

# The Evolution of Digital Finance in Zambia

By: David Cracknell and Betty Wilkinson

The evolution of digital financial services (DFS) in Zambia is in the early stages but has huge potential. This article considers digital finance evolution using a series of five Generations as developmental steps which overlap at the margins. Later Generation development is possible without earlier Generations being achieved, but it is likely to be significantly more difficult. The Generations are provided with methods of tracking growth and the current status of each in Zambia. Policy suggestions are provided to enable progress among and between the five Generations.

## Generation 1: Channels – Mobile Money and Agent Banking

First generation access is characterised by basic services for large numbers of individuals. Product features include person-to-person (P2P) transfers, cash in and cash out (CICO), and bill payment. Success and growth factors that are in place or developing include onboarding of new customers ; a widespread network of mobile network operator (MNO) -based agents with functional interoperability; financial education; digital identity and electronic know your customer (eKYC); deep understanding of agent banking strategy; countrywide cell signal coverage; addressing liquidity management constraints; and volume and value drivers.

Progress is varied, with need for more DFS product innovation and both agent banking and banking fintech/software development. At this point we are watching the digital identity project start-up and rollout with eKYC, growth in banks and nonbanks operating agent banking and extending networks and launch of bigger volume and value drivers including social cash transfers. The government through Smart Zambia Institute is already engaging with the Farmer Input Supply Programme and related weather index insurance, but much more is needed. Data to monitor in these areas include transactional and geolocation information on mobile money, agent banking, and market milestones.

Policy implications include continued focus on digital identity and eKYC, along with the framework, access, and pricing. In addition, despite a lot of recent work on a new financial education strategy and expansion of various financial education systems, Finscope 2020 showed very low levels of financial education and of financial health, with marked differences from the higher levels found in FSD Zambia's work.. More work needs to be done to make financial literacy more consistent and easier to use across varying client groups.

How can the policies and strategies of larger financial institutions be informed so that they can best take advantage of the opportunities of first-generation digital finance? FSD Zambia has already significantly contributed to the knowledge base of DFS in Zambia, so it would appear in part to be the application of knowledge which is lacking.

## Generation 2: Extending the use case - Nano credit and merchant services.

Nano credit: Nano credit is being provided by Airtel, MTN and a few third-party providers, with the first two powered by Jumo, a South Africa nano lender with operations in a growing number of African and now Asian countries. Success and growth factors include credit reference bureau integration and monitoring for suspicious activity, increasing market size and volumes, and evolving policy and regulatory framework anticipating financial conduct, and developing more complex data analytics.

The key item will be appropriate regulation and guidelines on nano credit. Monitoring will provide the quickest insight into industry performance and emerging issues. The key indicators will be quantum of nano credit disbursed, repayment rates, defaulters, multiple borrowing, and comparable costs of loans.

Currently while there are nano credit providers, the market is still developing on the supply side. Its important that the policy and regulatory framework for nano-credit is developed, to avoid widespread default and negative

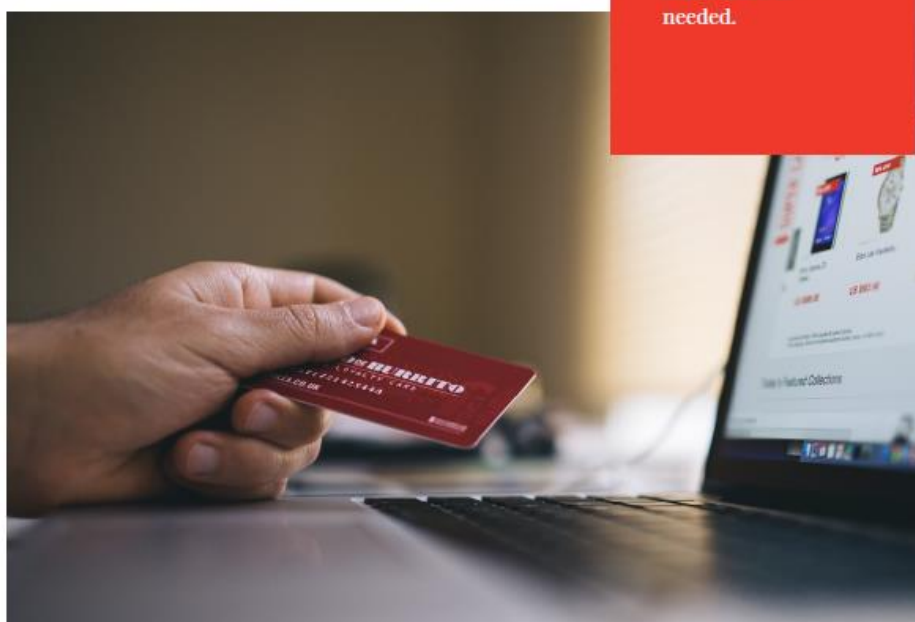
listing. In Kenya, a recent policy announcement limits access to the credit information system to ethical providers only.

Scaling up nano credit is likely to have policy implications relating to credit reporting, responsible conduct and fraud. Appropriate policies may need to be developed that not only encourage industry growth but also support appropriate conduct.

Merchant payments: Provided mainly through MNOs and point of sale-based transactions, merchant payments increases are highly indicative of digital finance growth. Where these payments are made through MNO channels, it is indicative of the extension of payment services to a wider range of Zambians. The growth in MNO merchant channels through pay-bills and till numbers

stimulates adoption and the development of payment-based use cases. Success factors include the emergence of merchant facilitators, appropriate pricing, and wallet integration into the banking system. Tracking is important for market expansion, including access strand analysis of payments, bank links in push and pull to MNO wallets, growth in local merchant numbers and transactions volume and value, and evolution in the ecosystem by entity types, payment mechanisms, and interaction with government

Merchant services are developing in Zambia. MTN has developed MoMo Pay and has facilitated transactions



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through Kazang. Airtel have Airtel Merchants. In some cases, QR codes are being used. Data from GSMA suggests that MoMo Pay in other markets has increased the volume and value of payments – as it is easier to use than P2P payments, fast and convenient.

## Generation 3: The emergence of fintech and use cases

As Generation 3 emerges much of the population will regularly use digital financial services, largely through their mobile phone. Agent banking and mobile money provide relatively easy cash-in and cash-out throughout the country, with fewer islands of illiquidity. Finscope 2020 suggests that CICO may be leapfrogged to direct transactions between wallet holders.

A widespread use of payment systems and merchant payments means that increasingly Zambians can choose how to pay. Many customers and common mechanisms including merchant payments facilitates the growth of fintech. In the third Generation there is a rapid growth of related fintech use cases. The principal driver remains financial services.

There is likely to be the adoption of fintech facilitated use cases in association with financial institutions. Success factors will include a large, viable fintech market with the skills and experience to launch and operate it; development and deepening of the support infrastructure, incubators, accelerators, and labs; and the development and deepening of the funding infrastructure. Monitoring will be required for trends in the ecosystem as a whole (potentially through a fintech association); e-commerce data on firms, volume and value; fintech firm volume and types; growth in PayGo activities; and growth in the gig economy.

We look for national and international fintech investment; Zambian fintech across borders; fintech partnerships with financial sector firms; and emergent insurance, investing, and crowdfunding. Zambia is at the very early stage of the third-generation development, with emergent fintechs and their incubators such as Bongo Hive, Paygo in solar, and work to engage them in new areas such as insurance. However, it is unlikely that there will be significant expansion before there has been much greater success in the first and second Generations of services.

Supportive policy is required at this stage from the financial sector regulators as there is significant diversification in models. This is the stage where the sandbox will be required, and there will need to be further changes in the regulatory framework. Bank of Zambia has established a sandbox system, but it may be needed in other regulators to diversify the market.

## **Generation 4: The emergence of fintech-enabled ‘real world’ services.**

Fintech enabled ‘real world’ services are those that relate to meeting real human needs beyond pure finance, such as into the Sustainable Development Goals.

Financial services are embedded in the delivery of other services and are largely invisible.

This includes the provision of loans to facilitate payment, or payment against other digital services rendered, such as MHealth, MEnergy, MInsurance, MHousing, EdTech, and AgTech. At this stage annual monitoring on the state of the industry in real world cases will be important, along with case studies of specific areas such as MEnergy.

This Generation is starting in Zambia and will require periodic monitoring as the sector develops to ensure appropriate policies are developed. Supportive policy can include incubators, accelerators and labs which are themed on developing real world services. Funding rounds can be developed – along the lines of the MasterCard Fund for Rural Prosperity’s work in Kenya. However, earlier DFS generations would be required to be significantly fulfilled to ensure there is a sufficient market for these services.

## **Generation 5: Fintech as a national asset**

In Generation 5 to come, fintech is recognised as a national asset due to its contribution to the development of the financial sector and to development more widely. Policies specifically developed to encourage this sector Generation could include the following steps.

- Education policies to encourage – STEM education and data analytics.
- Favourable work permits to encourage skilled workers to migrate to Zambia.
- Policies to encourage investment in Zambian financial technology.
- Favourable tax policies to encourage the expansion of the sector.
- Policies to encourage financial sector partnerships, accelerators, incubators and labs.

## Authors



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David Cracknell advises governments, regulators, donors, commercial banks, microfinance institutions, and mobile network operators on agency, digital strategy, policy and regulations and digital products. He brings 25 years of experience in financial services, from 25 countries in Asia and Africa. David lives in Kenya, he worked on the pilot test of M-Pesa and supported the early growth of Equity Bank, which has become one of Africa's strongest and most digital banking groups. He has advised on numerous institutional strategies for agency banking, trained on digital transformation for the IFC in Asia, studied innovation labs for UNCDF, and worked on policy and regulatory frameworks. He specialises in deposit mobilisation.

David continues to learn, all the time, from those who have more specific expertise and from applying his knowledge in different contexts and countries. He blogs regularly on the evolution of financial services and financial technology.



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Ms. Wilkinson is an innovative leader in public policy, financial markets, gender, poverty and inclusive growth. She has worked and resided long-term for over thirty years managing high-performance national and multinational teams in over 30 countries in Africa, Asia, and the Pacific. Ms. Wilkinson has enabled policy reform, advocacy, and field project success serving millions of low-income households. She engages and speaks regularly with Ministers, central bank Governors, and global leaders of all kinds, using a participatory, inclusive style to produce sustainable results.

In the last five years she has negotiated a successful public-private partnership in weather-based crop microinsurance for over 1 million smallholder farmers; enabled Covid-19 research and economic impact results for women, rural families, smallholder farmers, and microenterprises; supported national biometric identity rollout; created multi-regulatory approaches to mobile money and fintechs; engaged in national digitisation of agricultural subsidies and school fees; and enabled financial education in the national curriculum.

