MERCHANT SOLUTIONS

Unearthing future frontiers
for financial inclusion through
merchant solutions

TABLE OF CONTENTS

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1

# EXECUTIVE SUMMARY

Goals & Methodology Summary

PROJECT GOAL

Designing products and policies to support Tanzanian merchants, drawing upon cutting-edge behavioral science research and design techniques.

PROJECT METHODOLOGY

We used a variety of qualitative research techniques to identify the key barriers to the adoption and utilization of digital merchant solutions. These techniques included interviews and observation with micro, small and medium merchants in Arusha and Dar es Salaam. We focused primarily on solutions in the area of inventory management, customer management, staff management, and payment management.

AREAS OF RESEARCH

ARUSHA

DAR ES
SALAAM
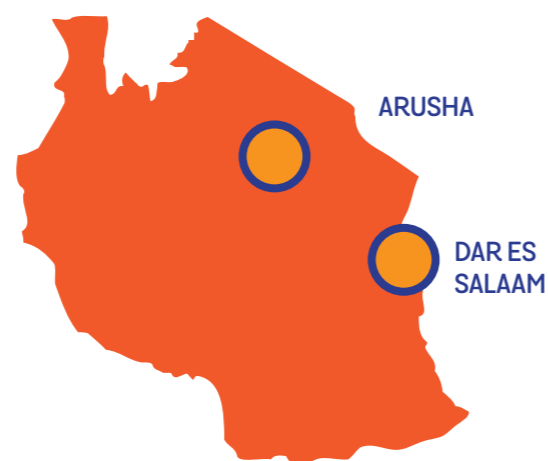
Merchants Insights Summary

- There is significant demand for an inventory management system, especially at the medium sized merchant level, particularly when linked to payments and credit options.

- Customer management tools are not seen as a priority. Trust and social networks play a huge role in dictating mode and nature of credit, and formalizing that for small scale merchants may be less effective.

- Staff are heavily observed by small merchants with limited room gains, and large merchants fear shifting costs from their informal monitoring tools

- While digital solutions are desired, a first mover is required. However perceptions of risk associated with existing DFPs can hinder uptake.

Product & Policy Solutions Summary

POTENTIAL PRODUCT SOLUTIONS

1. A holistic digital merchant inventory solution

2. Credit-incentives for digital payment and inventory adoption

3. Encouraging digital suppliers for downstream benefits

POLICY RECOMMENDATIONS

1. Supporting soft formalization and encouraging early stage business

② BACKGROUND

Micro, Small and Medium Size Merchants are Pervasive in Tanzania

350,000 – 500,000

MSMEs in Tanzania with the potential to use digital payments solutions.*

54% of MSMEs are run by **women****

Few Merchant Activities are Digitalized

100%
of purchases of groceries, medical treatment, rent and airtime use cash.*

0.07%
MSMEs pay their workers via bank or money transfer**

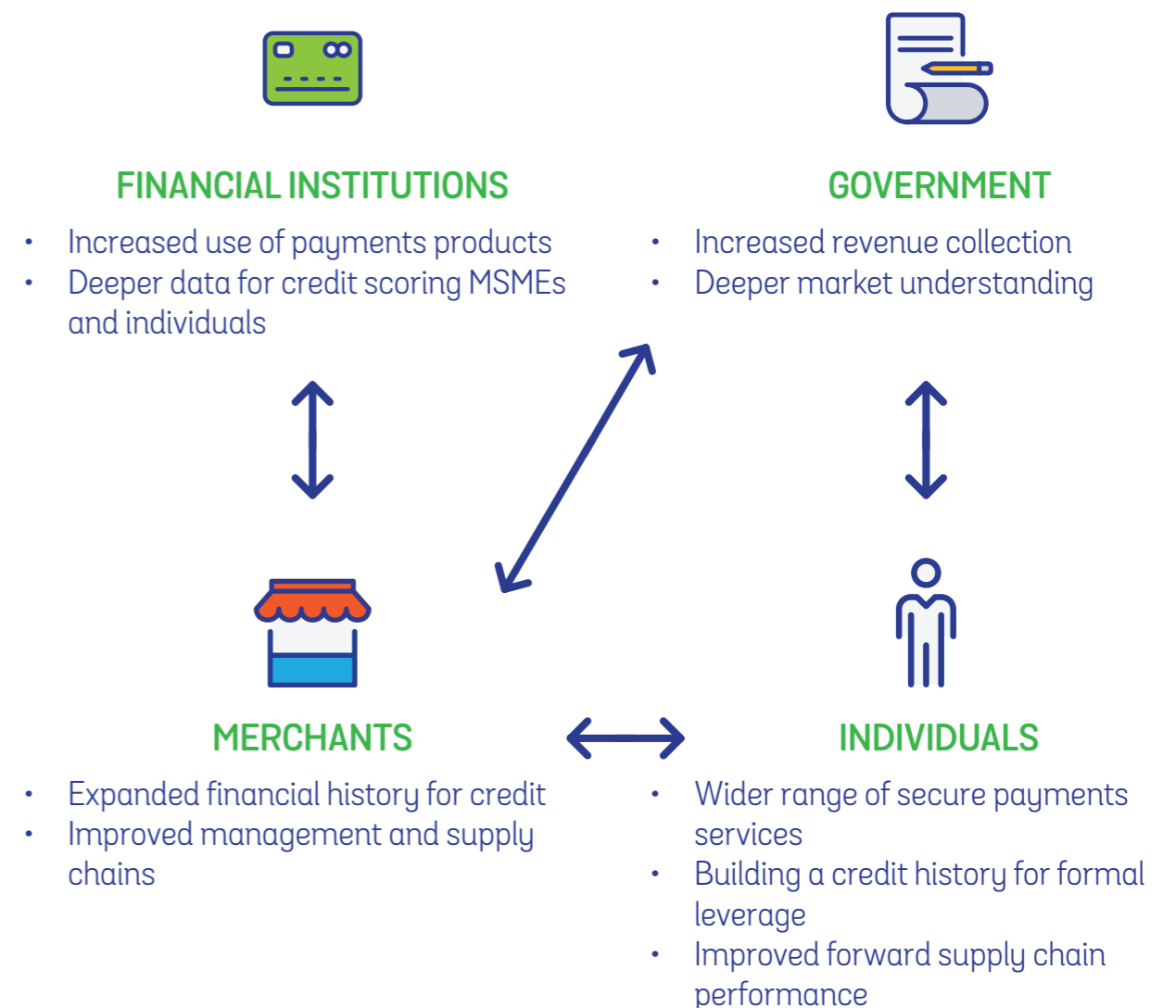**2,500**
card accepting merchants in Tanzania***

70–80%
of merchants don't use mobile money solutions***

Further to this, there are few effective inventory, staff or customer management digital solutions available.

*IFC Interoperable Mobile Money Merchant Payments Report 2016
**MSME Survey 2010
***FinScope Tanzania 2017

Merchants are Key Multipliers for the Wider Ecosystem

Micro, small and medium merchants are key ecosystem players. **Improving their engagement with formal financial and digital systems acts as a multiplier**, in turn leading to new eligible financial products, a wider financial service customer base, and more government revenue.

FINANCIAL INSTITUTIONS
- Increased use of payments products
- Deeper data for credit scoring MSMEs and individuals

GOVERNMENT
- Increased revenue collection
- Deeper market understanding

MERCHANTS
- Expanded financial history for credit
- Improved management and supply chains

INDIVIDUALS
- Wider range of secure payments services
- Building a credit history for formal leverage
- Improved forward supply chain performance

3

RESEARCH METHODOLOGY

Types of Merchants Surveyed

TYPE	EMPLOYEES	CAPITAL INVESTMENT	BEHAVIOR
MICRO ENTERPRISES	1 – 4	Up to Tsh 5 million	Transactions are small in nature, little adoption of digital financial solutions
SMALL ENTERPRISES	5 – 49	Tsh 5 –200 million	Some adoption of intermediate digital solutions especially government subsidized platforms
MEDIUM ENTERPRISES	50 – 99	Tsh 200 – 800 million	Transactions relatively large and frequent with moderate adoption of digital solutions

Research Techniques

To main research techniques were used: In-depth interviews (IDIs) and observation. Both of these had the same aim: to identify barriers to digitalization of merchant systems.

BEHAVIORAL NARRATIVES

Informal and unstructured in-depth qualitative interviews that seek to gain an in-depth understanding on respondent motivations that define behavior and decision making.

OBSERVATIONS

A systematic data collection approach where researchers use all of their senses to examine people in natural settings or naturally occurring situations.

Solutions Development

This project was solutions-focused. Insights generated from the qualitative research were used to design product solutions for Financial Service Providers, and policy solutions for regulators and government bodies.

PRODUCTS

What digital financial products can FSPs offer merchants that will lead to high uptake and utilization, based on a thorough understanding of merchant needs and desires?

POLICIES

How can the government and regulators support digitalization and formalization of the micro to medium merchant market, all the while protecting the interests of merchants, customers and other stakeholders?

4

RESEARCH INSIGHTS

Merchant Archetypes:

T Micro Enterprises

T Small Enterprises

T Medium Enterprises

Behavioral themes:

● Awareness
● Convenience
● Initiation Ambiguity

● Price Sensitivity
● Risk Perception
● Social Networks

● Social Norms
● Status-quo
● Trust

Inventory Management

Inventory systems are expensive and don't add a lot of value. Counter books are easy to use and teach, low cost and readily transferable.

Use of the EFD machines entail that 18% of total sales has to be paid as VAT. Most merchants prefer not to use it, if possible.

Digital inventory software such as "Datec" are used by a few vendors, however even though there is significant demand for inventory tools, there is little to no knowledge amongst a majority of merchants.

Customer Management

Cash is preferred for most transactions as there are hassle costs on following up with customers in case a transaction doesn't go through.

Credit is easily advanced to most customers due to the close relationship between merchant and customer.

Mix of both casual and friendly customer relationships. Give credit only to the customers who they have high trust.

Casual relationship with customers. Transactions are mostly large and thus debt is rarely issued to customers.

Staff Management

Employees prefer ready cash and have no time to follow up on payments made on another platform.

Merchant are willing to use alternative sources of payments but the staff insist on cash since they do not want to incur any costs when making withdrawals.

Merchants keep manual employee productivity logs to keep tab of employee attendance and level of productivity. When asked about shifting to a new tool, it was found to be unnecessary and added work.

Payments Management

It is not common for customers to ask for an alternative method of payment.

Suppliers rarely request alternative modes of payments.

There is a fear of fraud in the instance that the customer reverses the transaction.

There are transaction costs that must be paid on digital platforms that aren't clear.

Product Solution 1

This first product solution is a merchant tool focusing on a range of inventory management support, to be designed by an FSP with the aim of tackling several of the identified barriers to digitalization.

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PRODUCT & POLICY SOLUTIONS

The Potential Merchant Market, and its Revenue Implications, are Huge

26.7 MILLION
Tanzanians make retail purchases in cash, with average daily TZS 2,000*

Capturing just 5% of this market, with 2% fees, would bring a revenue of

TZS **53.4** MILLION per day

TZS **53.4** BILLION
daily market

*FinScope Tanzania 2017

CORE MODULE

This module holds only core capabilities the inventory management system should hold. It consists of a simple menu that consists of three primary functions.

Features & Functions

1 Inventory inflow and outflow
Input inventory/scan barcodes on phone when it comes in. Indicate the amount sold on each purchase of a product.

2 Depleting resources tracker
The tracker nudges the merchant on what stocks are running out and in what quantities he needs to restock.

3 Profit-loss statement
A quick and easily accessible financial tool that can act as a credit score card for the merchant.

EXTENDED CAPABILITIES

These set of tools lie over the core module and do not require input of any extra data.

Features & Functions

1 Automated process management
Based on preferences of the merchant, automated order placement, purchase and sales are conducted.

2 Hot-Cold product indication
Based on historical data, "hot" – high selling, high profit products and "cold" – low selling, low profit products are displayed.

3 Predictive sales
Based on historical data, products are predicted to sell in certain seasons.

LONG TERM CAPABILITIES

These set of tools lie over the core module and require the tool to be linked with external and/or self reported sources of data.

Features & Functions

1 Customer Module
Links with the inventory tool to create a customer preference profile that provides recommendation to customers when they visit the merchant.

2 Product recommendation system
Based on the app's users, a product recommendation "market" is created that suggests similar product at cheaper rates and available sources to a merchant.

Product Solution 2

Product Solution 3

Encourage digital payment solutions and inventory management as a basis for credit.

Support digitalized suppliers.

Opportunity

While merchants express lukewarm support for enabling digital payments, they are typically keen to access credit for investment, expansion and cashflow purposes. By tying formal credit to digital payments, FSPs can support the growth of a digital payments system market.

Support or create fast-paced suppliers, who provide rapid goods provision to informal businesses through a digitized platform (e.g. mobile phone apps).

Partner with these organizations to produce an inventory credit product, which offers credit to informal lenders to support rapid stock flows. Leverage on accessible purchase history in constructing credit scores.

Encourage digital payments to these suppliers to bring this section of the supply chain into the formal financial sector.

SOLUTION 1

Support Merchant Credit Based on Digital Transactions Volume
Encourage digital merchant payments (e.g. mobile money or card payments) by building a credit product which leverages digital payments history in credit scoring.

SOLUTION 2

Include Inventory Management In Credit Scoring Models
Expand this product to include inventory management as a basis for credit scoring. This can serve the dual purpose of supporting new digital inventory management products.

Policy Solution 1

Support soft formalization and encourage early–stage business.

Reduce regulations on new businesses to lower the administrative jump from informal to formal businesses, which currently holds back formalization.

Strengthen tax incentives to provide larger reductions over longer periods for small and new businesses.

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