

BEYOND INTERFACES

Designing Human-Centered Digital
Experiences Fueled by Data

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Keynote: UP TechX 2025



The Story of the “Perfect” App

We built it.



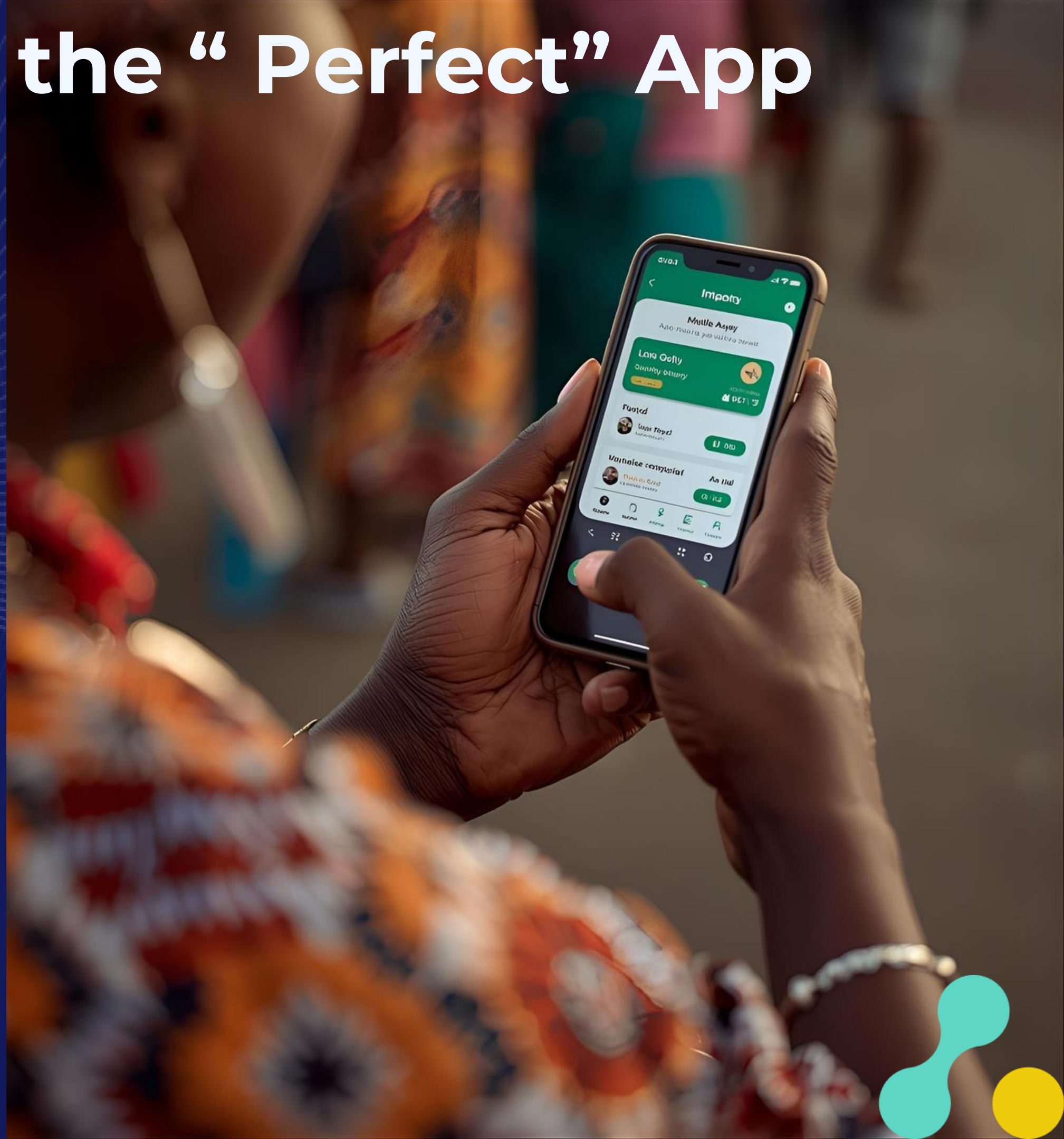
It won awards.



And it failed.



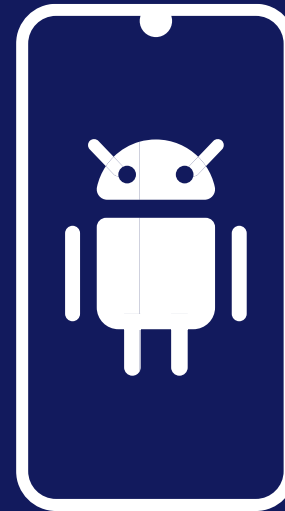
Why?



The Real African Context (The Stakes)

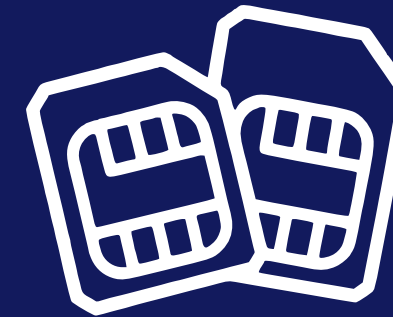
The Device:

90% of internet connections are mobile. Many are low-spec Android devices.



The Cost:

1GB of data can cost 8% of average monthly income. (vs. 0.5% in the US).



The Trust:

In Southern Africa, digital fraud is rampant. SIM-swap fraud has destroyed lives. Trust isn't given; it's earned in millimetres.



The Identity:

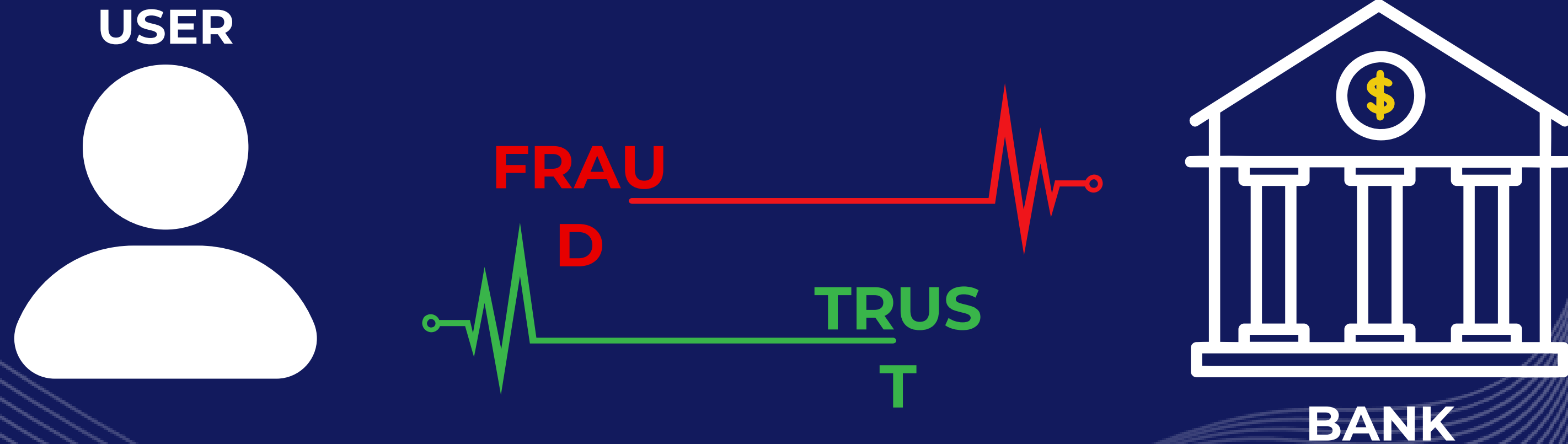
500 million Africans have no formal ID. How do you design KYC for a ghost?

My "Aha!" Moment: Fighting Fraud

The Data: "Impossible login velocity. Block the account."

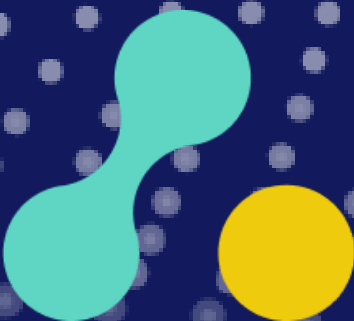
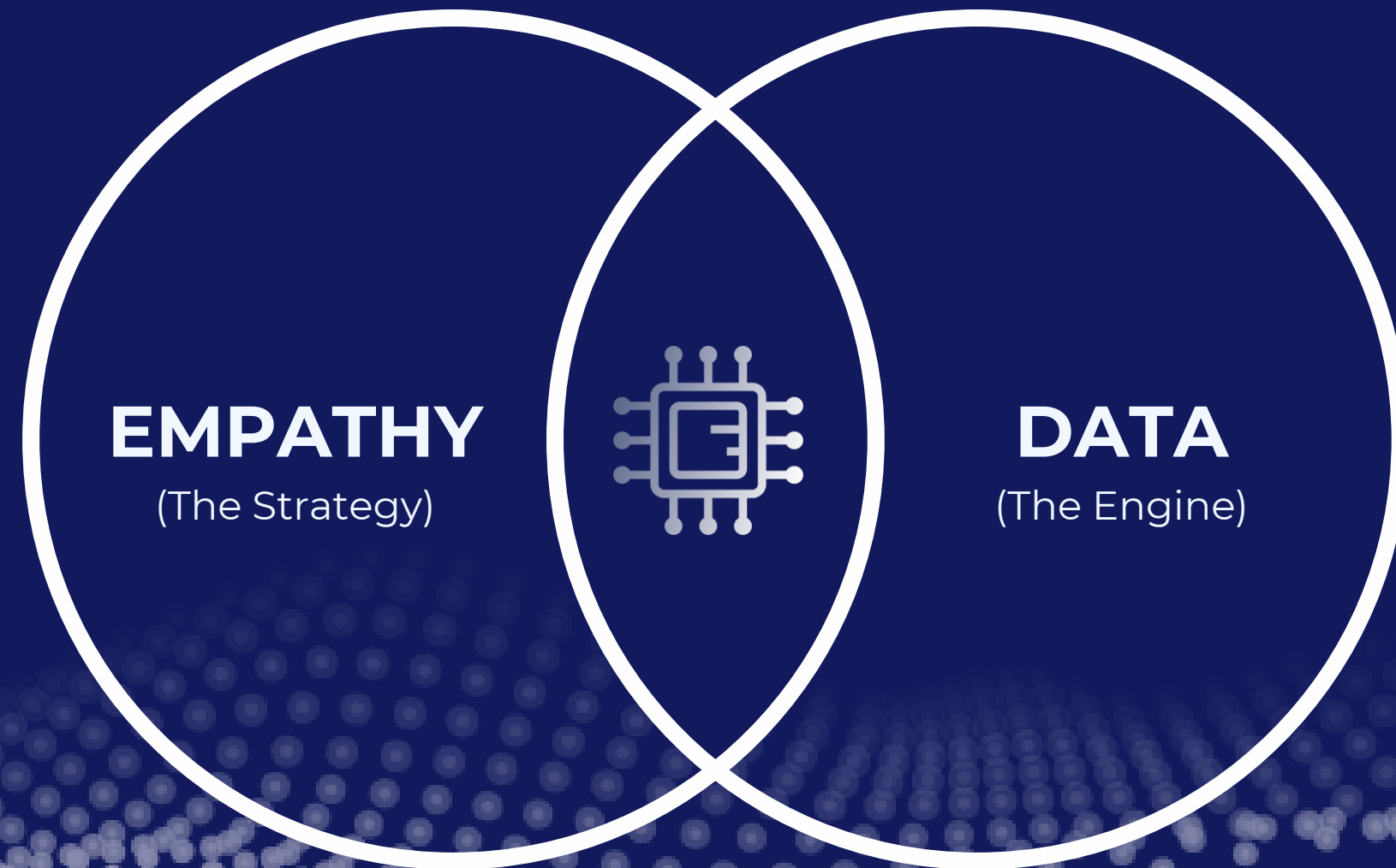
The Human: "I'm locked out! My money is gone! Help!"

The "Aha!": Data spots the problem. Empathy designs the intervention.



THE THESIS

In Africa's digital future, empathy is the strategy, and data is the engine.



Case Study 1: The "Invisible" Customer (East Africa)

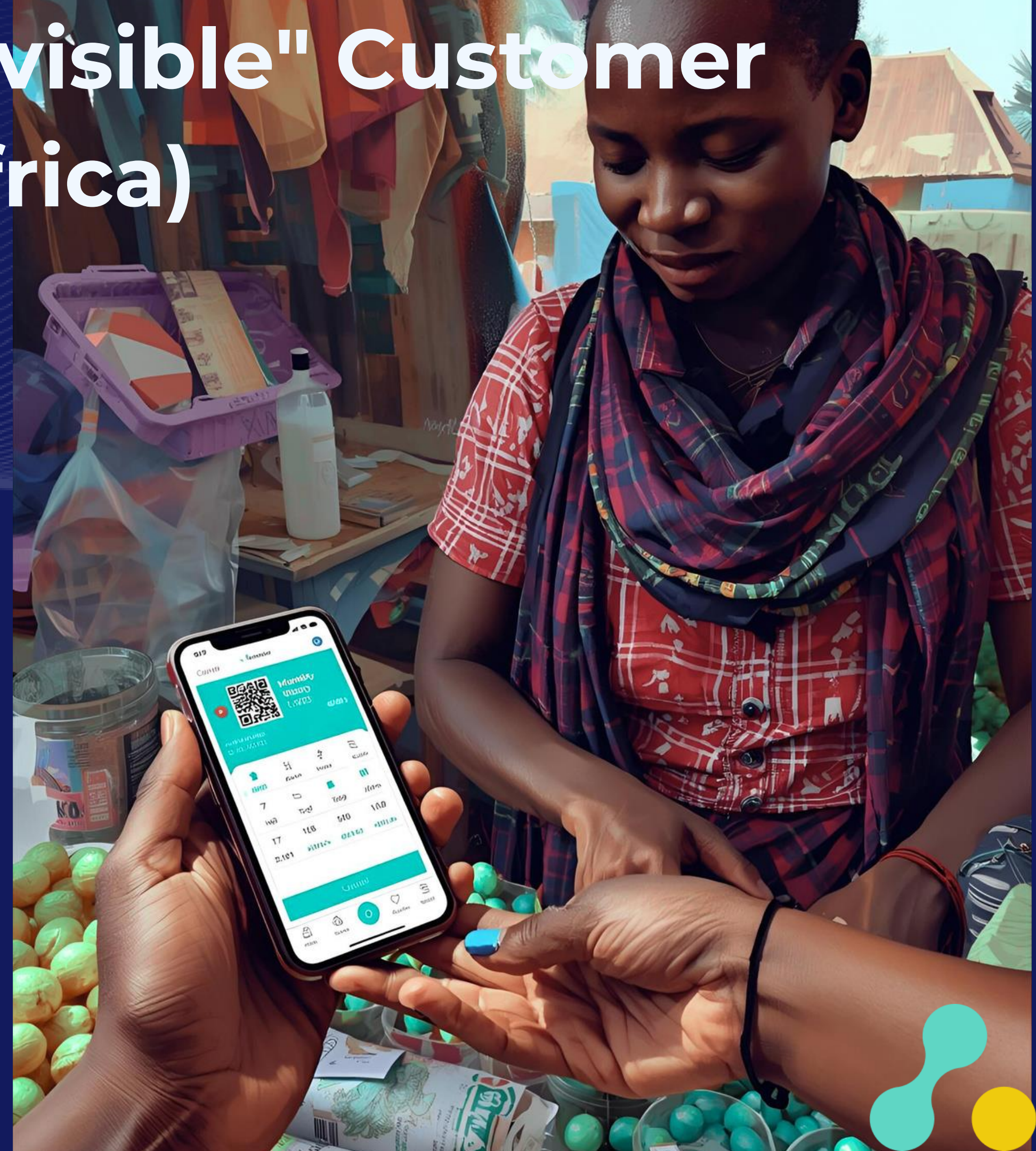
The Goal: Financial inclusion for informal traders.

The Data: 70% drop-off on the 'Proof of Residence' screen.

The Empathy: "I don't have a utility bill. I pay my landlord in cash."

The Solution: Use a digital footprint they do have.

The Result: Onboarding success +120%.



Case Study 2: The "Data-Light" User (Southern Africa)

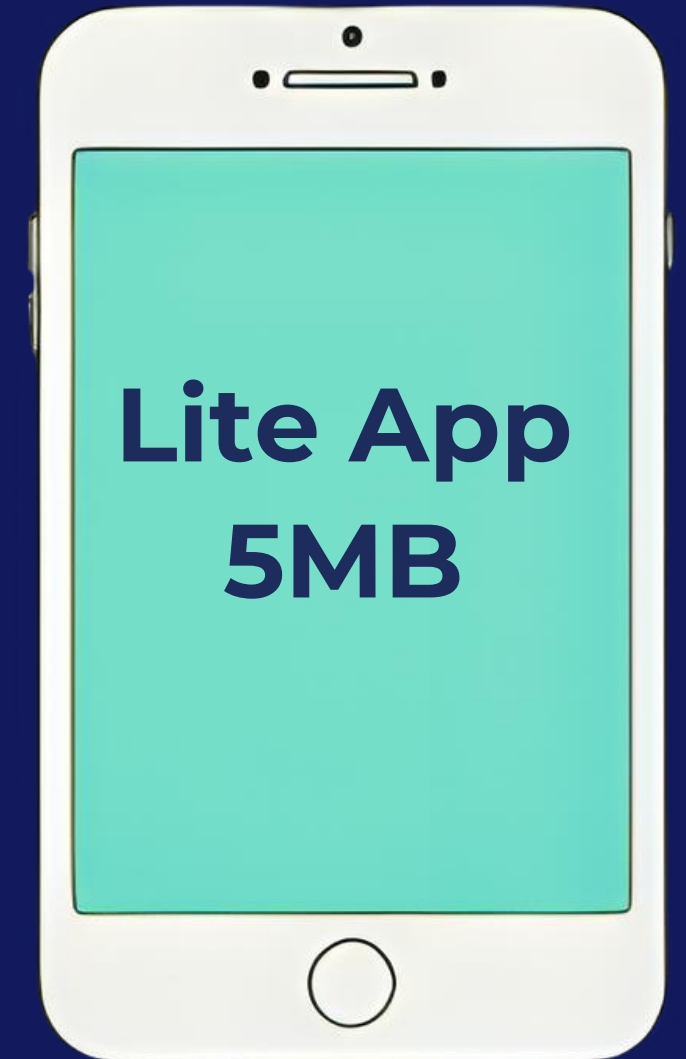
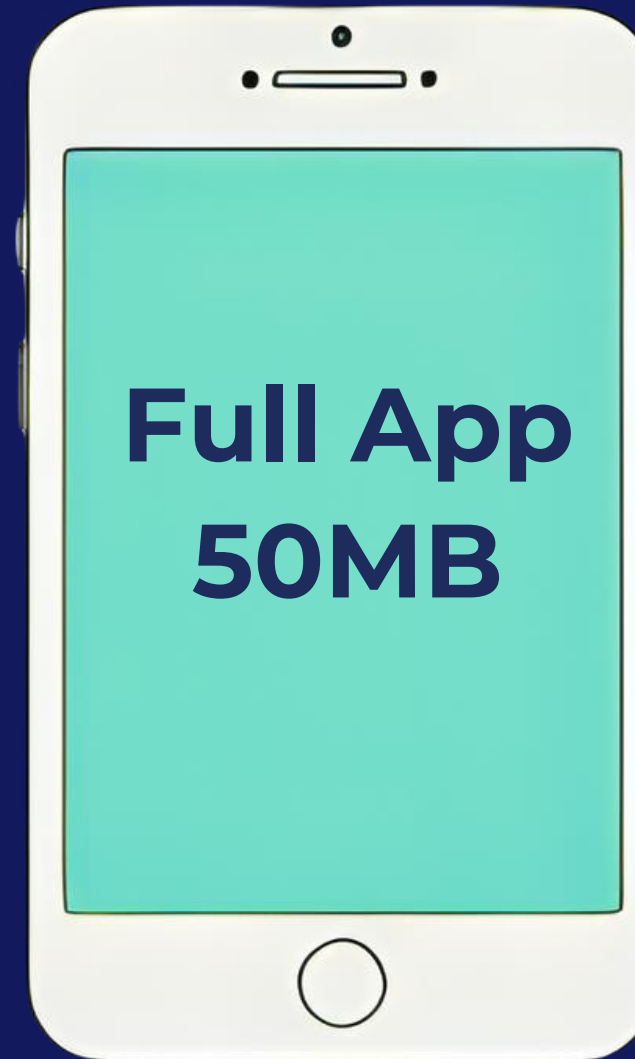
The Goal: Increase engagement for an e-commerce app.

The Data: Users log in on the 1st of the month. Then... silence.

The Empathy: "Payday. I buy my data. By the 15th, my data is finished."

The Solution: A "data-free" or "lite" version.

The Result: 30% increase in mid-month transactions.





ZULAZULA

MICHAELHOUSE

SMARTER ROUTES.
FASTER RIDES.
FOR EVERYONE.

IEB HACKATHON

MEET THE TEAM



**SIHLE
LUDONGA**



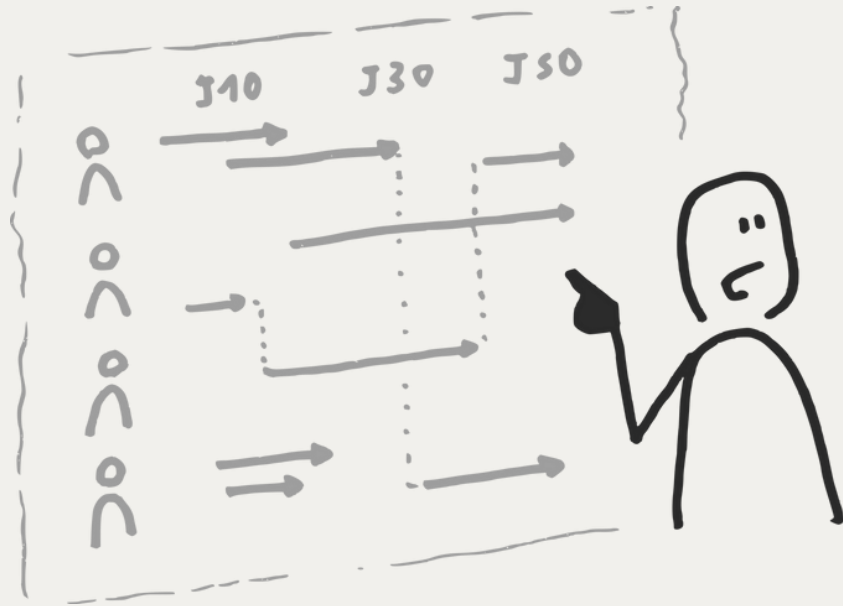
**THOMAS
WAYNE**



**GABE
ISABWA**



**BRENT
TAYENGWA**



THE PROBLEM DISSECTED

MEET THANDI

01

Thandi's Commute Is Not the Problem: It's the System

Thandi lives in a township outside Johannesburg. Like many, she knows when to expect taxis and roughly where they'll go. The problem isn't randomness — it's inefficiency.

02

Her Taxi Takes Inefficient Routes

Even when Thandi gets in early, her taxi spends extra time driving around half-full, trying to pick up passengers on a fixed route.

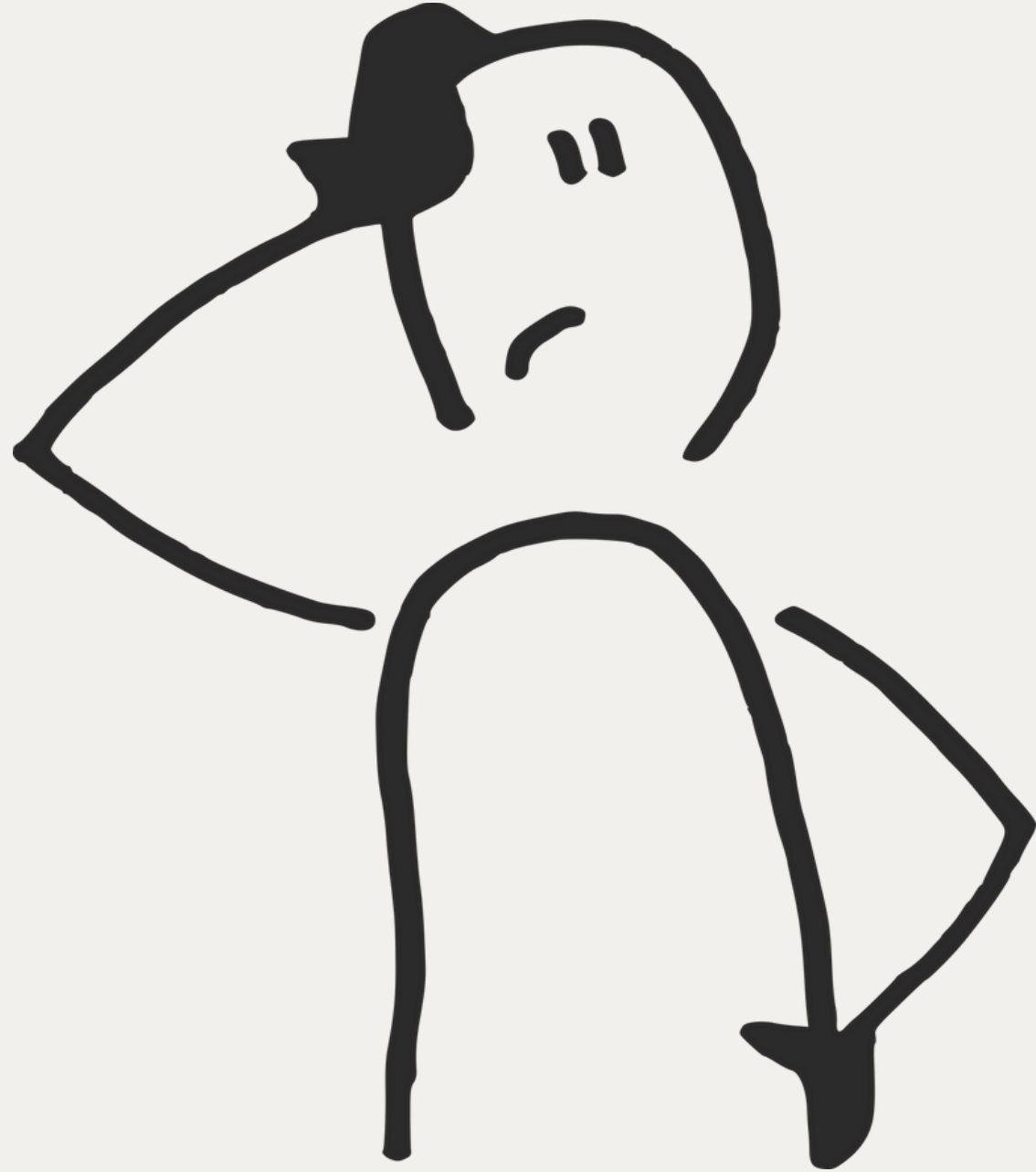
She watches the driver burn fuel, miss shortcuts, and take detours to areas that don't need rides. Why? Because there's no system telling the driver where demand really is or how to get there faster.

03

This Hurts Everyone

Thandi arrives late to work — again. The driver earns less, wasting fuel and time. Other commuters in high-demand zones don't get picked up at all. Taxis clog roads where they aren't needed, contributing to traffic and emissions.

The current system doesn't adapt — it follows the same outdated routes no matter what's happening on the ground.



ZULAZULA AI

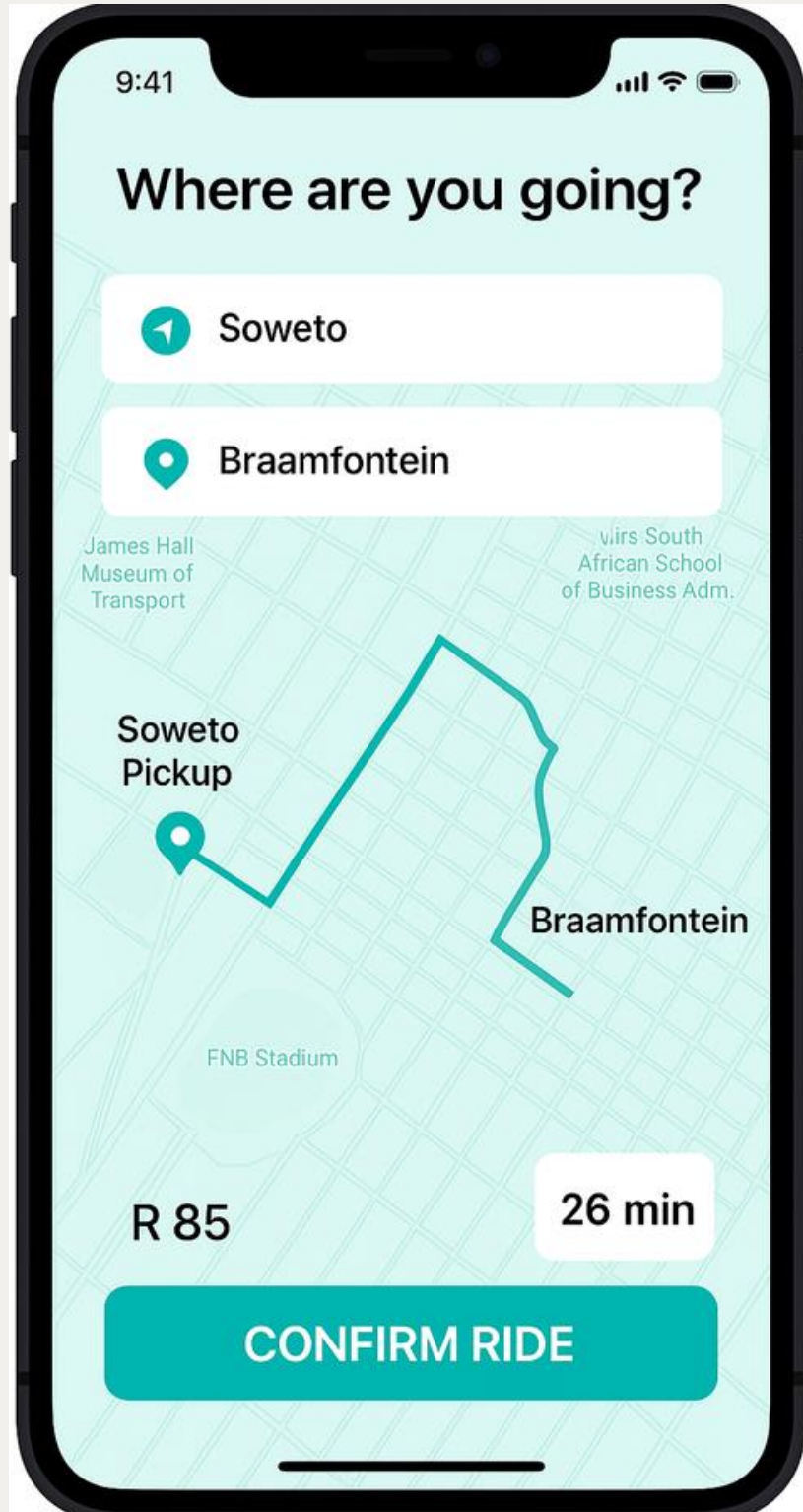
ZULAZULA AI USES ARTIFICIAL INTELLIGENCE TO POWER DYNAMIC ROUTING FOR MINIBUS TAXIS.

IT PREDICTS WHERE PASSENGERS WILL BE AND GUIDES DRIVERS TO HIGH-DEMAND AREAS IN REAL TIME.

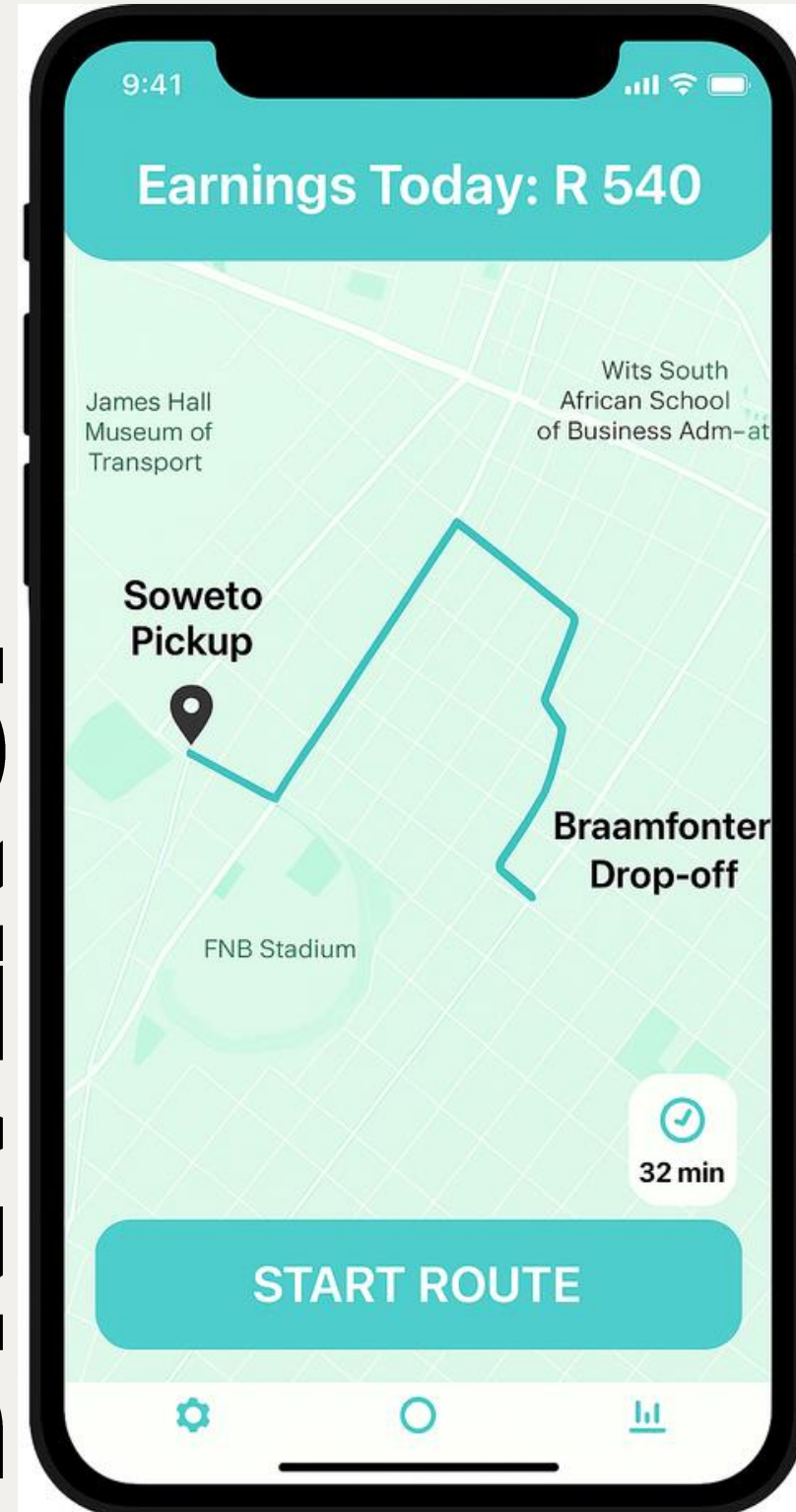
THE SYSTEM LEARNS FROM TRAFFIC, TIME, AND TRIP PATTERNS — HELPING DRIVERS EARN MORE WITH FEWER EMPTY RIDES, WHILE PASSENGERS GET PICKED UP FASTER.

**AI CONCEPT
SOLUTION**

UI-CONCEPT



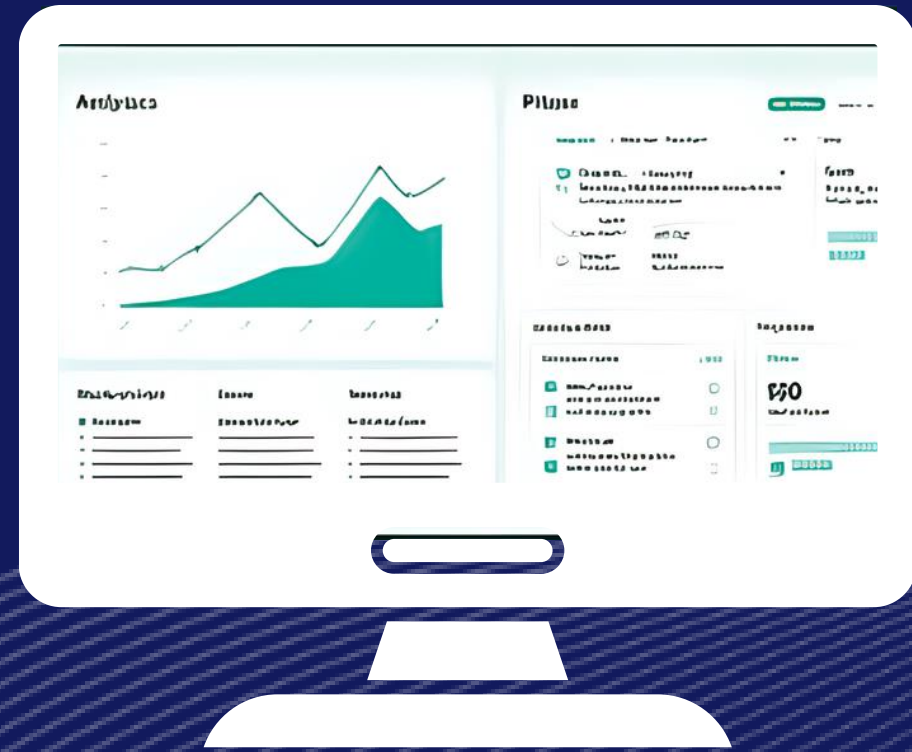
PASSENGER UI



DRIVER UI

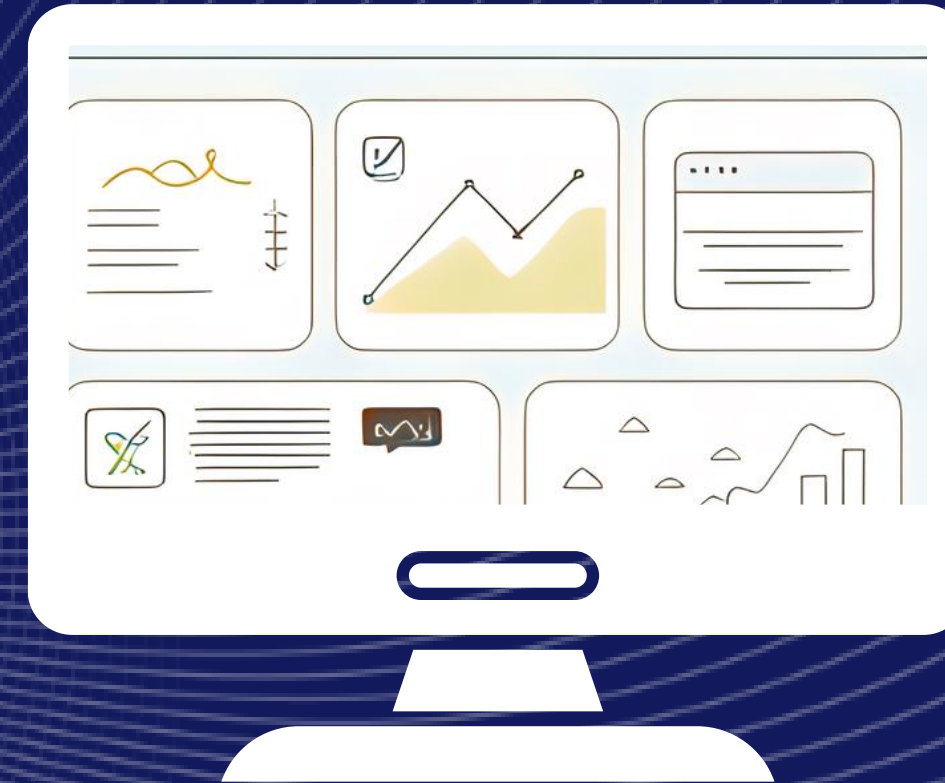
Data is More Than a Dashboard

Quantitative Data (The WHAT)



- Analytics
- Conversion Rates,
- A/B Test Results

Qualitative Data (The WHY)



- User Interviews
- Support Tickets
- Session Replays
- Social Media Comments.



The Generational Lens: Context is Not One-Size-Fits-All



Digital Natives (Gen Z, 18–27)

Behavior: Mobile-first, expect speed, zero friction.

Trust: Value transparency; privacy-aware but open to fair data exchange.

Implication: Personalize fast and clearly explain why you need their data.

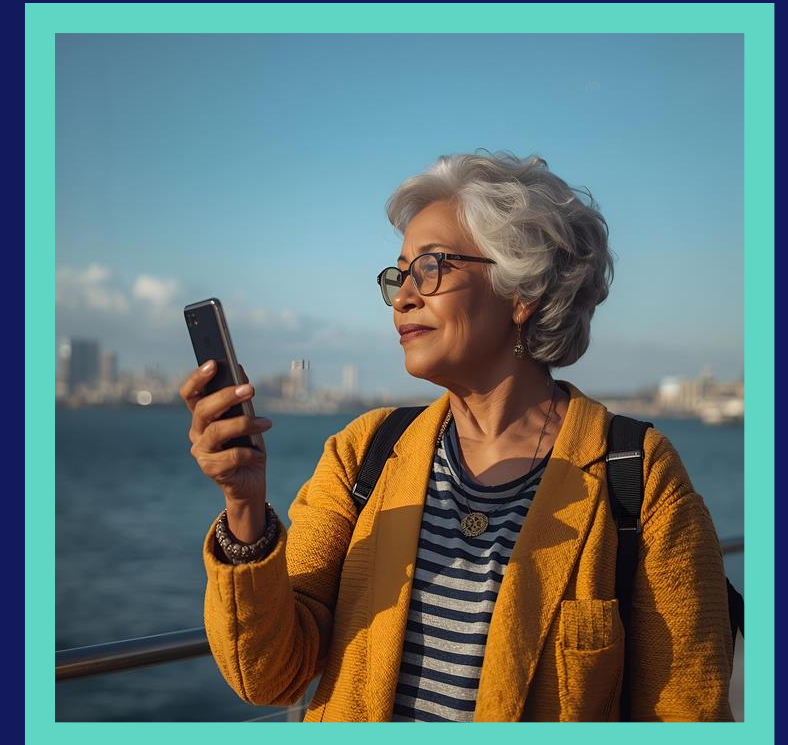


Digital Adopters (Millennials, 28–42)

Behavior: Convenience-driven, digital-first, value ease.

Trust: High expectations; fear fraud and security risks.

Implication: Build helpful, proactive features and reassure with visible security.



Digital Immigrants (43+)

Behavior: Cautious, methodical, prefer clarity.

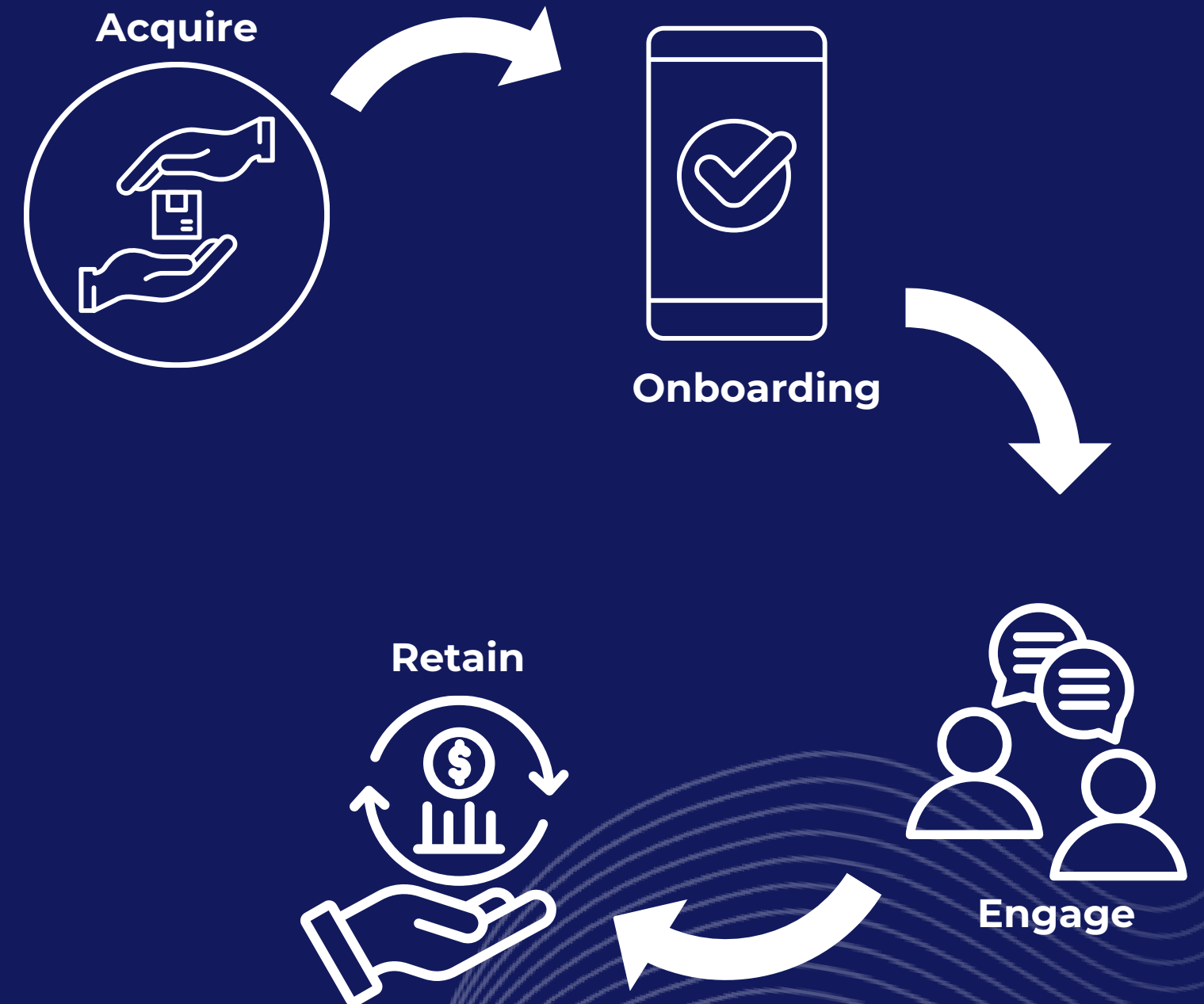
Trust: Earned through reliability, simplicity, and human support.

Implication: Use data to simplify, prevent errors, and keep options clear.

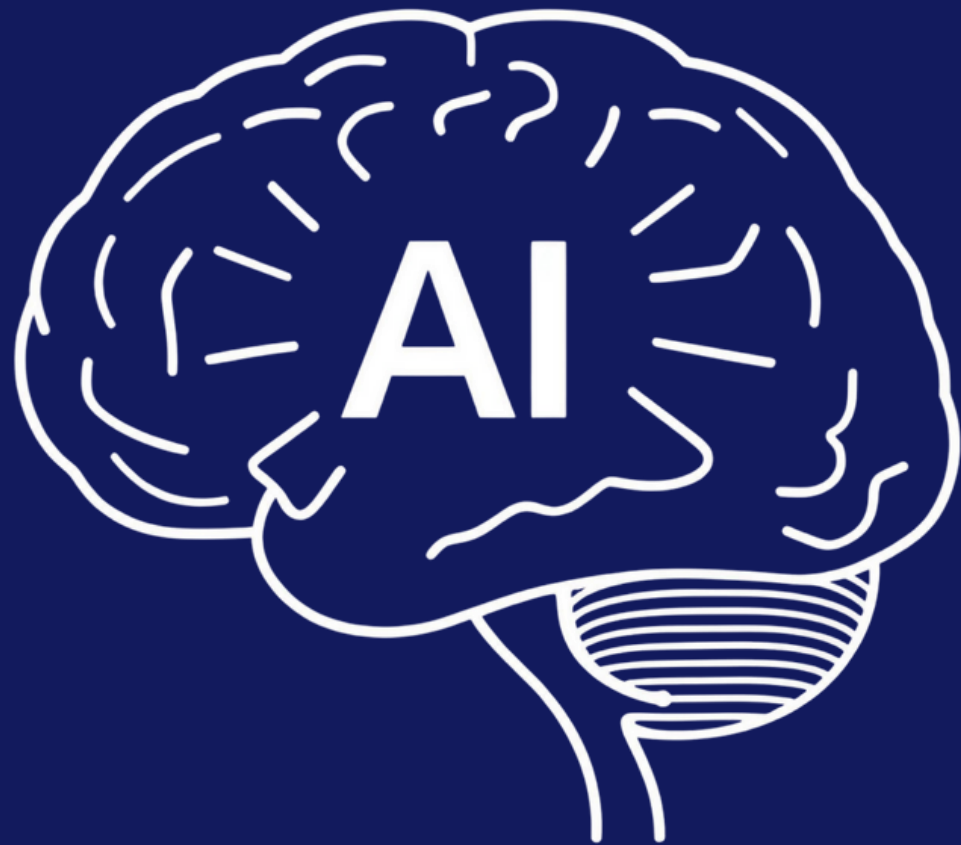


Designing for the Entire Lifecycle

- **Acquire:** Does your data tell you who you're excluding?
- **Onboard:** Is your data measuring comprehension or just completion?
- **Engage:** Are you using data to serve or just to sell? (Personalisation vs. Helpfulness)
- **Retain:** Does your data spot a user before they churn?



The Near Future: AI, Personalisation & Trust



- **AI is the ultimate "data engine."**
- **It can create 1-to-1 Personalisation at scale.**
- **The African Challenge: Can we do this without being "creepy"?**
- **The future is not just Personalisation, it's permission.**



What "Good" REALLY Looks Like

Stop Measuring:



Features Shipped



Daily Active Users (alone)



Screens

Start Measuring:



Task Success Rate:

(Can they do what they came to do?)



Reduction in Support Calls:

(Is the app so clear, they don't need to call?)



Time to Value:

(How fast can they get that loan, pay that bill?)



The Trust Score:

(Are they recommending you? Are they using more features?)



The Mandate

Stop building for "users."

Start designing for people.

See the human in the data.

See the data in the human.

Don't just build interfaces. Build bridges.



Q&A

**Thank You
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