Data for policy action framework
Retail and merchant trade sector

July 2022
Table of contents

1. Introduction ...........................................................................................................................................1
2. Policy priorities ......................................................................................................................................4
   Sector priorities........................................................................................................................................4
   Role of digitalisation...............................................................................................................................4
3. Retail payment digitalisation: status and drivers .....................................................................................7
   3.1. Current state of digitalisation ..........................................................................................................7
   3.2. Drivers of digitalisation ....................................................................................................................8
      Support function ...................................................................................................................................9
      Demand ...............................................................................................................................................10
      Supply .................................................................................................................................................11
      Institutions (rules and laws) .............................................................................................................11
4. Role of data...........................................................................................................................................12
   Supporting function .............................................................................................................................12
   Demand ...............................................................................................................................................13
   Supply .................................................................................................................................................13
   Institutions (rules and laws) .............................................................................................................14
5. Implications for policy implementation ..................................................................................................15
6. Bibliography ..........................................................................................................................................17

List of tables
Table 1 PSDYES priorities and digital linkages ......................................................................................5
Table 2. Potential indicators and data sources: supporting function drivers ..........................................12
Table 3. Potential indicators and data sources: demand-side drivers .......................................................13
Table 4. Potential indicators and data sources: supply-side drivers .......................................................13
Table 5. Potential indicators and data sources: institutional drivers ......................................................14

List of figures
Figure 1. Rwanda Economy Digitalisation Program (RED) policy domains and
Government of Rwanda domain-owners .................................................................................................1
Figure 2. Registered businesses per capita .............................................................................................3
Figure 3. Main pillars of the Cashless Rwanda strategy ..........................................................................6
Figure 4. Value and volume of MoMoPay Payments 2020-2022 ............................................................8
Figure 5: Market Systems framework ....................................................................................................9

List of boxes
Box 1. The retail merchant sector at a glance ..........................................................................................2
Box 2. Impact of fee removal and reinstatement policy on MoMoPay transactions ..........................8
1. Introduction

This document highlights the importance of data insights to help the government of Rwanda measure progress and target interventions to achieve its key objectives for retail trade growth in Rwanda, with a particular focus on small merchants. It is a deliverable under the Rwanda Economy Digitalisation (RED) Programme, a three-year initiative to support a sustained shift to an inclusive, digitalised economy.

About RED. Hosted by MinICT, the RED programme is implemented by Cenfri in partnership with the Government of Rwanda and supported by the Mastercard Foundation. The programme works with policymakers by leveraging insights from data analysis to inform policymaking, catalyse innovation and, ultimately, improve livelihoods towards the attainment of Rwanda’s Vision 2050.

Core policy domains. The RED programme engages in several policy domains, as illustrated in Figure 1. Its anchor domains are those below the line (indicated in green in the diagram below), where it engages closely on the Cashless Rwanda agenda. From these anchor domains, it also informs important real economy policy domains above the line (i.e. in blue), in each instance identifying how data can inform policy action towards the achievement of the policy objectives and key performance indicators for the relevant sector authorities. While the entry angle or lens is payments data, the focus above the line expands beyond payments digitalisation to generating actionable policy insights through novel data analysis.

Figure 1. Rwanda Economy Digitalisation Program (RED) policy domains and Government of Rwanda domain-owners

Merchant data for policy action framework. The merchant sector is one of the priority sectors for the programme. The sector and its upstream activities generate significant economic value and provide income for many Rwandans (as outlined in Box 1 below). The digitalisation of the payments ecosystem has a direct role in
The objective of this document is to showcase the power of data to help inform the MiniComm and its implementation agency the Rwanda Development Board in its implementation agenda, as well as to equip the MinICT and other policymakers in the implementation of the Cashless Rwanda strategy.

Box 1. The retail merchant sector at a glance

A significant, largely informal economic sector. Wholesale and retail trade accounted for 8% of GDP in 2020 (NISR, 2021a) and, according to the 2020 Establishment Census, 57.4% of all 232,283 enterprises in Rwanda operated in wholesale and retail services. Of these wholesale and retail enterprises, 94% were informal¹ (NISR, 2021b). The high level of informality is also evident in the 501,475 self-reported merchants in the FinScope survey² (2020). The fact that self-reported merchants are more than double the official number of establishments suggests that many merchants are not even captured in data as informal enterprises.

Retail merchants are active throughout Rwanda, with higher concentrations in some districts. There are merchants throughout the country with the largest concentration of merchants being in Kigali. Figure 2 below shows the number of registered businesses per capita in each district, with darker shades indicating higher business density. All three Kigali districts (i.e. Gasabo, Kicukiro and Nyarugenge) have substantially higher levels of business concentration than the other districts and so were excluded from the map for clarity. The per capita number of businesses for these districts is included in the bar chart.

The figure shows that, outside of Kigali, Rubavu has the largest concentration of registered businesses, followed by Musanze and then Bugusera. The high number of businesses in Rubavu is because of the significant cross-border trade with the Democratic Republic of Congo. Musanze houses the second largest city in Rwanda and Bugusera houses some of Rwanda’s manufacturing businesses. Huye has the fourth highest concentration outside Kigali and houses one of the University of Rwanda campuses.

¹ Formal businesses i) maintain regular operational accounts, ii) are registered with RRA and iii) produce goods or services for sale or barter in non-agriculture activities.

² Merchants reported main income as self-employed and worked in any of: wholesale and retail trade, transport, accommodation and food services, professional and technical activities, administrative and support services or other service activities.
Structure. This note starts by outlining the policy priorities for the retail sector in Section Error! Reference source not found. and will show how these link to the digitalisation and cashless payments agenda. These policy objectives and their corresponding key performance indicators (KPIs) are the point of departure for RED’s merchant engagement. Next, Section Error! Reference source not found. considers the current state of payments digitalisation and the key drivers of, or imperatives for, supporting further digitalisation. From there, Section Error! Reference source not found. considers the role of publicly-held data in helping to drive the merchant payments digitalisation agenda, and identifies key indicators to track under this agenda. Section Error! Reference source not found. concludes on the implications for policy implementation.

3 The map shading ranges from light areas with low business density per capita to dark areas with high business density levels per capita. The map excludes Kigali (Nyarugenge, Gasabo, and Kicukiro) as indicated by the white colour as the high density levels in Kigali would affect the visibility of non-Kigali areas on this map. The bar chart on the right however captures the numbers for Kigali and is to be read in conjunction with the map.
2. Policy priorities

Sector priorities

Key to Vision 2050 and NST 1. The policy priorities of the Rwandan government are built on the foundation laid by Vision 2050, which replaced the Vision 2020 as the overarching strategy for the Government of Rwanda. The aim of Vision 2050 is to see Rwanda become a high-income country by 2050. The strategy has five pillars: human development, competitiveness and integration, agriculture for wealth, urbanise and agglomerate, and an accountable and capable state. The National Strategy for Transformation (NST 1) (2017-2024) is the main implementation plan for reaching the vision and aligns with the presidential term. The strategy contains four pillars: economic transformation, social transformation, transformational governance, and a cross-cutting pillar. The retail trade/merchant sector is central to the competitiveness and integration pillar of the Vision 2050, as well as the economic transformation pillar of NST1.

Specific focus of Private Sector Development and Youth Employment Strategy (PSDYES) 2018-2024. Each main economic sector has a specific sector plan that aligns with NST1 and highlights the policies and key performance indicators that government aims to reach within the sector. For the retail sector, the applicable strategy is the PSDYES, which sets an overall goal of increasing the competitiveness of the Rwanda economy. The strategy has four pillars, for each of which specific KPI targets are set:

1. Promoting competitive value chains made in Rwanda
2. Increasing firm-level productivity and enhancing diversification
3. An ecosystem approach to increasing exports
4. Streamlining regulation and access to information

Role of digitalisation

Digitalisation serves retail sector objectives. Digital technology – and digital financial services, including payments – play a key support role to this policy agenda. Digitalisation of payments increases the efficiency of services offered. The digitalisation of payments also enables the growth of a more digitalised economy, as digital payments are an enabler for the digital economy, including e-commerce. Table 1 highlights the linkage between digital services and digital payments and the four PSDYES priorities.
1. Promoting competitive value chains made in Rwanda
   - **Access to credit and patient capital** – Channelling credit to priority sectors through incentives that have conditions attached. Targeted investment promotion of patient capital providers, such as angel investors and venture capital firms. Credit incentive packages to be granted to youth gazelle projects that have strong backward and forward linkages in the value chain.
   - **Rwanda Factoring Platform and legal reforms** – A marketplace for firms to access working capital on the back of supply contracts to big buyers.

2. Increasing firm-level productivity and enhancing diversification
   - **Technology upgrade support** – Firm-level support for firms to identify and acquire productivity enhancing technology upgrades.

3. An ecosystem approach to increasing exports
   - **Digitally-enabled exports** – Promoting e-commerce through regulatory review, training, awareness campaigns and logistics enhancements.
   - **International payments review** – Review of regulation around receiving money from abroad to lower the costs for recipients.

4. Streamlining regulation and access to information
   - **Irembo Business Portal** – A single window for the private sector to access government services, pay taxes, comply with regulation, access information and provide feedback.

**Table 1 PSDYES priorities and digital linkages**

*Source: Rwanda Economic Digitalisation Programme compilation, based on PSDYES (2017)*

**Contributing to the Cashless Rwanda Strategy.** The merchant payment digitalisation agenda also serves the broader Cashless Rwanda agenda. The Rwanda National Payment System Strategy (RNPS) 2018-2024 sets a vision of building a cashless Rwanda. Among the five pillars of the strategy is the facilitation of a cashless economy by promoting e-payments, ultimately to accelerate the rate of economic growth and empower Rwandans towards meeting the country’s vision of attaining middle-income status. In addition, the Ministry of ICT and Innovation (MINICT) has developed a Cashless Strategy. The Cashless Strategy seeks to complement the RNPS and guide its approach to implementation. It is one of six policy priorities highlighted in the Financial Sector Development Strategic Plan 2018-2024. The strategy has three pillars: infrastructure, adoption (which is broken down into cost on the supply-side and literacy and mindset on the demand-side) and trust. Each pillar targets a number of tangible indicators covering a range of topics:

---

4 High growth startups.
### Figure 3. Main pillars of the Cashless Rwanda strategy

**Source:** MINICT (2020)

By focusing on these pillars, the strategy aims to address the existing barriers to the digitalisation of payments and leverage the progress that has already been made in the payments market.
3. Retail payment digitalisation: status and drivers

Section 2 established the importance of digital payments in supporting the achievement of the policy objectives for the merchant sector. To understand how data insights on payments digitalisation can help to serve these objectives, it is important to first understand the current status and drivers of retail trade payment digitalisation in Rwanda.

Before COVID-19, mobile money and other digital channels were mostly used for person-to-person transactions or purchases at larger businesses. Small merchants transacted almost exclusively in cash and so their business activities were essentially invisible. When COVID-19 arrived in March 2020 the NBR removed all transaction fees on digital payments as a means of encouraging digital payments and limiting the use of cash. This had a dramatic impact on the development of the mobile money market in Rwanda and both digital payment values and volumes rose sharply. Analysing recent data for mobile money transactions has allowed us to develop insights about the state of payment digitalisation in the retail sector, as well as key drivers of digitalisation.

The rest of this section considers each of these two angles to form a picture of how far advanced merchant payment digitalisation is in Rwanda, what the gaps between the policy ideal and the current picture are and, importantly, what factors determine or drive the adoption of digital payments by merchants, clients, and suppliers. This understanding then lays the foundation for the discussion in Section 4 on the role of data and key indicators that could be tracked to understand the evolution of the status and drivers of digitalisation to support retail trade and merchant policy objectives.

3.1. Current state of digitalisation

*Merchant payment digitalisation has grown rapidly off low base, but much further scope for growth.* According to the latest FinScope survey findings (based on 2019 data), the majority of consumers conducted all their merchant payment use cases in cash, with the exception of school payments, which typically relied on bank transfers or deposits. This picture has since changed, largely prompted by fee policies in the back of COVID-19 (see Box 2 below). Recent data analysis by the RED Programme estimates that close to half of all household payments made in Rwanda per month are now digital. This represents substantial progress. However, it is

---

5 Payment of insurance premiums and formal credit instalments were also digitalised.

6 The analysis assumes, based on transaction patterns observed elsewhere in East Africa, that households make around 70 payments per month, which would mean that a total of 195 million payments are made per month by Rwandan households. By extrapolating the number of MTN MoMo payments based on an assumption that it would account for 75% of all digital payments, an estimate of 93 million digital payments per month is arrived at, accounting for 48% of all estimated payments.
estimated that there are still more than 100 million monthly household transactions that could be digitalised.

Box 2. Impact of fee removal and reinstatement policy on MoMoPay transactions

The removal of fees on digital payments with the first lockdown (March 2020) resulted in an increase in the value and volume of MoMoPay payments (see Error! Reference source not found.). Person-to-person (P2P) fees were reintroduced in June 2020 while MoMoPay transactions remained fee-less. Consequently, the decrease seen in P2P payments volume was not mirrored in MoMoPay payments. In contrast, MoMoPay payments increased substantially from June 2020, suggesting that merchants were shifting their P2P accounts to MoMoPay accounts in order to avoid fees. When fees for merchants were reintroduced on MoMoPay transactions over RWF4,000 in September 2021, there was a substantial fall in the total value of transactions but not the volumes, suggesting that merchants shifted transactions above the fee threshold to alternative payment mechanisms, but increased volumes of no-fee transactions.

Figure 4. Value and volume of MoMoPay Payments 2020-2022

Source: RURA MTN data

3.2. Drivers of digitalisation

What explains the current state of merchant payment digitalisation and what is likely to determine or drive the further evolution of the market? The diagram below illustrates the different elements needed to build an effective and inclusive market. The framework shows that, apart from considering direct market forces (demand and supply), it is also important to understand the institutions that impact markets.

---

7 MomoPay has always been, and remains, free for subscribers that make payments. Fees for merchants and others who accept payments via MomoPay have changed. Prior to March 2020, merchants and others accepting payments paid 1% of the transaction value. Fees to accept MomoPay payments were removed between March 2020 and the 1st of September 2021. MomoPay fees are now set at 0.5% of the transaction value for transactions above RWF 4,000.
indirectly, namely the supporting infrastructure and the rules for market engagement. The rest of this section applies this framework to categorise the drivers of payments digitalisation. It draws on a review of international payments digitalisation case studies, as well as the analysis to date of the Rwanda Economic Digitalisation Programme.

Support function

The support function layer conditions the scope for digitalisation in two ways:

1. **Reliable access to basic infrastructure.** Successful digital payments depend on i) reliable digital devices that can communicate, ii) electricity to power digital payments infrastructure and iii) an account with the ability to pay digitally. In Rwanda there is still a sizeable portion of the population that do not have reliable access to devices (25% of adults), electricity (32% of households) or digital accounts (39% of adults) (FinScope, 2020).

2. **Building on familiar, existing payment channels.** A review of international case studies suggests that the initial digitalisation of payments tends to occur more successfully if it is on the back of an established and trusted channel in the market. Over time, it then evolves to more sophisticated channels or technology. In Rwanda the USSD channel was already widely used for airtime transactions, and therefore formed the point of entry for digital payments. In future, security concerns as well as challenges in user convenience and speed will increasingly challenge the market to evolve beyond USSD. This trend is however constrained by hardware and infrastructure access.
Demand

There are at least six demand-side drivers of payment digitalisation:

1. *Conveniently exchanging between cash and digital.* Across most emerging markets cash is the predominant way to transfer value. To make use of digital payments, people must be able to easily switch between carrying cash and having digital value. To increase the use of digital payments, cash-in cash-out (CICO) points, processes and technology need to be affordable, accessible and efficient.

2. *Offering value-added services.* When users can access additional services through digital payments, it increases the value proposition of using digital payments. For example, if a user is able to obtain digital credit on the back of a digital payment account, and if the level or rate of credit received is determined by the level of digital transactions, then it increases the attractiveness of transacting digitally.

3. *Trust over time.* All other things being equal – particularly the reliability of infrastructure and fees – users of digital payments tend to increase their usage levels over time as they become more familiar with the service and learn to trust it, which may prompt them to start using digital payments for other use cases as well. This familiarity can also be gained by partnering with institutions that users trust. The data analysis conducted by the RED programme so far clearly shows that those who transact more frequently are those that have had digital payments for a longer time.

4. *Perceptions of fees and value proposition.* A review of international case studies suggests that, in markets with many low-income consumers, digital payment users tend to be very price sensitive and any cost they may incur from digital fees impacts their willingness to use the channel. Users’ understanding of fee structures is also an important driver, as it can mean that perceived cost is higher than actual. In qualitative interviews, smaller merchants in Rwanda indicated a preference for cash payments because of perceived high fees. This perception was driven by most merchants’ inability to correctly calculate ad valorem fees. Merchants then pass these miscalculated fees on to their customers, which disincentives customers from paying digitally.

5. *Network effects.* The more digital payments are used, the more advantageous it becomes for other related users (those in the network) to make use of digital payments. Within the merchant/retail trade space, geographic acceptance nodes may arise when merchants in a region digitalise and users become accustomed to paying digitally. The government is also an important aggregator that can incentivise the switch to digital payments via bulk payments.

6. *Meeting functional needs.* Qualitative fieldwork interviews with merchants (2021) highlighted that merchants were reluctant to use MoMoPay for business-to-business (B2B) transactions as it lacks some of the functionality that cash and bank transactions provide. The clearest limitation was the inability to make payments from a MoMoPay wallet from another MoMoPay wallet. To make purchases for their business, users need to transfer funds from their MoMoPay wallet into their personal mobile money account and pay
another merchant’s MoMoPay wallet from there. Another limitation merchants
mentioned is that the proof of payment provided by banks is considered
indisputable and universally accepted while mobile money proof of payments
was perceived as forgeable.

Supply

There are two main ways in which industry practices shape payments digitalisation:

1. *Fee levels and costing structure.* Rwandan consumers’ and merchants’
   price sensitivity was clearly illustrated with the removal and reintroduction of
   fees in 2020 and, as indicated in the demand-side drivers above, the ad
   valorem fee structure creates higher-than-actual price perceptions. Thus, the
   level and structure of fees is an important driver of payment digitalisation.
   A fee structure that is easy to understand and apply will encourage use of the
   channel by merchants and customers alike.

2. *Sufficient options.* For digital payments to be a profitable service, it is
   necessary that the number of transactions and number of users are
   sufficiently large. An important way to create scale is to facilitate ubiquitous
   payments: the acceptance of any payment method to complete a transaction.
   Particularly in a small market like Rwanda, the development of siloed
   proprietary payments solutions further creates scale issues by sub-dividing
   the market. Therefore, interoperability – enabling users to make payments
   across different providers, channels and instruments – is an important driver
   of payment digitalisation.

Institutions (rules and laws)

*Regulatory compliance.* While the digitalisation of payments makes regulatory
compliance easier for formal businesses (for example to make tax payments),
informal businesses may prefer not to digitalise payments to avoid being visible to
government authorities. Other than a trading license (*patente*), informal merchants
do not pay any other fees to the government. With digitalisation, informal businesses
may become liable for taxation. Thus, the need for regulatory compliance may be a
positive or negative driver of payment digitalisation.
4. Role of data

Data analysis holds great policy power. In the retail trade sector, it enables policymakers to form a granular understanding of merchant activities in Rwanda and to compare transaction patterns across merchant types and location to derive insights relevant for meeting the various policy targets as set out in Section 2. It also holds the potential to reduce information asymmetries on merchants, which can enable private sector providers to develop value added services such as credit to be added to the digital payments offering for merchants. The data analysis conducted by the Rwanda Economic Digitalisation Programme to date shows that digital payments are already taking root as a driver of merchant growth in Rwanda, and that the level and pace of this trend is determined by a number of drivers in the payments ecosystem – not least of which are pricing and functionality. Going forward, data will play a core role to further understand what is needed to promote merchant payment digitalisation in support of the broader public policy objectives for the sector, and to measure the progress of related policy interventions.

An important consideration in the quest for more data-informed policy insights is what data is available that can speak to the progress made to support the digitalisation of payments. The tables below outline a provisional list of indicators that could be drawn from available data, categorised across the different drivers of digitalisation categories. As the status of digitalisation is not stagnant, these indicators will evolve over time.

**Supporting function**

<table>
<thead>
<tr>
<th>Relevant digitalisation driver</th>
<th>Indicator</th>
<th>Rationale</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliable access to basic infrastructure</td>
<td>Network down time (%)</td>
<td>Network down time speaks directly to reliability of the network</td>
<td>RURA telecoms data</td>
</tr>
<tr>
<td></td>
<td>Call failures as proportion of calls (per district)</td>
<td>Failed calls indicate the reliability of the communications network broadly</td>
<td>RURA telecoms data</td>
</tr>
<tr>
<td></td>
<td>% area of Rwanda with mobile network access</td>
<td>Connectivity is a basic requirement for digital payment access. Once this is 100%, it can be updated to 4G access</td>
<td>RURA tower data and mapping of signal strength</td>
</tr>
<tr>
<td></td>
<td>Mobile phone ownership by merchants</td>
<td>Device access is a basic requirement to access digital payments</td>
<td>RURA telecoms data, Rwandan Development Board (RDB) business registrations</td>
</tr>
<tr>
<td>Reliable access to basic infrastructure; Building in familiar payment channels</td>
<td>Smartphone ownership by merchants, including NFC functionality</td>
<td>Device access is a basic requirement to access digital payments and smartphone ownership is needed to shift from USSD</td>
<td>RURA telecoms data, Rwandan Development Board (RDB) business registrations</td>
</tr>
<tr>
<td></td>
<td>% of transactions on USSD vs OTP (website or mobile app)</td>
<td>Indicates the dependence on USSD for digital payments</td>
<td>NBR, RURA telecoms data</td>
</tr>
</tbody>
</table>

Table 2. Potential indicators and data sources: supporting function drivers

*Source: RED Programme compilation*
## Demand

<table>
<thead>
<tr>
<th>Relevant digitalisation driver</th>
<th>Indicator</th>
<th>Rationale</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network effects</td>
<td>Registered merchants per capita per district</td>
<td>Showcase areas with potential for payments digitalisation due to concentration as well as where merchants have formalised.</td>
<td>Rwandan Development Board (RDB) business registrations &amp; NISR population estimates</td>
</tr>
<tr>
<td></td>
<td>Merchants with a digital payment account (#) by district and gender</td>
<td>Showcase the level of uptake of digital payments by merchants by area for geographic nodes and by SIC for digitalisation of value chains</td>
<td>Rwandan Development Board (RDB) business registrations, NBR account ownership data &amp; RURA Mobile money data</td>
</tr>
<tr>
<td></td>
<td>Value of merchant digital payments</td>
<td>Showcase areas where digital payments are emerging in terms of value and whether this is supporting gender inclusion</td>
<td>Rwandan Development Board (RDB) business registrations, NBR account ownership data &amp; RURA Mobile money data</td>
</tr>
<tr>
<td></td>
<td>Volume of merchant digital payment</td>
<td>Showcase the value of digital payments in facilitating credit and thus value of paying digitally</td>
<td>Mobile transaction data and (pending) bank transaction data NBR)</td>
</tr>
<tr>
<td></td>
<td>Merchants with an active credit product (#) by district and gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total value of credit extended to SMEs digitally by channel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Potential indicators and data sources: demand-side drivers

Source: RED Programme compilation

## Supply

<table>
<thead>
<tr>
<th>Relevant digitalisation driver</th>
<th>Indicator</th>
<th>Rationale</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient options</td>
<td>Number of POS devices; number of MoMo Pay registrations</td>
<td>Is the supply of digital acceptance options supporting digital uptake</td>
<td>NBR data, RURA infrastructure data, MNO agent data</td>
</tr>
<tr>
<td>Sufficient options</td>
<td>Number of mobile money agents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conveniently exchanging between cash and digital</td>
<td>Number of ATMs</td>
<td>Is the availability of CICO systems easing the shift between cash and digital</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Potential indicators and data sources: supply-side drivers

Source: RED Programme compilation
## Institutions (rules and laws)

<table>
<thead>
<tr>
<th>Relevant digitalisation driver</th>
<th>Indicator</th>
<th>Rationale</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory compliance</td>
<td>Number of active merchants with Tax Identification Number</td>
<td>This speaks directly to tax compliance and highlights were the greatest mismatch in merchants and TINs is</td>
<td>RDB business registration data</td>
</tr>
<tr>
<td>Fee levels and costing structure; Meeting functional needs</td>
<td>% of merchants with mobile money and not MoMoPay (or individual rather than merchant accounts)</td>
<td>This highlights where the MoMoPay registration could be a barrier or the potential for increased uptake with a clearer value proposition</td>
<td>RDB business registration data (IDs) MTN P2P and MoMoPay registrations (pending NBR data)</td>
</tr>
</tbody>
</table>

### Table 5. Potential indicators and data sources: institutional drivers

*Source: RED Programme compilation*
5. Implications for policy implementation

This note demonstrates the linkage between data and public policy objectives for the retail merchant sector. By combining and analysing a variety of datasets already held by public entities, the RED programme is unearthing powerful insights for how to tailor policy implementation towards the achievement of the payments digitalisation goal in Rwanda and, with that, to support the broader NST1 and Vision 2050 priorities for economic transformation and commercialisation.

*Data is already informing key implementation recommendations.* The first round of the RED Programme’s merchant sector analysis focused on the last mile transactions between merchants and customers. The insights from this analysis rendered at least four recommendations for payments digitalisation policy implementation to support merchant digitalisation and growth:

1. **Ensuring infrastructure reliability:** Some of the basic requirements for payment digitalisation, such as network and electricity reliability, are not fully in place yet in Rwanda.

2. **Achieving interoperability.** This will allow digital payment providers to compete on product offerings rather than infrastructure, which has elements of a public good. It also benefits providers as interoperability aids them in gaining scale.

3. **Finding the pricing balance.** Pricing remains a strong driver of demand. The current pricing regime for mobile merchant payments discourages merchants from using this option. Alternative pricing options are available.

4. **Supporting value-added services to digital payments**, the most widespread of which is credit. Careful consideration of consumer protection to avoid over indebtedness when credit is more easily attainable, is important. Ensuring that credit information is shared by financial service providers through the credit bureau is also necessary.

*Much more can be done.* Armed with the initial insights, the RED focus shifts to the next level of data discovery for policy insights. A first-order priority is establishing a more granular picture of how the retail ecosystem works, doing a comparative analysis between wholesale and retail payments, and better understanding supplier-buyer relationships. Engagement with the existing databases has shown that data is often outdated and, hence, inaccurate. Moreover, gaining access to all the datasets underlying the indicators as set out in Section 4 requires buy-in from and data access agreements with a host of different institutions.

Negotiating access, cleaning up and innovatively combining different datasets is a large undertaking, but an important and necessary one to be able to understand how to more accurately track enterprises through their digital engagements, to inform the policy agenda. It is also important to monitor the progress of policy implementation over time. Over the coming two years RED will continue to work with its core
counterparts MINICT, RURA, the BNR and other “below the line” authorities to further this agenda, and to engage with and incorporate more “above the line” data to render direct insights to inform real economy policy implementation.


Finbold, 2021. *China’s share of unbanked population is 2.8x higher than the US, Morocco tops the list.* [Online] Available at: https://finbold.com/chinas-share-of-unbanked-population-is-2-8x-higher-than-the-us-morocco-tops-the-list/ [Accessed 29 April 2022].


Shu, C., 2016. Traditional Red Envelopes Are Going Digital Thanks To China’s Largest Internet Companies. [Online] Available at: https://techcrunch.com/2016/02/08/smartphone-hongbao/?guccounter=1&guce_referrer=aHR0cHM6Ly9lbi53aWtpcGVkaWEub3JnLw&guce_referrer_sig=AQAAAAAVSiZUB0zGIt7dQY5CM6FEg1yiTY6lcKqmWa3d91WBIAPgy-rJrU1GfaNxxAMWn2bo2kvi9R7yrRP_ytPcqBSIHObv_14eQTwHUcGn-nb2wW3TVZ [Accessed 8 April 2022].


