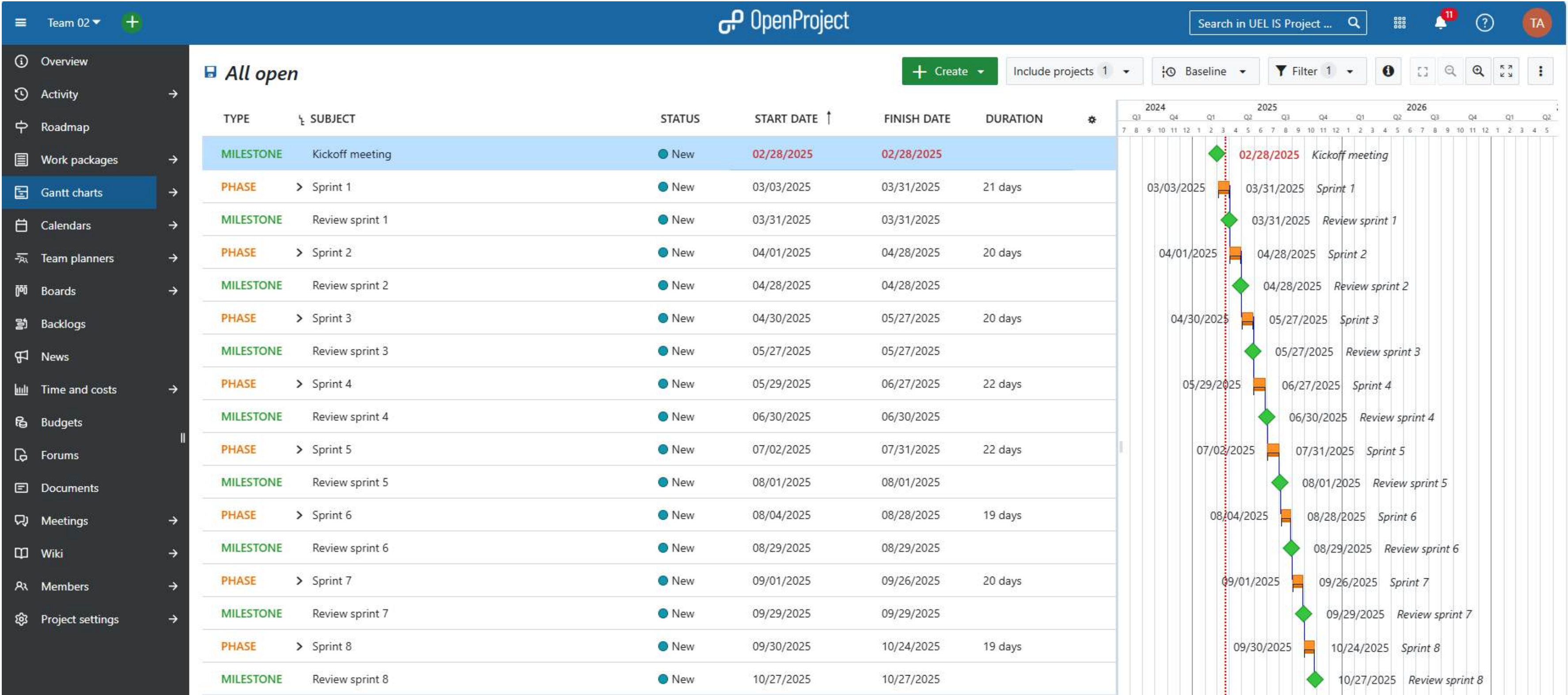
3

Update Product Backlog

4

Planning and implement

2.5.Change Logs



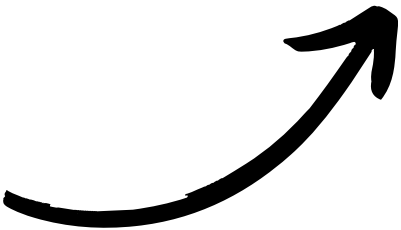
Sprint Backlog after being updated- approved **Change request C01**

2.7. Issues Log

Issues log is used to record and track all issues that arise during the system's implementation. Issues are primarily **identified during User Acceptance Testing (UAT), performance testing, and security testing**, as well as through **user feedback** and **internal review meetings**.

ID	Issue Description	Date Raised	Reported By	Severity	Probability	Status
I01	Formatting errors in Core Banking data entry	04/02/2025	Dev Team	High	Low	Minor issue, future fix planned
I02	Slow synchronization between Core Banking and CRM	3/3/2025	Dev Team	Medium	Medium	Closed
I03	Compliance system fails to flag large transactions	30/3/2025	Security Team	Low	Low	Closed
I04	Formatting issues in financial reports (PDF export)	27/4/2025	QA Team	Low	Low	Closed

Technical issues and **interface (UI)** issues



2.8. Risk Update

Risk update is a crucial process to **assess and revise** the project's initial risk assessment and risk management strategies throughout its lifecycle. This involves reviewing new risks, monitoring existing risks, and evaluating the effectiveness of the mitigation strategies in place.

2.8.1. Newly identified risk

Risk ID	New Risk	Description	Severity	Probability	Risk score	Mitigation strategy
R12	Unexpected system downtime	Since deployment, the RPA system has experienced unplanned outages due to high transaction loads exceeding system capacity. These downtimes have impacted loan processing	High (5)	High (5)	25	Implement a failover server architecture, enable real-time system monitoring, and optimize bot execution scheduling to distribute workloads more efficiently.
R13	Data synchronization delays	The integration between the Core Banking system and the CRM is not functioning as expected, resulting in delayed updates of customer financial data.	High (5)	Medium (3)	15	Improve API call efficiency, implement asynchronous data processing, and optimize database indexing to ensure seamless data flow between systems.
R14	Bot performance degradation	RPA bots operating slower than expected under high workloads.	Medium (3)	High (5)	15	Conduct script optimizations, introduce load balancing techniques, and refine bot task prioritization to enhance performance under peak loads.

2.8. Risk Update

2.8.2. Previous risk update

In the project, we regularly **review and update the status** of **initially identified risks**. Some risks from the initial risk assessment may have been resolved, while others remain ongoing or have escalated in severity.

Risk ID	Previous risk	Initial status	Updated status	Current risk level
R01	System integration issues	High	Resolved - Integration completed successfully with API improvements.	Low
R02	Data quality and security	High	Ongoing - Additional encryption measures added, but minor security gaps remain	Medium
R03	Process complexity	Medium	Resolved - Business processes streamlined, reducing automation failures.	Low
R04	Scalability and performance issues	Low - Medium	Ongoing - Performance optimized for current load, but monitoring required for future scaling.	Medium
R05	Stakeholder alignment	High	Resolved - Regular stakeholder meetings and updates improved alignment.	Low
R06	Employee change management resistance	High	Partially resolved - Training improved, but some resistance still exist	Medium

Risk ID	Previous risk	Initial status	Updated status	Current risk level
R07	Resource allocation challenges	Medium	Resolved - Additional resources allocated, ensuring smooth execution.	Low
R08	Vendor management risks	Low	Resolved - Clear SLAs established, vendor performance monitored effectively.	Low
R09	Regulatory compliance issues	High	Escalated - New regulations require further adjustments to automation logic.	High
R10	Operational disruptions	Low-Medium	Resolved - Phased rollout minimized disruptions, no major impact observed.	Low
R11	Scope creep	Medium	Ongoing - Change control measures improved, but some minor deviations still occurring.	Medium

3. Project Closure



3.1. Final project report



The project is evaluated based on three main factors: **Scope, Time, Cost**



Scope

- The main objectives were **successfully completed** as expected
- Operating costs were reduced by **30%**, exceeding the initial target of 20%

Time

- Each sprint ensures on schedule 4 weeks/1sprint
- An **additional 1 sprint** was required

The project was extended by **1 month**

Cost

- Cost deviations ranged from **2-5%**
- Increase labor costs by **250%**
- Total project costs rose to **38 billion VND**



3.2. Lessons learned

Successes

Implementing the Hybrid Agile-Waterfall approach proved effective in:

- Ensuring **high-level requirements** were met.
- Providing **flexibility in task** adjustments within sprints.

Limitations

- Did **not adequately assess** end-user acceptance of the system.
- Required system optimization, leading to **extended** training time and costs.

Opportunities

- **Optimizing** the current RPA system
- **Expanding** RPA applications
- Integrating **AI & Machine Learning** into RPA





THANK YOU