SCBF 2020-07 December 2022

Scaling-up Last Mile Supply-Chain Merchants with Affordable Float Financing in Kenya

1. DEVELOPMENT RELEVANCE

Country context:

The current population in Kenya is approximately 54.9 million, of which 50.3% are female. The per capita GDP in Kenya was US \$2'006.8. In 2021, which means it is in the lower middle-income category of Sub-Saharan African countries.

While the Kenyan GDP grew from US \$5.57B to US \$110B from 1993 to 2021 and its population has more than doubled in the same period, the country is still one of the world's poorest and most underdeveloped. In 2022, the Kenyan economy continued to grow with GDP growth of 7.5% and the outlook remains positive. In 2023, the Kenyan economy is expected to grow at 5% in 2023 and 5.3% in 2024, the slowdown is being driven mainly by high inflation rates and the continuing drought that creates a food insecurity crisis^{iv}.

Financial Sector context:



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Table 1 ⁱ : Population and economic indicators	
Population in million (2021)	54,985,702
GDP growth (2021)	7.5%
Inflation (2021)	6.1%
Trade balance (% of GDP) (2021)	-9.53% ⁱⁱ
Foreign direct investment (net) (% of GDP) (2021)	-9.1%
Net ODA received (% of GNI) (2021)	4%
Remittances received (% of GDP) (2021)	3.1%
Economic Freedom Index (Rank among 186 countries) (2021)	54.9 ⁱⁱⁱ
Poverty indicators	
GDP per capita (USD) (2021)	\$2006.8
Gini Index (0= equality 100= inequality) (2015)	40.8
International poverty rate (2015; at 1.90 USD/day)	29.4%
National poverty rate (2021)	19%

The financial sector is characterised by a combination of banks and MFIs that focus primarily on salaried people and SMEs. Its outreach remains limited, and steadily growing. The 2020 Covid-19 pandemic has had a significant negative impact on access to credit^v

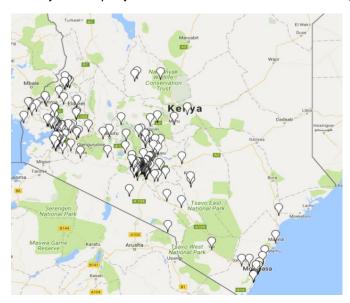
Approximately, 65.5% of Kenyan female adults are active users of a financial institution or mobile money account^{vi}. Mobile money has been a key driver of financial access with usage increasing to 25.3 percent driven mostly by those below the age of 35 years^{vii}. However, challenges remain, access gap to purposeful financing for MSMEs sits at US \$19 billion in the formal sector and an additional US \$10 billion gap in the informal sector^{viii}.

At the same time, usage of informal sources of credit remains at 30.1 percent (down from 31.7 percent) implying that informal groups are a key source of financing for Kenyan households.

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Partner Financial Institution: The main partner financial institution for the project, Pesatransact limited, is a Kenyan company dominant in Africa that is redefining the distribution of digital products with its agent



network. Pesatransact is a unique innovator leveraging a network of countrywide agents to distribute digital products and accept payments. However, to scale its business and those of its agents/merchants, Pesatransact needs to begin offering float financing to its merchants who will in turn be able to meet the demand of their local customers thereby facilitating financial inclusion in the entire supply chain. Pesatransact, is operating an efficient multi-sided platform capable of meeting the rapidly evolving needs of corner stores (MSMEs). It provides multiple digital products that accepts bill payments, cash withdrawals and deposits across its online, mobile and point of sale ("POS") channels. Pesatransact aims to change the agency-industry, which traditionally comprises a patchwork of providers, mobile money and agency banking systems resulting in fragmented (cash) merchant services. Pesatransact's merchant wallet connects the fragmented ecosystem around

informal merchants. It turns their mobile phones into point-of-sales devices and enables them to offer products and services from a range of providers from one in-app float account. The end-customers who buys digital products from the merchants are low-income, vulnerable people, living in shanties, that record an average transaction size of US \$1 (for airtime) and US \$2 (for power tokens), most owning feature phones and not smartphones.

Grantee: Pezesha Africa Limited, the grantee, is a digital financial platform connecting MSMEs across various sectors with working capital from a diverse group of financial institutions. For this project, Pezesha developed the credit scoring model for the merchants using a sample of 20 qualified Pesatransact merchants, establishing a level of product-market fit demonstrated by repeating monthly disbursements and over 95% repayment rate. Pezesha also developed and improved the processes throughout the value-chain (defined below) including Merchant On-boarding, KYC, credit scoring, funding the merchant, loan monitoring and ensuring customer repayments. Pezesha and Pesatransact also developed the initial MVP (Minimum Viable Product) for the manual pilot phase for a duration of 6 months and allocated staff for project delivery.

2. INTERVENTION APPROACH

Pesatransact is a unique innovator leveraging a network of countrywide agents to distribute digital products and accept payments. However, to scale its business and those of its merchants it needs to begin offering float financing to its merchants who will in turn be able to meet the demand of their local customers facilitating financial inclusion in the entire supply chain. The typical merchant is a small retailer (akin to a corner store /



mom-and-pop shop / duka / kiosk), working with US \$100 working capital, located in low-income merchants shanties. The are informal shopkeepers who do not keep digital business records and as such are underserved and largely excluded from the formal financial system. For these merchants, managing liquidity is the most important aspect of their business (i.e., keeping enough cash and e-float as working capital to be able to serve their customers). Given that merchants have been experiencing cashflow constraints (both business and personal) due to the economic crisis caused by COVID-19, this product will especially help the merchant keep up with the demand for its products while ensuring that they are able to continue generating revenues.



The project aim was to increase the number of new merchants served by Pesatransact. By the end of the 2-year project it will have on-boarded at least 4'000 new merchants who would have benefited from float financing and worked with Pezesha Africa Limited to provide the float financing product. To achieve this goal, Pezesha designed the solution, modified their platform, piloted and scaled the product while ensuring regulatory compliance. The objective was to meet the needs of the female-merchant-community with a risk-based credit scoring approach using transaction records as the main parameter. Pezesha also introduced personalised SMS tips which provide on-going and accessible information on fitting credit products and aligned to the growth of the loan limits to the underlying repayment rate of the borrowers.

To meet the needs of at least 50% of the merchants that are from rural areas, Pezesha made 4 key adaptations. These are 1) added field officers to ensure that rural merchants have some face-to-face interaction, 2) offered touchpoints in the local language of Swahili, 3) allowed repayment flexibility (i.e., daily or weekly) monthly and 4) trained 36 Pesatransact account managers across 6 counties on customer education on how to use Pesapoint application and to access a loan.

3. RESULTS ACHIEVED AND NOT ACHIEVED

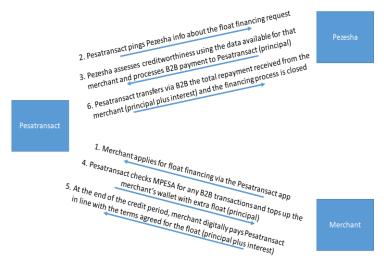
For this project, Pezesha and Pesatransact developed a loan product ranging between US\$ 20 - US\$ 2'000 priced at 3% per month and as of November 2022, it has funded 697 unique merchants with over 1'082 loans with over US \$100K in loans with an on-time repayment rate of 94% and a 5% cumulative default rate.

In addition, 305 of the unique merchants were female borrowers and 397 of the unique merchants were aged under 35 years old.

Metrics	As at November 2022
Percent of total unique merchants who were repeat merchants	82%
Percent of total unique merchants with increased sales	45%
Percent of total unique merchants representing new jobs created	38%
Number of financially educated merchants	697

Pesatransact and Pezesha created a sustainable value chain that includes:

- A customer who requests a digital product (bill payment, airtime, ticketing, etc.) from the merchant;
- A merchant/agent digitally requests a credit facility as float financing from Pezesha to purchase the digital product from Pesatransact;
- Pesatransact offers digital products from mobile network providers such as M-PESA, the leading mobile money infrastructure by Safaricom.



Pezesha and Pesatransact has shown that access to float financing, for Embedded Finance^{ix} originating channels, can be a core acquisition strategy to onboard new merchants that can then offer digital products and payments services. Pezesha's float financing addresses the initial and growth financing capital constraints experienced by MSMEs.

Pesatransact and Pezesha created access to float financing options through a mobile phone application. Enabling access to purposeful credit and 100% use of funds for business purposes which was ensured by the product design as funds borrowed are only used to increase the float in merchant wallets which can only be monetised by selling the Pesatransact products.



In addition to this product, KYC efficiency is enhanced by using APIs with the supplier database, government IPRS database and telco companies, we have also enabled credit scoring using underlying merchant transactional data.

Pesatransact and Pezesha grew its payments merchant network by including financial education delivered through SMS and USSD channels. A referral system was used where existing Pesatransact merchants reach out to onboard new merchants. This was to ensure a scalable and cost-effective credit origination approach, improve personal decisioning of entrepreneurs and increase their resilience and livelihoods.

Customer experiences were used to modify the scoring tool. For example, Elvis in the photo, would have only been eligible for a small loan amount if the scoring tool did not take into consideration the last three months when he had a steady growth in transaction amounts. Based on this feedback, the credit scoring was revised to consider the growth and or decline of the transaction amounts of the customer and to increase the loan repayment period. This would

The loan from Pesatransact in partnership with Pezesha has enabled me to scale up demand for my customers and also educated me on personal finance tips that have empowered me to grow

have otherwise locked out 60% of the potential client base.

In the customer surveys, merchants echoed the sentiments of the Kenyan population who have been affected by the ills of debt and Covid-19 pandemic which had a severe effect on the purchase of digital products. Although they acknowledge the usefulness of debt financing, they would rather self-finance their float than obtain a loan for their businesses. This meant Pezesha had to double down on the financial education module in addition to the float financing.



One of the merchants, Miriam, runs a Pesatransact M-Pesa agent shop, was able to access a working capital loan to grow her inventory and business. The Pezesha financial education module has enabled her to manage her business better, increase her revenues by at least 30%, improve her credit score and access higher loan amounts.

The successful unit economics and competitiveness of the Pezesha loan product with the Pesatransact field operations, has attracted patient debt capital with aligned debt investors to a tune of over \$1M during the years of this project as well as unlocked debt

capital network of over US \$20M for future lending opportunities and have expanded this solution to Ghana and Uganda and are expanding in Q1-2023 to Nigeria and Rwanda and the Pezesha credit infrastructure has received a Letter of No Objection from the Capital Markets Authority in Kenya that validates our solution with the stamp of the regulatory authorities.

4. LESSONS LEARNT

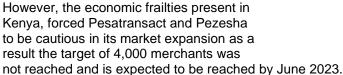
Overall, the chosen approach to offer embedded float financing product while building purposeful use of credit and a sustainable business model can be replicated. It provides real value add to customers while generating

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income for Pesatransact and aids the rapid business expansion and growth for an existing client base (MSMEs).

Pesatransact and Pezesha sees that it can create a sustainable and unique business model that works for the partners and the concept can be scaled with other Embedded Finance partners. For example, both parties can agree on a revenue share agreement that is based on fully paid loans and can monitor unit economics performance to ensure balance between affordability by the merchant and ability to charge affordable interest rates. The subject and the approach have been well designed and are achieving the desired results in terms of development of the financial product and delivery mechanism.





The following insights can be confirmed at the present stage:

- Financial education module can be a value-add proposition for a competitive market like Kenya
- Pezesha has the framework of a sound credit scoring system that avoids over indebtedness by tying the loan amounts to the cash flow of the merchant's Pesapoint business and the credit scoring model needs to be reviewed and updated regularly to reflect market conditions and on-going learning on the customers.
- From a client survey done in November 2021, the Pezesha loan is appreciated as it has its intended effect of increasing float for Pesatransact merchants. Also, Pezesha is promoting sound borrowing practices by ensuring merchants understand the cash flow potential and economics of the business line they are financing before requesting for a loan
- Pezesha will introduce a new loan product with longer tenor but only available to repeat merchants who have demonstrated good repayment behaviour on the first loan and after they prove a return to pre-Covid-19 business demand for Pesapoint products through our regular touchpoints

The following insights is yet to be validated at the present stage:

- Measurement of household income impact metric can be sustainably done without room for error
- The loan origination sales cycle for rural merchants can be shorter than 2 months

¹ The World Bank Group (2022). World Development Indicators database. Washington, DC. http://data.worldbank.org. Accessed (23/11/2022)

ii https://www.macrotrends.net/countries/KEN/kenya/trade-balance-deficit iii https://knoema.com/atlas/Kenya/Index-of-economic-freedom

iv https://www.theeastafrican.co.ke/tea/business/world-bank-downgrades-kenya-growth-3973786

v https://www.centralbank.go.ke/uploads/banking_sector_reports/1275966539_2020%20Survey%20Report%20on%20MSME%20Access%20to%20Bank%20Credit%20-%20Final%20-

vi Active users represent one of the following depending on the source of the data are:

⁽A) individuals who report they 'currently use' a service from a provider if the data sources is FinAccess, (B) used a service in the last 90 days if the data source is FII or (C) deposited or withdrew money from an account in the past 12 months if the data source is Findex.

vii https://s3-eu-central-1.amazonaws.com/fsd-circle/wp-content/uploads/2020/02/06095110/2019-FinAccess_Household_SurveyReport_FIN_Web.pdf viii https://www.smefinanceforum.org/data-sites/msme-finance-gap

ix https://www.macrotrends.net/countries/KEN/kenya/trade-balance-deficit