

vybeCoders

SPARK

Service Proactive AI Responsive Knowledge

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Problem Statement and Impact

The customer service of BPI is at risk as recurring floating cash reconciliation delays—reported by clients online and lasting a couple of business days—*threaten to erode its strong NPS*, especially since most of consumers rely on social media reviews in choosing financial services.

Customer Reviews

A screenshot of a Reddit post from the subreddit r/DigitalbanksPh. The post is titled "BPI Vybe - Most unreliable online banking app". It has 6 months ago and 5476 upvotes. The post content includes a link to the original post and a text block with a Digital Bank / E-Wallet tag. The text discusses a transaction getting stuck and being unable to transfer funds back to BPI or other online banking and e-wallets. A large yellow arrow labeled "Impact" points from the review area to the threat section.

BPI Vybe - Most unreliable online banking app

Digital Bank / E-Wallet

Once my transaction got stuck. My entire funds are stuck as I cannot transfer it back to BPI or any other Online banking and E-wallets. I was advised that I could perform a cardless cash withdrawal using the app to a BPI ATM but lo and behold, it didn't work either.

I'd like to express my immense disappointment in @TalktoBPI for not resolving an issue I've had with a refund since August 3, 2025. \$119 may not be a big amount to them but it is for me, and I'd appreciate having it in my account.

I'll be calling on Monday but I had to vent :)

Threats

Created a bad *customer service reputation*

Can be a threat to the *NPS score of BPI* if not resolved immediately.

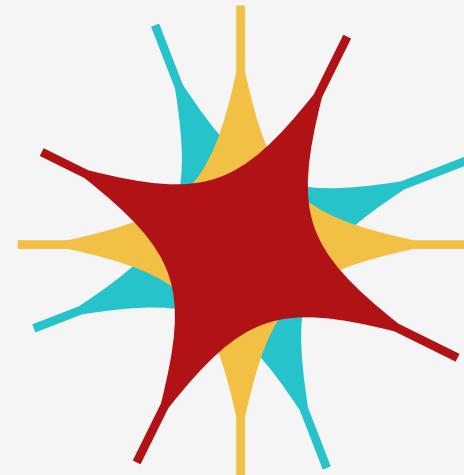
Can result to customer switching their banking application to other local banks.

User Story



Impact: Due to recurring issues with **floating cash** and **unresolved customer service concerns**, Maria—a valued client—is beginning to **lose trust** in Vybe's reliability and effectiveness.

Solution: Architecture

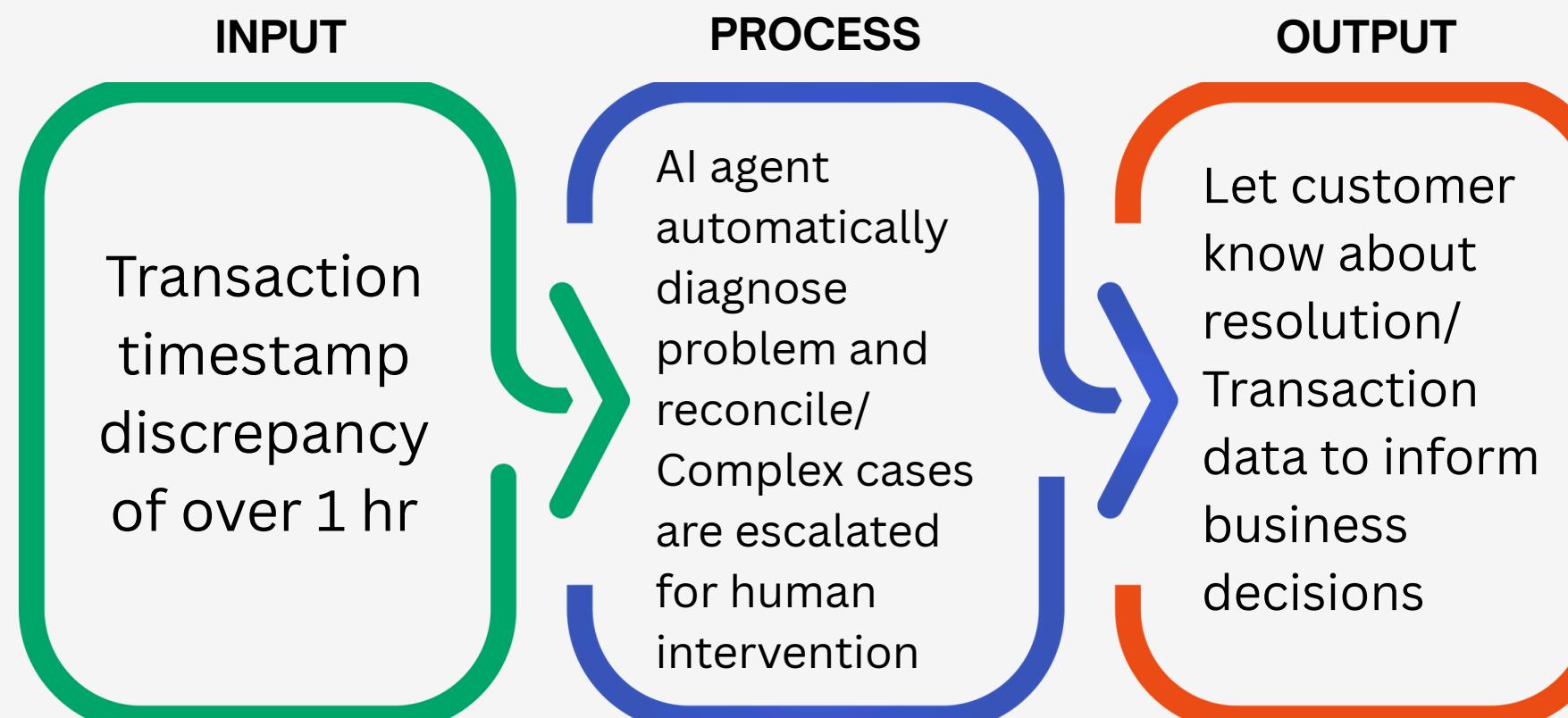


from float to found

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A **proactive** project that can *detect risks* of floating cash and **auto-reconciliation** method powered by **AI agents**.



Proactive Project

SPARK AI agent allows risk detection with proactive measures of auto-reconciliation to solve the floating cash anomaly in digital apps.



Risk Detection

With the use of Machine Learning, SPARK AI agent can detect high-risk transactions for floating cash and can give proactive measures to resolve it.



Auto-Reconciliation

Once the floating cash incident happens, SPARK AI agent can auto-reconcile transactions ensuring accuracy and timeliness for the clients.

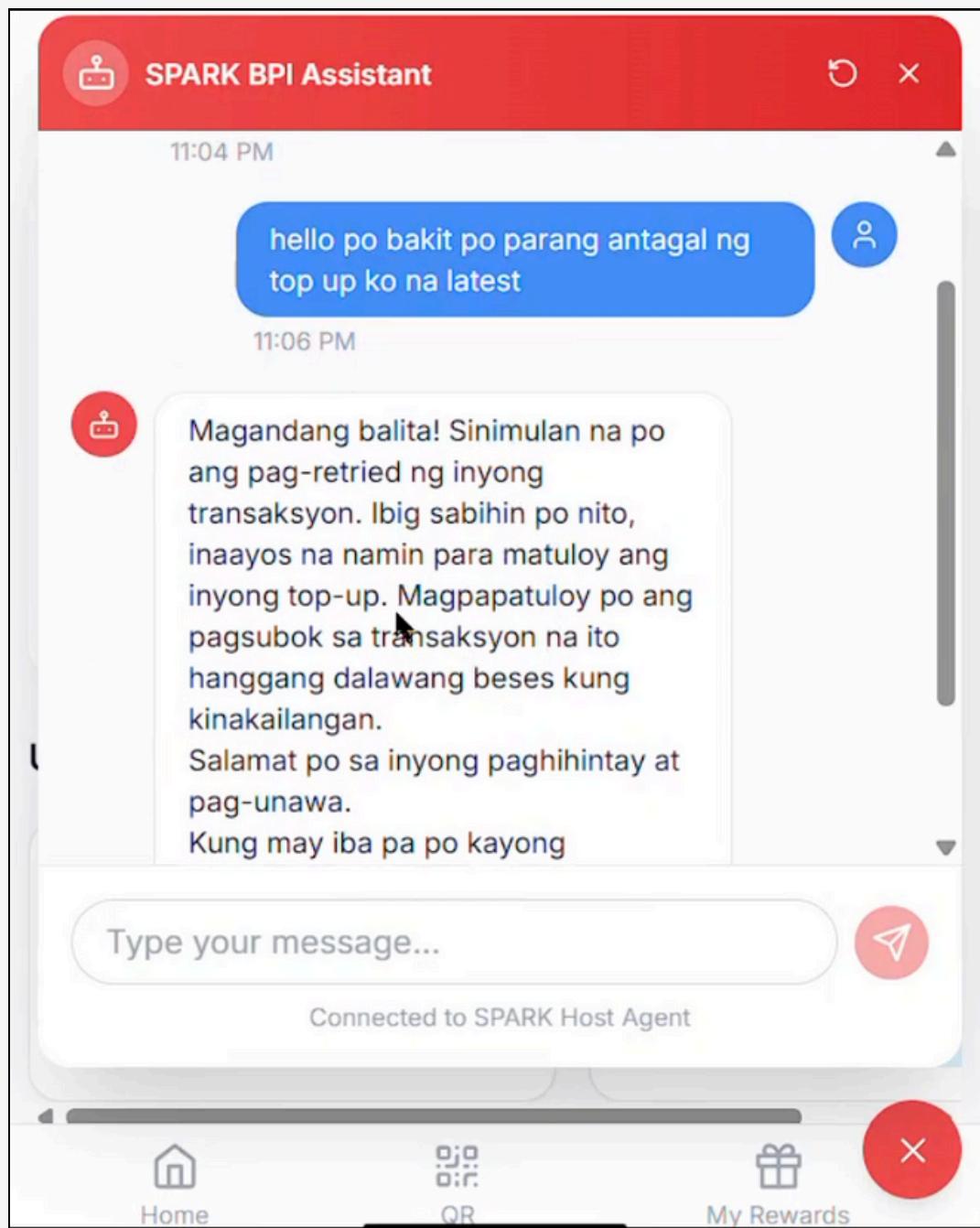


Impact to Client

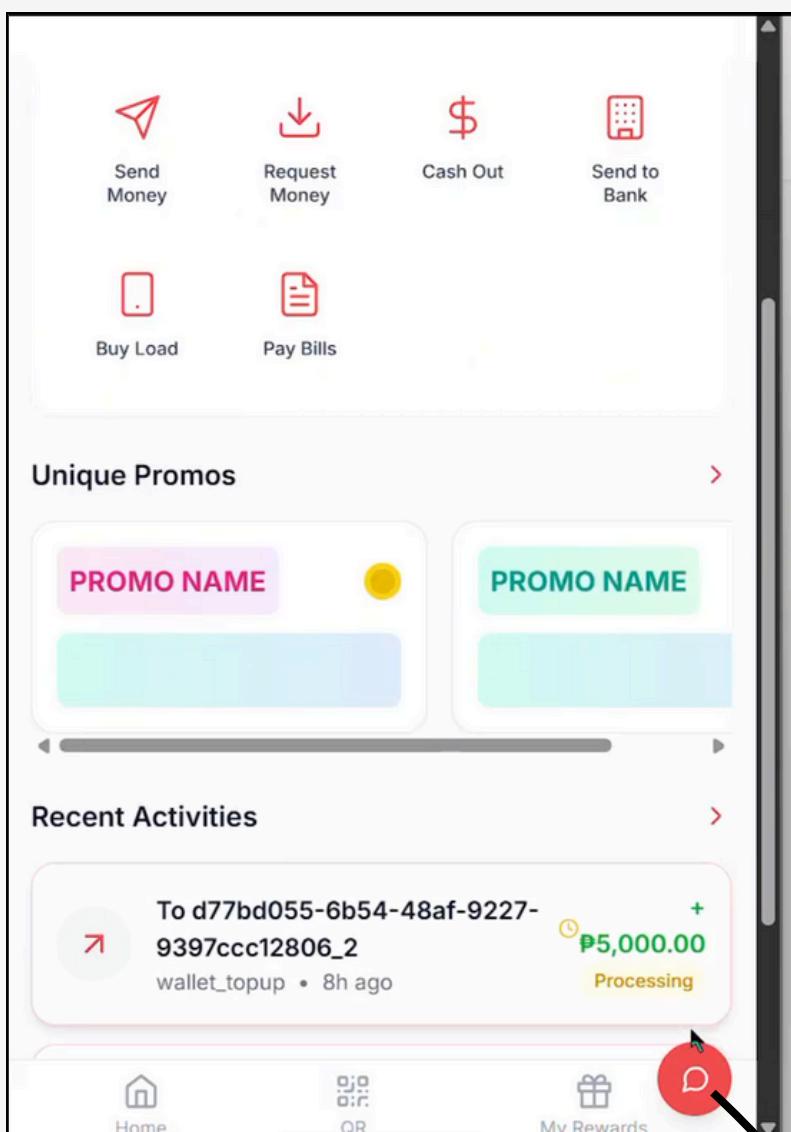
Less hassle in auto-reconciling and transparency on floating cash incidents.
Happy transactions = happy clients

Solution: Interface

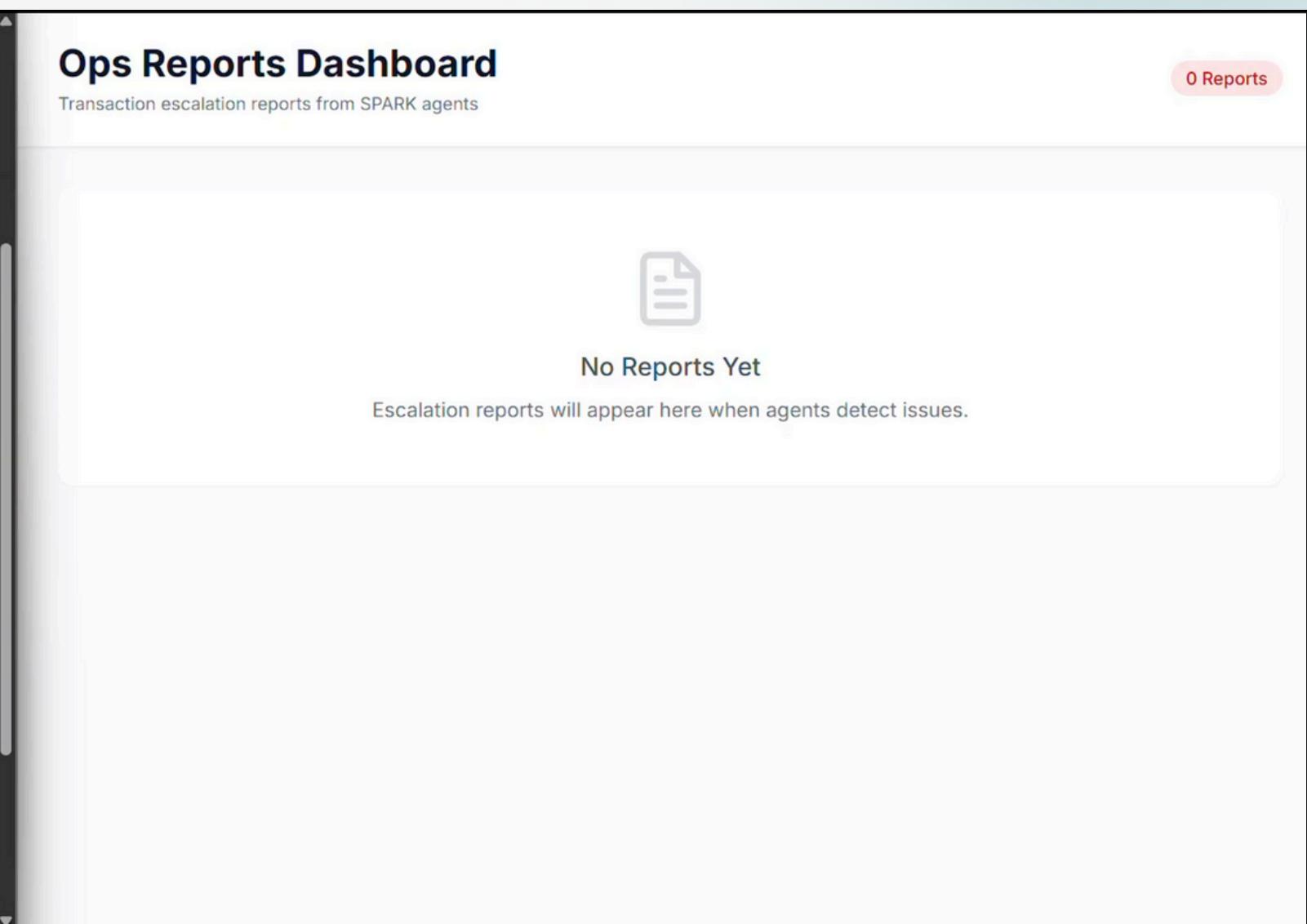
Full view of SPARK



LEFT: Vybe e-wallet mock up



RIGHT: Customer service agent view

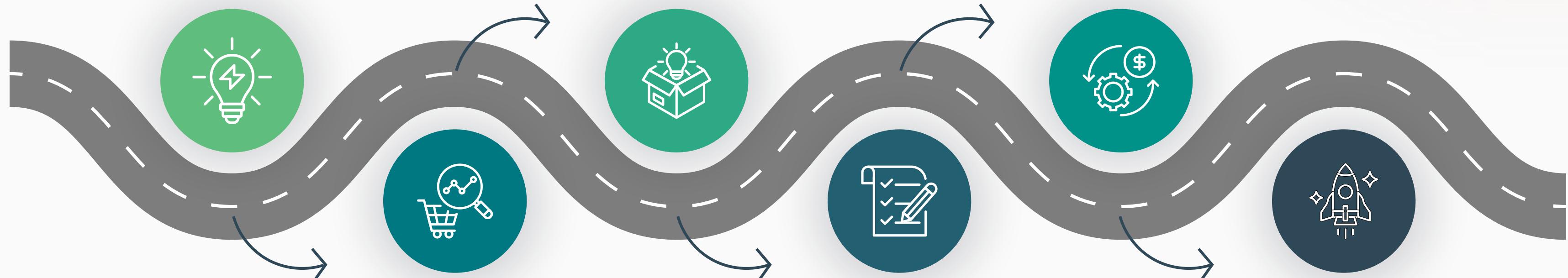


SPARK AI AGENT

Methodology

Data Generation

Created a synthetic dataset for the prototyping and testing.



Risk Predictor

With the given dataset, proponents used machine learning models to create a risk predictor to be integrated with the AI modelling and design.

AI Agent Integration

The developers created an AI agent with the integration of the risk predictor and mock designs of UI.

Testing & Prototyping

Testing of the AI agent to ensure accuracy, alignment with the business objectives, and overall strategic goals.

Improvement & Refinement

Iterate based on feedback from product testing results.

Demo

A demonstration tutorial was developed to systematically present the functionality of the prototype, showcasing its core features, operational flow, and intended use cases.

Implementation Plan

Phase 0: Building Team

Build a dedicated project team composed of a project manager, developers, QA personnel, and an AI engineer to oversee implementation and long-term maintenance.



Phase 2: Development

Define objectives and align IT goals with business strategy, then roll out SPARK in parallel with ongoing operations to avoid disruptions.



Phase 3: Testing

Conduct quality assurance and user acceptance testing with clients and call center agents using dummy data or a mock system to validate functionality and usability.



Phase 5: Maintenance

Regularly retrain and update the AI model to adapt to changing data patterns, ensuring long-term accuracy, reliability, and business relevance.



Results and Impact



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Results Highlights

- **96.4% recall rate** in detecting floating cash incidents
- **92.45% accuracy** in ML-based risk prediction
- Resolution time reduced from **hours to under 5 minutes**
- 100% success rate across 11 security test scenarios for the multi-agent system

CHALLENGES

FLOATING CASH CRISIS

POOR CUSTOMER EXPERIENCE

TRUST EROSION

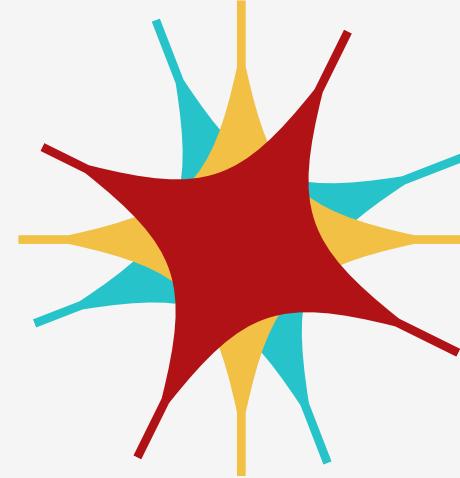
SPARK SOLUTION

AUTOMATED DETECTION & RESOLUTION

PROACTIVE COMMUNICATION

INTELLIGENT ESCALATION

Results



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Results here of the testing.

from float to found



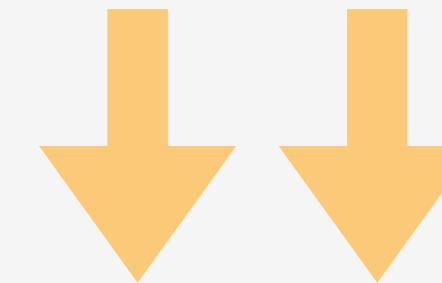
Before SPARK: Maria's Journey

- Transaction shows "successful" but merchant doesn't receive funds
- Forced to pay cash after waiting at counter
- Hour-long wait before calling customer service
- Told to "check with merchant" with no clear resolution
- "*Sana di nalang ako nag-Vybe*" - complete loss of trust

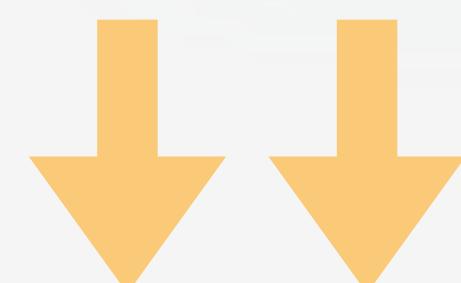
TRANSACTION STUCK IN "FLOATING" STATE FOR 60+ MINUTES

FRUSTRATED USERS EXPRESSING ANGER TO AGENTS

CONTACT CENTER AGENTS LACK TRANSACTION CONTEXT AND SYSTEM VISIBILITY



 **SPARK**
intervention



AUTOMATICALLY DETECTED AND RESOLVED VIA RETRY MECHANISM

SENTIMENT-AWARE AI MAINTAINS COMPOSURE, RESPONDS WITH EMPATHY, AND DE-ESCALATES TENSION WHILE SOLVING ISSUES

COMPREHENSIVE REPORTS WITH TRANSACTION HISTORY, RESOLUTION ATTEMPTS, AND RECOMMENDED NEXT ACTIONS

With SPARK
integration, we ensure
happy clients with
happy transactions



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