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## FinTechs and digital financial services landscape of Malawi: A supply-side analysis

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### Abstract

*Financial Technology (FinTech) organisations are perceived to be enablers of digital financial services in Malawi. They support efficient business transactions, secure payments instead of cash, lower transactions costs and support financial inclusion. While the phenomenon of FinTech has received attention among scholars, FinTech landscape of Malawi (e.g. supply-side) is not well documented. This paper analysed the FinTech landscape of Malawi focusing on profiling organisations, digital financial services and regulations. Using secondary data, the findings showed diversity of FinTech services e.g. mobile money, digital wallets, card-based payments, cloud banking services, microfinance and international remittance services. FinTechs operating in formal sector were regulated, while other FinTechs offering services for cryptocurrencies and crowdfunding platforms were not covered in the financial sector regulations. The study contributes towards literature on FinTechs in Malawi and highlights areas of further research.*

**Keywords:** Financial Technology, FinTechs, Supply-side, Digital financial services, Malawi.

## 1. Introduction

Financial Technology (FinTechs) organisations support other financial services organisations (e.g. banks) in providing innovative digital financial services to the unbanked populations. FinTechs provide efficient business transactions, secure payments instead of cash and lower transactions costs (Chipeta & Lipunga, 2025; Madise, 2019). Further, FinTechs can promote financial inclusion in Malawi (e.g. where 50% of adult population have access to digital financial services) (World Bank, 2025). Some scholars have analysed the use of digital financial services in Malawi. For example, use of digital financial platforms (Kayila, 2024; Jiya, 2021), adoption and use of mobile money (Aggarwal, Brailovskaya & Robinson, 2020; Madise 2014; Madise, 2019), use of point of sale terminals (Banda & Mdwazika, 2007), internet banking use (Makoza, 2023), use of branchless banking in rural areas (Mtambalika, Manda, Gombachika, & Kunyenje, 2016), cryptocurrencies use (Thangalimodzi, 2019) and cryptocurrency regulatory environment (Makoza, 2022). However, FinTechs have received limited attention among scholars. There is interest from the central bank of Malawi to understand the status of supply-side of FinTechs to inform policymakers and regulatory organisations (RBM, 2023). Other scholars have also suggested the need for more research on FinTechs in the context of developing countries (Ediagbonya & Tioluwani, 2023; Molla & Biru, 2025; Raheem, Addo, Shaffakat & Lunberry, 2024).

In response to the call for understanding FinTechs in developing countries, this paper analysed the landscape of FinTechs in Malawi focusing on organisations, digital financial services, and regulations. Although there are well established theories or frameworks on FinTech ecosystem (see Diemers, Lamaa, Salamat & Steffens, 2015; Lee & Shin, 2018), the study considered the concepts on organisations, digital financial services, and regulations. It was assumed that not all components of FinTech ecosystem (Diemers, Lamaa, Salamat & Steffens, 2015) could yield robust evidence. The FinTechs phenomenon was new and not well documented in the context of Malawi (Monteiro, Constantinides, Scott, Shaikh & Burton-Jones, 2022; Von Krogh, Rossi-Lamastra & Haefliger, 2012). To the knowledge of the author, few but growing studies have addressed some aspects of FinTech ecosystem of Malawi (e.g. Aggarwal, Brailovskaya & Robinson, 2020; Kayila, 2024; Chipeta & Lipunga, 2025). Therefore, the purpose of this study is to understand and profile the supply-side FinTech of Malawi. This was significant in three ways (a) to contribute towards literature on the FinTechs in Malawi; (b) to highlight gaps in FinTech services and regulations; and propose areas of further studies; (c) to provide recommendations for policymakers and regulatory organisations on improving FinTech services and their roles in supporting financial inclusion.

The rest of the paper is presented as follows. Section 2 provides a background to the study. Section 3 highlights the theoretical perspective of the study. Section 4 presents the research methodology. Section 5 summarises the findings of data analysis. Section 6 discusses the findings and section 7 concludes the lessons drawn from the study.

## 2. Background to the study

### 2.1. Definition of Financial Technology (FinTech)

Financial Technology (FinTechs) has been defined differently across disciplines (Treu, 2022). In their study on understating FinTechs and its industry, Knewtson and Rosenbaum (2020) demonstrate definitions of FinTechs as follows:

- (a) *“FinTech is technology used to provide financial markets a financial product or financial service, characterized by sophisticated technology relative to existing technology in that market”* (pp. 1049).
- (b) *“A FinTech firm is a firm that primarily uses FinTech in its business model, to provide a financial product or financial service”* (pp. 1049).

The first definition points to technology that used in financial organisations to offer products and services to other organisations and consumers. Examples of such technologies include the internet, cloud computing, big data, blockchain technology, data analytics, mobile applications, application programmable interface, digital ID, artificial intelligence, machine learning, etc. (Das, 2019; Thakor, 2020). The second definition is related to a type of organisation that prioritises innovation and development technologies that support delivery of customer centric products and services in the financial sector (Del Sarto & Ozili, 2025). It is clear that a more comprehensive definition was required for the current study. Therefore, the study will use the following definition: *“A technology-enabled financial innovation that leads to the convergence of finance and technology to create new business models, applications, processes, and products that have a significant impact on financial markets, financial institutions, and the way financial services are delivered”*. (Yin, Ma & Wu, 2023:35).

Table 1: Summary of FinTech services (Del Sarto & Ozili, 2025; Thakor, 2020)

Area	Description	Examples
Finance and investment	Innovative ways of supporting funding or financing businesses and other community initiatives using digital technologies	Peer 2 peer lending, crowdfunding, venture capital
Internal operations and risk management	Use of digital technologies to support efficient services and improved data monitoring and security	Internet banking portals, electronic transfers, real time transactions clearing, fraud detection
Payments and infrastructure	Mobile technologies used to support payments and infrastructure for financial transaction processing	Mobile money payments, remittances, cross-border transactions
Data security and monetization	Securing data against threats and use of data to understand customer's behavior and develop new products	Big data, Data analytics, open banking
Customer interface	Extending branch bank services of financial services to online services that can be accessed anytime from any location	APIs, personal banking apps, neo-banking, Robo-advisors, peer to per lending

FinTechs supports innovative digital financial services for finance and investment, internal operations and risk management, payments and infrastructure, data security and monetisation and customer interface (Das, 2019; Del Sarto & Ozili, 2025; Thakor, 2020). The FinTech services are summarised in Table 1 above. In addition, FinTech services are used in digital insurance services and wealth management (Abdulla, Isa & Al-Sartawi, 2024; Schultz, 2025). Digital insurance services support customers in the process of making claims, collecting personal information and use of insurance products. Wealth management is the use of digital technologies in supporting customers in investment decisions, portfolio management and identifying risks related to investments. Wealth management may also assist customers to set their financial goals (Thakor, 2020; Temelkov, 2020).

## **2.2. Advantages of Financial Technology (FinTech)**

There are advantages of FinTech for organisations and consumers (Del Sarto & Ozili, 2025; Offiong, Szopik-Depczynska, Cheba & Ioppolo, 2024). FinTechs supports banks to offer innovative services to their customers. These include personal financial applications, automated customer response systems, instant electronic payments, digital wallets, etc. (Ozili, 2023; Treu, 2022). Banks may also use FinTech to support compliance, fraud detection for transactions and credit scoring. Financial institutions may use FinTech to stay competitive e.g. offering non-traditional banking services using online digital technologies e.g. cloud-based banking platforms, mobile applications, artificial intelligence-based applications etc. (Banna, Mia, Nourani & Yarovaya, 2022; Thakor, 2020).

For consumers, FinTech services may lower costs of transactions because they eliminate intermediaries. Another advantage of FinTech services is convenience where customers may transact at any time from any location (Das, 2019; Moro-Visconti, 2021). In developing countries, FinTech allow consumers in rural areas to use digital financial services via mobile devices and transact without going to a physical bank (e.g. mostly located in cities and urban centres). FinTech are also supporting financial inclusion through mobile money services in remote and rural locations targeting individuals who do not meet the requirements for opening and maintaining a bank account e.g. without physical assets and steady income from employment (Ediagbonya & Tioluwani, 2023; Raheem, Addo, Shaffakat & Lunberry, 2024). Government departments are also able to implement digital payment systems for social support programs that target vulnerable communities using FinTech services e.g. mobile money, payment vouchers and digital wallets (Moro-Visconti, 2021).

FinTech can support access to small loans where communities can borrow money and invest in income generating activities. Microfinance institutions may use FinTech to manage loan processes including disbursement, receiving funds, and recording repayments (Offiong, Szopik-Depczynska, Cheba & Ioppolo, 2024). Microfinance institutions have access to real time data that may be used in supporting decision-making related to fraud detection, defaults in loan repayments and cash flow management (Temelkov, 2020). Thus, FinTech is supporting microfinance institutions to achieve their goals and serve their customers better.

For private organisations, FinTechs promotes innovation through developing digital products and services that deliver value to customers. FinTechs are offering competitive products and services that are disrupting traditional banking services to focus on customer

experience, greater personalisation and efficiency in processing payment transactions (Lee & Shin, 2018; Treu, 2022). FinTechs are also offering opportunities to innovators to participate in the financial sectors and make the sectors more competitive (Galazova & Magomaeva, 2019). Microfinance, insurance and social organisations use FinTech innovations to provide services (e.g. loans, village group banking) that addresses poverty, access to financial services and social inequality (Banna, Mia, Nourani & Yarovaya, 2022). Thus, benefits of FinTechs are beyond financial incentives and profit; and can contribute towards well-being of individuals and communities.

### **2.3. Challenges of financial technology (FinTechs)**

While there are advantages of FinTech, implementation of digital services using FinTech innovations can be challenging (Murinde, Rizopoulos & Zachariadis, 2022). Some of the problems are difficulties related to compliance. In developing countries financial laws do not adequately address issues arising from adoption, appropriation and use of digital financial services and FinTech innovations e.g. licensing, supervision and compliance to standards (Ediagbonya & Tioluwani, 2023). Furthermore, cybersecurity issues (e.g. identity theft, mobile money frauds etc.) have led to loss of money for consumers and resulting in consumers to have limited trust in digital financial services. There are challenges of data protection when there is transfer of data between financial institutions and FinTechs. In some cases, there is disclosure of information to third parties (Banna, Mia, Nourani & Yarovaya, 2022; Thangalimodzi, 2019). Another challenge is absence of cross-border data exchange frameworks among African countries which makes it difficult to transact between countries (Murinde, Rizopoulos & Zachariadis, 2022). There are also issues of limited funding to support FinTech companies to develop new digital financial services and innovations to meet the new needs of consumers (Mohd, Razali & Ab Manan, 2024). It is important to understand these challenges when developing and delivering digital financial services using FinTechs.

### **2.4. Context of Malawi: Financial sector**

Malawi is located in southern Africa and has a population of 21.6 million people (World Bank, 2025). Financial sector plays a crucial role in supporting key economic activities (e.g. services, agriculture, tourism, mining, transport, education and health) in the country. Agriculture remains the main income generator of the economy through cash crops e.g. tobacco, tea, sugar and coffee. The country is also prioritising growth in other sectors including tourism and mining (Sichoongwe, 2023). Digital infrastructure and services are critical for the economy to fully integrate digital financial services. The country has digital infrastructure in major cities and urban centres that supports operations of financial sector. For instance, there are payment systems (e.g. real time gross settlement (RTGS), Malawi Inter-Bank Transfer and Settlement System (MITASS) and Electronic Cheque Clearing House (ECCH)) and networks (parallel networks of Malawi Switch Centre (Malwitch/NITEL) and Bankers Association of Malawi) that supports operations of financial institutions (Banda & Mdwazika, 2007; Makoza, 2023). Figure 1 summarises the structure of financial sector.

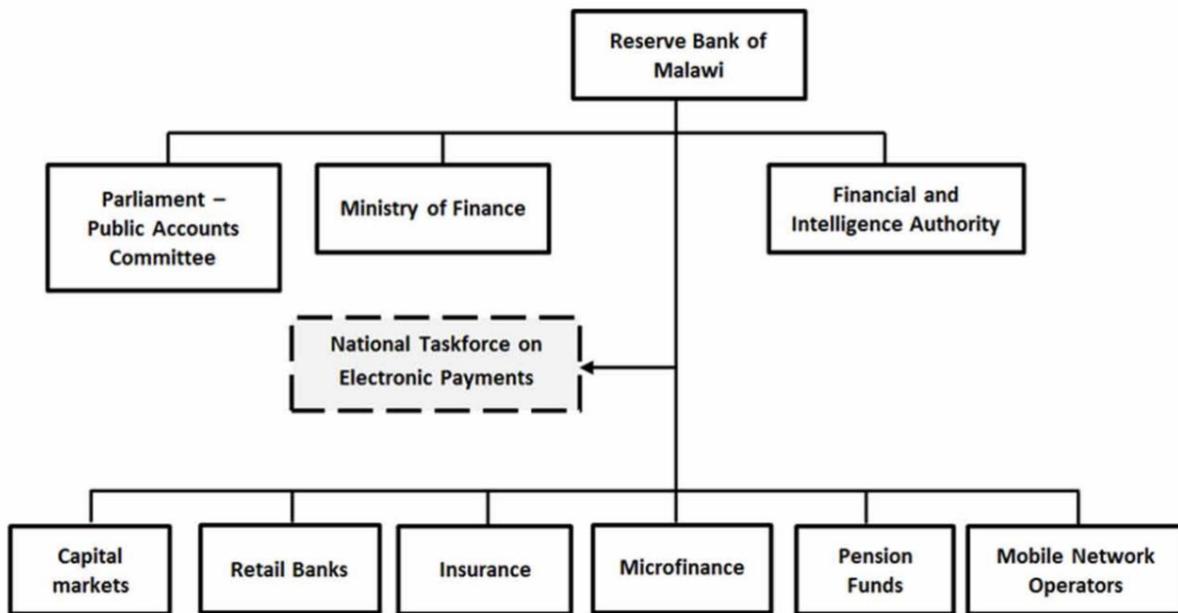


Figure 1: Summary of formal financial sector of Malawi (Makoza, 2022).

As can be seen in Figure 1, the formal financial sector of Malawi comprises retail banks, insurance, microfinance and other organisations. The Reserve Bank of Malawi is the regulator of the financial sector. The sector has undergone changes to address emerging issues of micro and macro-economic policies, external shocks and exclusion of some members of society (Lapukeni, 2015). The government through Reserve Bank of Malawi and Financial and Intelligence Authority are attempting to address problems of money laundering, illegal forex trading and externalisation, financial fraud (Chitsime, 2016). Another challenge is low financial inclusion where a large part of the adult population does not have a bank account with financial institutions. Access to digital financial services for adult population is 50% (of which 47% are mobile money accounts and 3% are bank accounts) (World Bank, 2025b).

The Government of Malawi developed the National strategy for financial inclusion III (2024-2028) to guide the country and financial institutions in addressing financial sector challenges and promote financial inclusion. Part of the policy solutions is to improve adoption and appropriation of digital technologies. The country introduced mobile money services through the main two mobile network operators (Airtel money by Airtel Malawi limited and Mpamba mobile money by Telkom Networks Malawi Limited) in 2014 (Madise, 2019). FinTechs have been operating in the sector. However, there are limited details about the companies that are offering digital financial services (RBM, 2023). Further, some banks have adopted FinTech to support their digital financial services (Makoza, 2022). It should be noted that there may be differences between banks and FinTech as organisations (as discussed in Section 2.1). For the purposes of clarity, in this study, banks and FinTech firms will be considered in light of regulation, registration, physical presence, services and business focus (Galazova &

Magomaeva, 2019; Temelkov, 2020; Thakor, 2020). Table 2 summarises the comparison between banks and FinTech.

Table 2: Comparison of banks and FinTechs (Temelkov, 2020; Thakor, 2020)

Variable	Banks	FinTechs
Regulation	Operate in highly regulated sector	Less regulated with flexibility
Registration	Registered with financial sector regulator e.g. Reserve Bank of Malawi	Innovative technology organisation also registered with Ministry of Trade and Industry or local chamber of commerce and industry
Physical presence	Provide services via branches bank floor, websites and mobile apps	Provide services digital/online websites and mobile apps
Services	Very broad services e.g. deposits, lending, payments	Very niche services e.g. payments or cash transfer
Business focus	Maintaining customer base	Innovation in quality of services and customer experience

Informal financial sector also exists in Malawi, and its activities include cash-based transactions, informal lending without collateral or credit checks, informal selling of forex and money laundering (Chitsime, 2016; Kayira, 2024). Furthermore, there are also uses of digital technology in the informal sector including transactions for buying or selling and investing in cryptocurrencies. The current legislation and regulations in Malawi do not recognize cryptocurrencies as a formal legal means of payment (Makoza, 2022). However, there is interest from the central bank to introduce central bank digital currency. Hence, the central bank is conducting research on the possibility of introducing central bank digital currency (RBM, 2024).

### 3. Theory perspective of the study

Lee and Shin (2018) suggested that a FinTech ecosystem is an interconnection of institutions, actors and activities in the financial sector. FinTech ecosystem has FinTech startups, technology developers, government departments, financial customers and traditional financial institutions. These collaborate, interact, produce and provide products and services to customers. Muthukannan, Tan, Gozman and Johnson (2020) highlighted that a FinTech ecosystem is not linear but dynamic and complex. It changes all the time and new network connections and interactions emerge over time. Hence, understanding of FinTech ecosystems require a) longitudinal empirical data b) disruptive nature of technologies can also present difficulties to analyse ecosystems c) consideration frequent changes in technologies in the ecosystem c) multiple dimensions of FinTechs (e.g. organisations or digital technologies) to include informal sectors which can be difficult to observe (Evans & Oni, 2022; Harasim, 2021; Senyo, Gozman, Karanasios, Dacre & Baba, 2023). In consideration of these points, the study viewed the demand-side of FinTech since the phenomenon was new in the context of Malawi. This perspective fitted well with the exploratory nature of the study. Three theoretical

constructs were selected from literature: organisations, digital financial services, and regulatory organisations (Harasim, 2021; OECD, 2020). These are summarised as follows:

- **Organisations:** Institutions or organisations that develop or provide support for use of financial technologies in the financial sector. These can be banks, FinTechs, big technology companies and organisations that use fintech services (Harasim, 2021). Entrepreneurs establishing technological innovations and formal organisations fit within this category (Lee & Shin, 2018; Molla & Biru, 2025).
- **Digital financial services:** The nature of products and services that are used in the financial services sector to meet the needs of organisations and consumers. This includes digital innovations that are based on advanced technologies e.g. artificial intelligence, data analytics, blockchain technology, cloud computing etc. (Evans & Oni, 2022; Murinde, Rizopoulos & Zachariadis, 2022).
- **Regulatory organisations:** Instructions that are responsible for implementing laws and regulations related to financial services to protect the interests of consumers and ensure fair practices in the financial services industry. The laws and regulations may address issues related to digital data identification, electronic know your customers, cybersecurity, prevention of financial fraud and crimes (Hannan, Shahriar, Ferdous, et al., 2023; Ghози, 2018; Lee & Shin, 2018).

#### 4. Approach to the study

The aim of the study was to establish the landscape of FinTech in Malawi focusing on the supply-side. The study used qualitative research approach to gather subjective information related to organisations, digital financial services and regulations of FinTechs (Conboy, Fitzgerald & Mathiassen, 2012). Exploratory case study fitted well to address the objective of the study because the phenomenon of FinTech was new in Malawi and represented a real-life situation (Walsham, 2006). Furthermore, exploratory case supported understanding on complexity and contextual issues of FinTechs in Malawi (Monteiro, Constantinides, Scott, Shaikh & Burton-Jones, 2022).

##### 4.1. Data collection

Purposeful sampling was used to collect data that was relevant to the study (Bouncken, Czakon & Schmitt, 2025). Data collection was conducted in two phases. The first part was collection of reports from websites of financial institutions and government departments in Malawi to produce a list of FinTech in the country. The list was used as a starting point because not all FinTechs are registered with the Reserve Bank of Malawi. Hence, online news websites were searched for articles on FinTechs to improve the list of FinTechs. Table 3 summarises the documents that were collected and analysed in the study.

Table 3: Summary of data used in the study.

Document	Source	Reference
National Strategy for Financial Inclusion I (2010-2014)	Ministry of Finance and Economic Affairs	D#1
National Strategy for Financial Inclusion II (2016-2019)	Ministry of Finance and Economic Affairs	D#2
National Strategy for Financial Inclusion III (2021-2028)	Ministry of Finance and Economic Affairs	D#3
Payment Systems Operating Regulations (2019)	Reserve Bank of Malawi	D#4
Business Licensing (Deployment and usage electronic payments channels) regulations (2019)	Reserve Bank of Malawi	D#5
Payment Systems Act (2016)	Reserve Bank of Malawi	D#6
Payment Systems Interoperability (2017)	Reserve Bank of Malawi	D#7
Business Registration Act of 2012	Ministry of Trade and Industry	D#8
Establishment of Muuni research and development Fund (2022)	Malawi Communications Regulatory Authority	D#9
Public statement on cryptocurrencies (2019)	Reserve Bank of Malawi	D#10
Communications Act (2016)	Malawi Communications Regulatory Authority	D#11
Virtual assets and virtual asset service providers: Money laundering, terrorist financing and proliferation of financing - Risk assessment report (2025)	Financial Control Authority	D#12
Online news articles- Nyasatimes	www.nyasatimes.mw	N#1
Online news articles- Nation Malawi	www.mwnation.com	N#2
Online news articles- Malawi24	www.malawi24.com	N#3

The second phase was collecting information on digital financial services details from the websites of the identified FinTechs. Internet searches were conducted on the names of FinTechs identified in the documents identified in first phase. The process was repeated to ensure that the list was representative enough of the FinTechs, and all the digital financial services of each identified FinTech were recorded (Bouncken, Czakon & Schmitt, 2025). A complete list of sampled FinTechs presented in Appendix 1.

#### 4.2. Data analysis

Content analysis (Graneheim, Lindgren & Lundman, 2017) was used to analyse the documents and understand the context of financial sector, digital financial services and the regulations that were relevant for FinTechs. The documents were read to be familiar with text. The documents were re-read to note the important and relevant points. Codes were assigned to the text and later grouped into categories. The categorised were organised into themes. The process was repeated to ensure that related categories were grouped into themes

(Erlingsson & Brysiewicz, 2017; Graneheim, Lindgren & Lundman, 2017). A report was produced to address the objective of the study.

## 5. Summary of findings

### 5.1. Organisations and financial technologies

The local description of financial technology (FinTech) was more encompassing to include both organisations, technology, and services perspectives. For instance, the Reserve Bank of Malawi defined FinTech as:

*“Technologically enabled financial innovations that can result in new business models, applications, processes, products, or services with an associated material effect on financial markets and institutions and the provision of financial services” (D#5).*

From this description the study considered technologies, organisations and services for electronic payments. This section presents the organisations and description of the digital financial technologies that are used in the delivery of financial services. The details of the financial services were included to improve the readability and storyline.

In the organisational perspective, FinTechs comprise formal and informal organisations based on the services offered to consumers and the regulatory environment of the country. In this context, formal organisations were financial services organisations and private financial technology companies that offered digital financial services to consumers, organisations and communities. In addition, formal organisations were registered with the central bank and ministry of trade (e.g. Department of business registrar) and Malawi Revenue Authority as part of the requirements of Business Registration Act of 2012 (D#8). Within this category, some of the nine commercial banks extended their services to digital banking services and were considered to be part of FinTech. For instance, all the banks had online portals and mobile Apps to support electronic payments, electronic transfers, investments and utility payments. Only one bank (e.g. NBS Bank) offered open banking services linked to a public institution:

*“Directorate of Road Traffic and Safety Services (DRTSS) is the first key partner in the open banking initiative adding that this will see non-NBS Bank customers pay for services such as driver’s license, fines, COF, road permits, change of ownership, traffic register cards and number plate application, among others, using various digital banking platforms” (N#1).*

Formal organisations were categorised into mobile network operators, technology companies, microfinance and insurance. Mobile network operators provided infrastructure for connectivity that supported ICT services e.g. broadband, WiFi, voice services, mobile internet and cloud data storage. In addition, mobile network operators provided mobile money services e.g. USSD services and Mobile Applications for money transfer within the network and with other mobile network operators; and supporting merchant services for cash deposits and withdraws. Technology companies were private organisations that functioned as intermediaries between banks, mobile network operators and organisations in

offering digital payment solutions targeting consumers. The services including mobile money services, electronic payment solutions, integration of payment services and development of customised mobile applications (app) that were applicable to the context of Malawi. For instance, digital wallets linked with mobile money services for Airtel money by Airtel Malawi Limited; and Mpamba by Telkom Networks Malawi Limited. Table 4 summarises categories of financial technology organisations.

Table 4: Summary of categories of financial technology organisations

Category	Name of organisation	Website
<b>A. Formal organisations</b>	Organisations registered with the financial regulator or Ministry of Trade and Industry	
Mobile Network Operators	Airtel Malawi Limited	<a href="https://airtelmoney.mw">https://airtelmoney.mw</a>
	Telekom Networks Limited	<a href="https://www.tnmpamba.co.mw">https://www.tnmpamba.co.mw</a>
Technology companies	PayChangu	<a href="https://paychangu.com">https://paychangu.com</a>
	Kwenda	<a href="https://www.kwenda.co">https://www.kwenda.co</a>
	Angle dimension	<a href="https://angledimension.com">https://angledimension.com</a>
	Mukuru/Zoona	<a href="https://www.mukuru.com/mw/services">https://www.mukuru.com/mw/services</a>
	pawaPay	<a href="https://www.pawapay.io">https://www.pawapay.io</a>
	NetSoft Money	<a href="https://netsoftmoney.com">https://netsoftmoney.com</a>
	Flutterwave	<a href="https://flutterwave.com/mw">https://flutterwave.com/mw</a>
	DPO Pay	<a href="https://dpogroup.com/online-payments/malawi">https://dpogroup.com/online-payments/malawi</a>
	Kakupay	<a href="https://kakupay.com">https://kakupay.com</a>
	Malipo	<a href="https://malipo.mw">https://malipo.mw</a>
	Pesapal Malawi	<a href="https://www.pesapal.com/mw">https://www.pesapal.com/mw</a>
	NITEL	<a href="https://nitel.mw">https://nitel.mw</a>
	E-Pay Limited	<a href="https://www.epay.mw">https://www.epay.mw</a>
Microfinance providers	MFI HUB Company Limited	<a href="https://www.mfihub.co.mw">https://www.mfihub.co.mw</a>
	Fin Coop	<a href="https://fincoop.wordpress.com">https://fincoop.wordpress.com</a>
	Select financial services	<a href="https://selectafrica.net/malawi">https://selectafrica.net/malawi</a>
	Microloan foundation	<a href="https://microloanfoundationusa.org/our-work/where-we-work/malawi">https://microloanfoundationusa.org/our-work/where-we-work/malawi</a>
	FINCA Malawi	<a href="https://finca.mw/service/finca-express-banki-pachala">https://finca.mw/service/finca-express-banki-pachala</a>
	Mbora	<a href="https://www.mbora.io">https://www.mbora.io</a>
Insurance providers	MediPay	<a href="https://www.hipipo.org">https://www.hipipo.org</a>
<b>B. Informal organisations</b>	Organisations that were not registered with the central bank or Ministry of Trade and Industry	
Cryptocurrencies	SpectroCoin	<a href="https://spectrocoin.com/bitcoin-in-Malawi.html">https://spectrocoin.com/bitcoin-in-Malawi.html</a>
	TransFi	<a href="https://www.transfi.com/">https://www.transfi.com/</a>
	Kyrrex	<a href="https://kyrrex.com/global/payments/malawi">https://kyrrex.com/global/payments/malawi</a>
Crowdfunding	Chithandizo	<a href="https://chithandizo.com">https://chithandizo.com</a>
	Entrepreneur Crowdfunding Platform	<a href="https://www.hipipo.org">https://www.hipipo.org</a>

Microfinance were organisations providing financial services to the unbanked populations that had unstable income sources and without a collateral. The microfinance services were small loans offered to individuals or groups with financial literacy training and flexible

repayment options. Microfinance organisations changed from paper-based systems to digital financial services to manage processes (e.g. issues of loans and repayments) and reach more beneficiaries. Continental regional organisations (e.g. MediPay) introduced insurance services targeting women in rural communities to support access to health services.

It was interesting to note that despite nonrecognition of cryptocurrencies as a form of payment by the central bank in Malawi, the public were using cryptocurrencies. The central bank released a press statement:

*“In this regard, Reserve Bank Malawi wishes to advise the general public that cryptocurrencies are not legal tender in Malawi. The RBM is however aware that they are used as a means of payment or medium of exchange, a store of value or invested assets online” (D#10).*

Some organisations were offering digital financial services for buying and selling cryptocurrencies despite the position of Reserve Bank of Malawi. The organisations were operating outside the country and offered the services to consumers via platforms. Hence, the organisations were categorised as informal (cryptocurrencies companies and crowdfunding) because the organisations were not registered with any regulatory organisation in Malawi.

Crowd funding organisations offered support for raising funds for social support to individuals, organisations and communities that were in need. The funds were raised for purposes of education, environment programs, emergencies and events. Another crowdfunding platform was offering services for raising capital for small businesses and networking opportunities.

## **5.2. Digital financial services**

The findings revealed diversity of digital financial services from the five categories of organisations. The services were categorised into mobile money, digital wallets, international money transfer, debit/credit card payments, village bank transactions, electronic bank transfers, buying or selling cryptocurrencies, cloud based banking or neo-banking, mobile banking, fundraising for social causes and microfinance. Mobile money were transactions that were accessed using mobile phones e.g. deposit, withdraw and transfer cash without using a banking account. Digital wallets were secure systems of storage of information on a device (e.g. smart phone or computer) used for payment of transactions without a card or using cash. For example, Netsoft money supported Airtel money and Mpamba users to create an account for online shopping payments in foreign currencies. International money transfers and remittances were secure transfer of funds between individuals or organisations across borders. Debit or credit card payments were payment cards issued by financial institutions and used to pay for products or services with approved credit limits.

Village bank were financial services to underserved and rural communities that had no access to formal banking services. They include small loans, savings and withdrawals, loan disbursement, and repayments. Some of the services were accessed using mobile devices e.g. mobile phones. Electronic bank transfers were transfer of funds between accounts using mobile apps or internet applications. Cryptocurrencies were informal payment systems based

on distributed ledger technology that were not regulated by the central bank (D#12). Neo-banking services allowed FinTechs to operate online platforms without any branch and customers accessed the banking services using a mobile app. Table 5 summarises the digital financial services in the country.

Table 5: summary of digital financial services

Category	Name of organisation	Digital Financial Services													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Mobile Network Operator	Airtel Malawi Limited	X													
	Telekom Networks Limited	X													
Technology companies	PayChangu	X	X									X			
	Kwenda												X		
	Angle dimension					X					X				
	Mukuru/Zoona	X	X	X											
	pawaPay	X	X									X			
	NetSoft Money	X	X												
	Flutterwave														
	DPO Pay		X		X								X		
	Kakupay	X	X												
	Malipo	X			X				X						
	Pesapal Malawi				X								X		
	NITEL		X										X		
	E-Pay Limited	X	X		X								X		
Microfinance providers	MFI HUB Company Limited	X							X		X	X			
	Fin Coop	X				X					X				
	Select financial services	X									X				
	Microloan foundation	X							X		X				
	FINCA	X							X		X				
	Mbora					X					X				
Insurance providers	MedPay		X								X			X	
Cryptocurrencies	SpectroCoin		X					X							
	TransFi							X							
	Kyrrex							X							
Crowdfunding	Chithandizo									X					
	Entrepreneur crowdfunding									X					
<b>Key:</b>		1= Mobile money, 2 = Digital wallets, 3 = International money transfer, 4 = Debit/Credit card payments, 5 = Village bank transactions, 6 = Bank transfer, 7 = Buying or selling cryptocurrencies, 8 = Cloud based banking, 9 = Mobile banking, 10 = Fundraising for social causes, 11 = Microfinance 12= Integration of payment systems 13= Online payments platform, 14= Health insurance													

Crowd funding were platforms that supported raising funds in small amounts from the public for social causes. Microfinance were financial services that targeted people without access to financial services, operating in informal sectors and involved small amounts. The microfinance services were related to small loans, savings, insurance, group lending and remittances. Integration was linking of organisations with banking systems and mobile operators to support electronic payments. For instance, Powerpay linked Airtel money and Mpamba to

merchants to support payments. There were few organisations that offered insurance services using technology. Only MedPay offered health insurance to rural communities using mobile phones. This may mean that few insurance organisations had integrated digital technologies when offering services to consumers. Consequently, there was low penetration of insurance service in the country: *“As we step into the future together, we are aware that the insurance sector in Malawi faces challenges: with penetration still very low, standing at less than 5 per cent, we have much ground to cover.”* (N#3). This may mean that there was need to grow the insurance market in the country.

On overall, FinTechs were bridging the gap for users that could not use banking services because part of the requirement for using the services did not require collateral. The consumers did not require constant income to maintain use of the digital services. Thus, digital services were used as when the services were required.

### **5.3.Regulatory organisations**

There were regulatory organisations that formed part of the supply-side of FinTechs ecosystem. These include Reserve Bank of Malawi (RBM) and Malawi Communications Regulatory Authority (MACRA). RBM was the financial regulator responsible for ensuring standards for payments systems and financial consumer protection. All FinTechs operating in the country were required to register with RBM and an operating license:

*“Under the Payments Systems Act 2016 and the Reserve Bank Act 2018, it is a violation of the law for any individual or entity to establish or operate a payment, clearing and settlement system or service, remittance services, electronic money services, mobile payment services, or issue payment instruments without proper authorisation or a licence issued by RBM”* (N#1).

In some cases, there were FinTechs that offered digital financial services without registration with RBM. MACRA was responsible for registration of mobile network operators (D#11). It issued dedicated mobile numbers for mobile money services, registration of SIM cards used for mobile money users, raising awareness of security measures for mobile money users, and received complaints related to mobile payments from users and other stakeholders. MACRA implemented regulations of Electronic Transactions and Cybersecurity Act of 2016 to ensure recognition of electronic transactions as a form of payment and supporting protection of consumers from cybersecurity. Other laws and regulations that were affecting FinTechs operations in the country are summarised as follows:

- Consumer Protection Act of 2014: promoted safety of consumers by ensuring fair business practices including payment systems.
- Payment Systems Act of 2016: ensure that all financial services providers have interoperable systems that can support exchange of transaction data with the central bank.
- Reserve Bank Act of 2018: requires all financial services providers to seek authorisation and registration before providing services to consumers.

- Financial Crimes Act of 2023: empowers Financial Control Authority (FCA) to cooperate with financial regulator and law enforcement agencies to investigate financial crimes, money laundering and financing of terrorism. It also supports FCA to enforce national and international payments systems standards and compliance procedures (e.g. know your customer) to prevent financial crimes.
- Data protection Act of 2024: support protection of consumer data to ensure privacy and avoid misuse of personal data collected during transactions.

However, there were no laws that addressed regulations for cryptocurrencies as a form of payment. This meant that consumers who were using cryptocurrencies could not receive support from the regulator in cases of loss due to theft and fraud. Other challenges were related to cybersecurity issues (e.g. identity theft and SIM (Subscriber Identity Module) swaps) and increase in mobile money fraud leading to low trust in digital financial services:

*“Technological advancements have given consumers more convenience in terms of sending and receiving money or making payments. However, some fraudsters have also taken advantage of the technology to trick unsuspecting Malawians by either calling or messaging them, advising that they have won prizes and should send either their mobile wallet pin numbers or deposit a specified amount of money to redeem prizes. (N#2).*

*“At the same time, mobile money operators face rising operational risks due to fraud, scams, and connectivity disruptions—factors that continue to erode user trust.” (N#1)*

Another challenge was delayed refunds for cancelled or reversed transactions, power supply challenges and inadequate infrastructure (network coverage and mobile network towers) especially in rural areas. Some stakeholders perceived that digital financial services were not open enough and required regulatory reforms to be more competitive.

MACRA, through the provisions in the Communications Act 2016, has established Muuni Fund to promote research of new technologies and development of communication services. Muuni Fund supports development of digital innovations: banking solutions, health, agriculture, energy and ICT and digital services (D#9). The organisation had potential to foster collaboration among entrepreneurs, universities and funders in commercialisation of innovations. MACRA was planning to implement a sandbox where innovations could be tested to ensure digital products or services standards and consumer safety before deployment.

## **6. Discussion of findings**

This study sought analyse the supply-side profile of FinTech of Malawi focusing on organisations, digital financial services and regulations. The findings confirm the development of FinTechs in the financial sector that offered services to unbanked population to close the gap of financial inclusion. The organisations included mobile network operators, technology companies, microfinance, insurance companies, cryptocurrencies services organisations and crowdfunding organisation. The organisations provided services for mobile money, digital

wallets, international money transfers, village bank transactions, mobile banking, cloud-based banking, open banking, international money transfer and remittances, integration of payment systems and online payment platforms.

It was clear that FinTechs were part of the growth in the financial sector with the increased adoption of mobile technologies (e.g. mobile phones). Apart from the commercial banks, there was an increase in number of private organisations offering digital financial services (from two mobile network operators offering mobile money services in 2014). This was consistent with other studies that have looked at the role of mobile money as part of digital financial services in the context Malawi (Madise, 2014; Mtambalika, Manda, Gombachika & Kunyenje, 2016). The findings in the current study highlighted further organisations that were providing digital financial services beyond mobile money. It was interesting to note that beyond mobile network operators, other private organisations and emerging entrepreneurs were participating in the digital financial services. FinTechs participation in digital financial services may support sector competitiveness and innovation of new products and services to achieve financial inclusion (Lee & Shin, 2018; Mohd, Razali & Ab Manan, 2024).

The findings showed that FinTechs offered diverse digital financial services. Mobile money was a popular digital financial service. This could be attributed to the increase in number of mobile phone users. This was consistent with other studies that have highlighted the popularity of mobile money services in Malawi (Aggarwal, Brailovskaya & Robinson, 2020; Madise, 2019). In addition, there was demand for new services to meet the diverse needs of consumers. For example, microfinance services for supporting small businesses and individuals to access loans, managing savings and investments. Other interesting services were rural-based agriculture services that had integrated digital financial services e.g. Mhora. The organisation integrated agricultural entrepreneurial activities (e.g. supply chain for agricultural produce, access to loans, management of loads using mobile app). This confirmed the potential of FinTechs in filling the gaps where banks may not be able to provide services using innovative solutions that relevant to the local context conditions (Molla & Biru, 2025). FinTechs in this context were supporting financial inclusion in rural areas (Aggarwal, Brailovskaya & Robinson, 2020). However, there were few FinTech organisations that offered insurance services. This meant that some organisations and rural communities were at risk because of limited access to insurance (Iddrisu, Abor, Boadi & Gyebi, 2025).

For regulatory environment, the findings confirmed a structured sector that had institutions that supported formal organisations operating in the financial sector. This was consistent with previous studies that have noted the different institutions and government departments that were supporting the economic activities in the financial sector (Makoza, 2022). Further, the study demonstrated the laws and regulatory gaps in dealing with new payment systems e.g. cryptocurrencies. Other studies have also highlighted similar findings (Madise, 2019; Thangalimodzi, 2019). The contribution of the study is the role of central bank in providing information to consumers on the risks of using unlicensed digital payment systems. The central bank also demonstrated willingness to adopt new payment technologies e.g. central bank digital currency (RBM, 2025).

From the theoretical perspective, the study confirmed the complexity of FinTech ecosystems focusing on three areas: organisations, digital financial services, and regulatory environment (Lee & Shin, 2018; Muthukannan, Tan, Gozman & Johnson, 2020). These concepts provided as basis for understanding FinTechs as a technology (related to digital financial services) and as organisations (related to categories of technology organisations). These areas are supporting the early phase of the development of the FinTech ecosystem in Malawi. There was limited evidence on investors in the supply side of FinTech ecosystem (apart from the few Innovation hubs e.g. m-Hub, Mzuzu m-Hub, The Polytechnic Innovation Hub and Ntha Foundation). Details on individuals or organisations that were investing in FinTechs were missing. Similar studies have argued that investors are crucial in supporting FinTech start-ups with financing and networking (Cornelli, Doerr, Franco & Frost, 2021; Golder & Barua, 2025).

The study was without limitations; the analysis did not cover all organisations that provide cryptocurrencies payments in Malawi. Cryptocurrencies were not recognised as formal payments system (e.g. not covered in the Payments Systems Act of 2016) (Makoza, 2022; Thangalimodzi, 2019). The FinTechs that offered cryptocurrencies were not registered with Reserve Bank of Malawi. The few FinTechs covered in this study were operating outside the country. The study provides a good starting point for further research summarised as follows:

- a) Studies on readiness of local FinTechs and central bank to introduce cryptocurrencies as a formal payment in the country.
- b) Studies on effectiveness of consumer protection from the perspective of FinTechs and regulatory organisations for different digital financial services beyond mobile money
- c) Studies on how government through the central bank are supporting the development of FinTechs for insurance and microfinance (to address the low insurance penetration of below 5% in the country).

The study makes the following recommendations for policymakers and the central bank based on the findings related to the supply side of FinTechs ecosystem of Malawi: (b) the need to expedite laws and regulations on use of cryptocurrencies so that local FinTechs can enhance their digital financial services to include cryptocurrencies (b) development a standalone National FinTech Strategy for the country as more sectors are integrating digital financial services (e.g. Agriculture, Social Services, Trade, Transport etc.) to make the FinTech ecosystem more trustworthy and competitive. (b) Scale up human capital development and financial literacy programs through collaboration of the central bank, business development organisations, FinTechs accelerators, investors, universities and science and technology regulatory institutions.

## **7. Conclusion**

This study set out to analyse the supply-side of FinTechs ecosystem of Malawi focusing on organisations, digital financial services and regulatory organisations. The findings showed that the supply side of FinTechs comprises mobile network operators, technology companies, microfinance providers, insurance providers in the formal sector. There were also organisations that were not registered with Reserve Bank of Malawi that were offering digital

financial services e.g. cryptocurrencies. Mobile money was the most popular digital financial services in the country because of the increase in access to mobile phones. Insurance and crowdfunding were least used digital financial services. The country had institutions and legal frameworks that supported standards and regulations for digital payment systems. However, there also gaps in laws and regulations to address some of the changes related to mobile money fraud, identity theft and SIM swaps. The study recommends the development of national FinTech strategy, human capital development and collaboration among actors in the FinTech ecosystem.

## Appendix 1: List of FinTechs & digital financial services

Organisation	Website	Description and services
Airtel Malawi Limited	<a href="https://airtelmoney.mw">https://airtelmoney.mw</a>	A mobile network operator that provides network infrastructure, mobile money services (Airtel Money) and IT services.
Telekom Networks Limited	<a href="https://www.tnmmpamba.co.mw">https://www.tnmmpamba.co.mw</a>	A mobile network operator that provides services including networks infrastructure and connectivity, mobile money services (Mpamba).
PayChangu	<a href="https://paychangu.com">https://paychangu.com</a>	FinTech that offers payment solutions linking Airtel money, Mpamba, electronic bank transfers, card payments, and payment integration
Kwenda	<a href="https://www.kwenda.co">https://www.kwenda.co</a>	An organisation that provides a payment platform where consumers can book or pay for events, accommodation and transport.
Angle dimension	<a href="https://angledimension.com">https://angledimension.com</a>	FinTech organisation that provide solutions for e-KYC, Village banks, Microfinance and SMS gateway.
Mukuru/Zoona	<a href="https://www.mukuru.com/mw/services">https://www.mukuru.com/mw/services</a>	FinTech that over mobile money services, digital wallets and cross-border remittance services.
pawaPay	<a href="https://www.pawapay.io">https://www.pawapay.io</a>	FinTech that offers services including mobile money, merchant API development and integration, and treasury management for mobile money.
NetSoft Money	<a href="https://netsoftmoney.com">https://netsoftmoney.com</a>	FinTech provides online payment solutions. Customers can create an online account and move money from Mpamba or Airtel into the account (used for online shopping).
Flutterwave	<a href="https://flutterwave.com/mw">https://flutterwave.com/mw</a>	FinTech that provides API payment solutions for transfers, payment verification, customer verification and virtual cards/digital wallets creation.
DPO Pay	<a href="https://dpogroup.com/online-payments/malawi">https://dpogroup.com/online-payments/malawi</a>	FinTech provides payment solutions including mobile money, integration of API, card-based payments and digital wallets.
Kakupay	<a href="https://kakupay.com">https://kakupay.com</a>	Online payment provider that offers payment gateway solutions, digital wallets and money transfer services.
Malipo	<a href="https://malipo.mw">https://malipo.mw</a>	FinTech that provides API integration, mobile payments, utilities payment and card transactions.

Organisation	Website	Description and services
Pesapal Malawi	<a href="https://www.pesapal.com/mw">https://www.pesapal.com/mw</a>	Payment provider for point of sale, mobile money and card-based payments.
NITEL	<a href="https://nitel.mw">https://nitel.mw</a>	Technology company that offers payment platform development and integration, point of sale solutions and data centre operations.
E-Pay Limited	<a href="https://www.epay.mw">https://www.epay.mw</a>	FinTech company that offers different payments solutions including mobile wallets, point of sale, card-based payments, agent wallets, cloud-based banking and QR code payments.
MFI HUB Company Limited	<a href="https://www.mfihub.co.mw">https://www.mfihub.co.mw</a>	A company that provides technology solutions for microfinance institutions and financial cooperatives. The services include cloud banking solutions, mobile banking and system integration.
Fin Coop	<a href="https://fincoop.wordpress.com">https://fincoop.wordpress.com</a>	A microfinance organisation that uses Fin Mobile App to deliver financial services to underserved businesses (micro, small and medium enterprises)
Select financial services	<a href="https://selectafrica.net/malawi">https://selectafrica.net/malawi</a>	Microfinance organisation that offers loans and provides digital financial solutions to manage loans and integration with other systems e.g. payroll.
Microloan foundation	<a href="https://microloanfoundationusa.org/our-work/where-we-work/malawi">https://microloanfoundationusa.org/our-work/where-we-work/malawi</a>	A microfinance organisation that uses mobile money and digital financial services (digital banking platform) to manage loan disbursements and repayments.
FINCA Malawi	<a href="https://finca.mw/service/finca-express-banki-pachala">https://finca.mw/service/finca-express-banki-pachala</a>	Microfinance organisation that uses mobile banking services and digital banking platform to support microloans services to communities.
Mbora	<a href="https://www.mbora.io">https://www.mbora.io</a>	Agriculture based FinTech social organisation that offer microfinance services (microloans), digital village banking, mobile money and WiFi to a rural community.
MediPay	<a href="https://www.hipipo.org">https://www.hipipo.org</a>	An NGO that uses FinTech solution to offer medical insurance targeting rural women. The organisation supports use of mobile bank accounts and mobile money wallets.
SpectroCoin	<a href="https://spectrocoin.com/bitcoin-in-Malawi.html">https://spectrocoin.com/bitcoin-in-Malawi.html</a>	Foreign registered organisation that offers financial services for cryptocurrencies (e.g. Bitcoin), digital wallets, debit cards and payment processing services.

Organisation	Website	Description and services
TransFi	<a href="https://www.transfi.com/">https://www.transfi.com/</a>	Foreign registered organisation that provides payment platforms supporting cross-border transfers, cryptocurrencies, digital wallets and
Kyrrex	<a href="https://kyrrex.com/global/payments/malawi">https://kyrrex.com/global/payments/malawi</a>	Foreign registered organisation provides cross-border transfer services, API integration and conversion of cryptocurrencies to other currencies.
Chithandizo	<a href="https://chithandizo.com">https://chithandizo.com</a>	An organisation that provides a platform for fundraising to support social activities and programs (e.g. events, emergencies, education and medical)

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