



AfricaNenda

ACCELERATING INCLUSIVE PAYMENT SYSTEMS

THE STATE OF INCLUSIVE INSTANT PAYMENTS IN AFRICA 2023

CONSUMER RESEARCH INSIGHTS

Rwanda



INTRODUCTION

- The State of Inclusive Instant Payment Systems (SIIPS) in Africa report is an AfricaNenda initiative in collaboration with the World Bank and the United Nations Economic Commission for Africa. This annual think piece is derived from a comprehensive assessment of instant payment systems across Africa, employing a blend of research methodologies. It involves an in-depth industry analysis to identify key trends, best practices, and benchmarks. The aim is to guide the enhancement and growth of instant and inclusive payment systems, thereby hastening financial inclusion on the continent.
- The SIIPS in Africa 2023 report marks the second edition of this endeavor. The report's goal is to enlighten both public and private sector stakeholders within Africa and internationally on the advancements within the instant retail payment system (IPS) landscape in Africa. This includes evaluating how inclusive these systems are in terms of functionality (their accessibility to all end-users) and governance (ensuring all licensed payment providers have equitable access and opportunities to contribute to system design).
- For the 2023 edition, the report includes systems that were operational with live transactions as of June 2023. Data for this report was compiled using public sources from March to July 2023, complemented by comprehensive stakeholder interviews conducted in the same timeframe. The consumer research took place between May and June 2023. It involved extensive in-country qualitative and quantitative research covering low-income adult individuals and micro, small, and medium-sized enterprises (MSMEs) across five countries, namely Cameroon, Malawi, Morocco, Rwanda, and Senegal.
- This consumer research exercise will be replicated in different countries annually, and insights will contribute to the annual SIIPS report content. The sample is not nationally representative, as this exercise was intended to draw out insights to inform how IPS can be designed to meet the needs of end-users better.

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SECTION 1

METHODOLOGY OVERVIEW



Methodology: Overview



Research methodology and corresponding objectives

Quantitative survey

- Understand customer usage habits
- Measure frequency of digital payment usage and transaction profiles
- Rank the most used payment instruments
- Identify core barriers

In-depth interview

- Map use-case characteristics and payment behavior
- Determine customer perceptions on instant and inclusive payments using access, early usage, and habitual usage framework
- Map the customer journey

Mystery shopping

In-depth understanding of the user journey—cost, recourse, and customer support

Objectives of the tool







Fieldwork itinerary

- **Quantitative data collection:** 15 Feb – 3 Mar 2023
- **Qualitative data collection:** 15 Feb – 6 Mar 2023



Methodology: Sampled groups overview

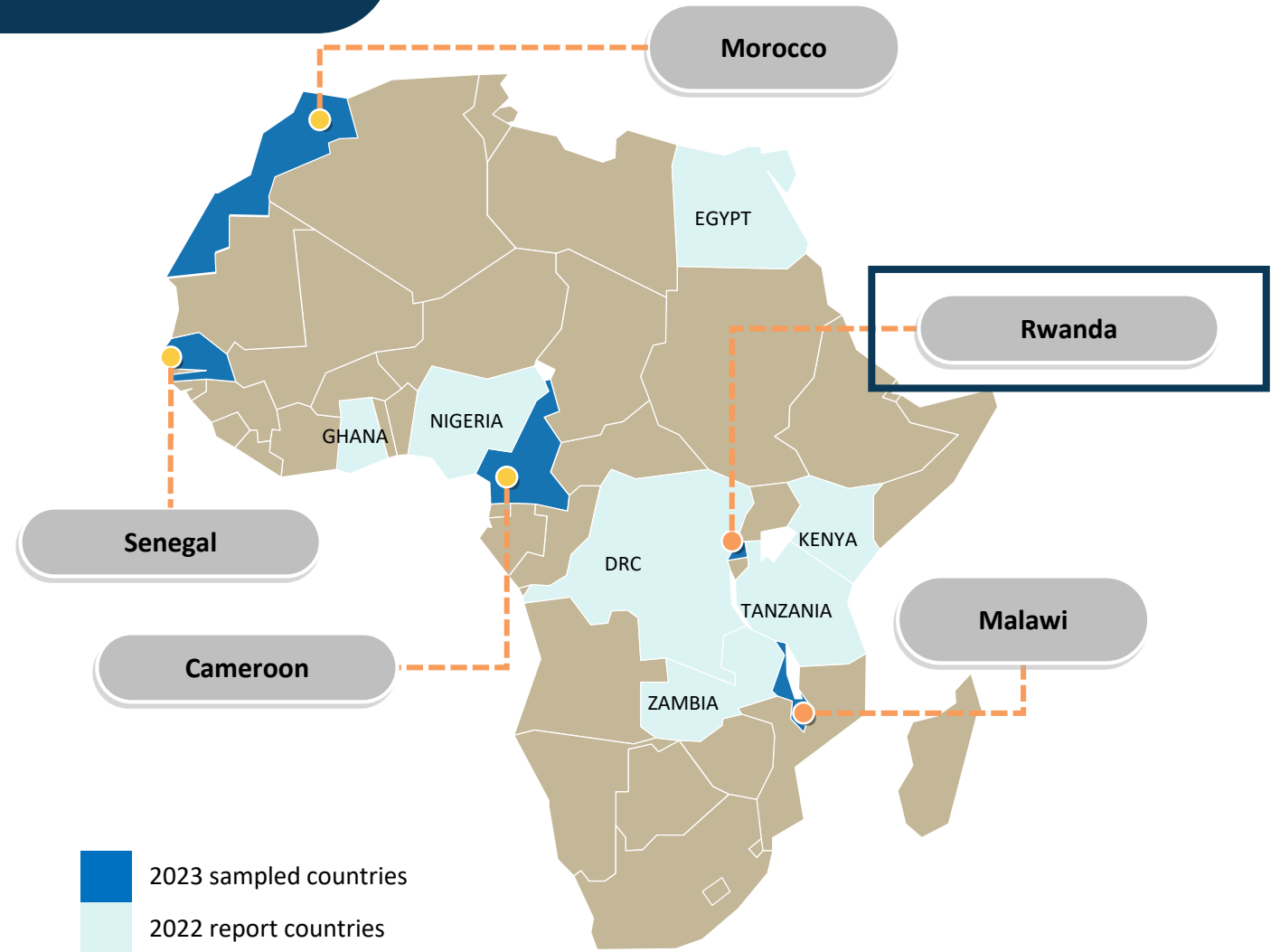
	 Lower and infrequent income earners	 Lower but frequent income earners	 Micro entrepreneurs*	 Small businesses*
Definition	Lower-income but infrequent income earners, including urban poor who live “hand to mouth” and lack regular employment, stable earning opportunities, intermittent piece job/gig workers, and people who are dependent on others in the family/community and/or on social grants.	Lower-income but frequent income earners are the slightly more affluent part of the lower-income mass market, earning a steady income (wages) or a salary in the formal or informal sector.	Individual trader/merchants like hawkers, fruit and vegetable sellers, cobblers, and other crafts traders.	Traders who have small, fixed premises or (mostly informal) shops/service providers, as well as smallholder farmers, and small agribusinesses.
Actual Sample size (quant. survey)	41	36	19	28
<p>77% of the total sample for the quantitative survey are digital payment users (individuals and businesses) and 90% of the total sample for the qualitative research components are digital payment users (individuals and businesses).</p> <p>Within each of the four groups, an adequate coverage of women and youth was ensured.</p>				
<p><i>* Country specific monthly turnover cut-off has been applied</i></p>				

The study sample focuses on the “**next market**” that is expected to use digital payments and thus only sampled those in **urban and peri-urban** settings. The focus was on low-income earners and MSMEs and the sample is therefore **not nationally representative**. Any inferences made on a country-by-country basis are with respect to the sampled respondents.



Sampled countries: Cameroon, Malawi, Morocco, Rwanda, and Senegal

- The customer research was conducted in five sample countries, namely Cameroon, Malawi, Morocco, Rwanda, and Senegal.
- Cross-country averages are based on these five sample countries.
- The research complements research done in seven other countries in 2022 using a similar methodology (DRC, Egypt, Ghana, Kenya, Nigeria, Tanzania, Zambia).





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SECTION 2

CURRENT STATE OF DIGITAL PAYMENT USE





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SECTION 2.1: DIGITAL PAYMENT USAGE ANALYSIS



Digital payment usage across the countries: Rwanda belongs in the emerging category, as only 39% of its population had utilized digital payments in the year before the Global Findex 2017 survey.

Countries have been categorized as **nascent**, **emerging**, and **leading** based on usage data from the Global Findex. Most of the 2023 surveyed countries are in the emerging category.

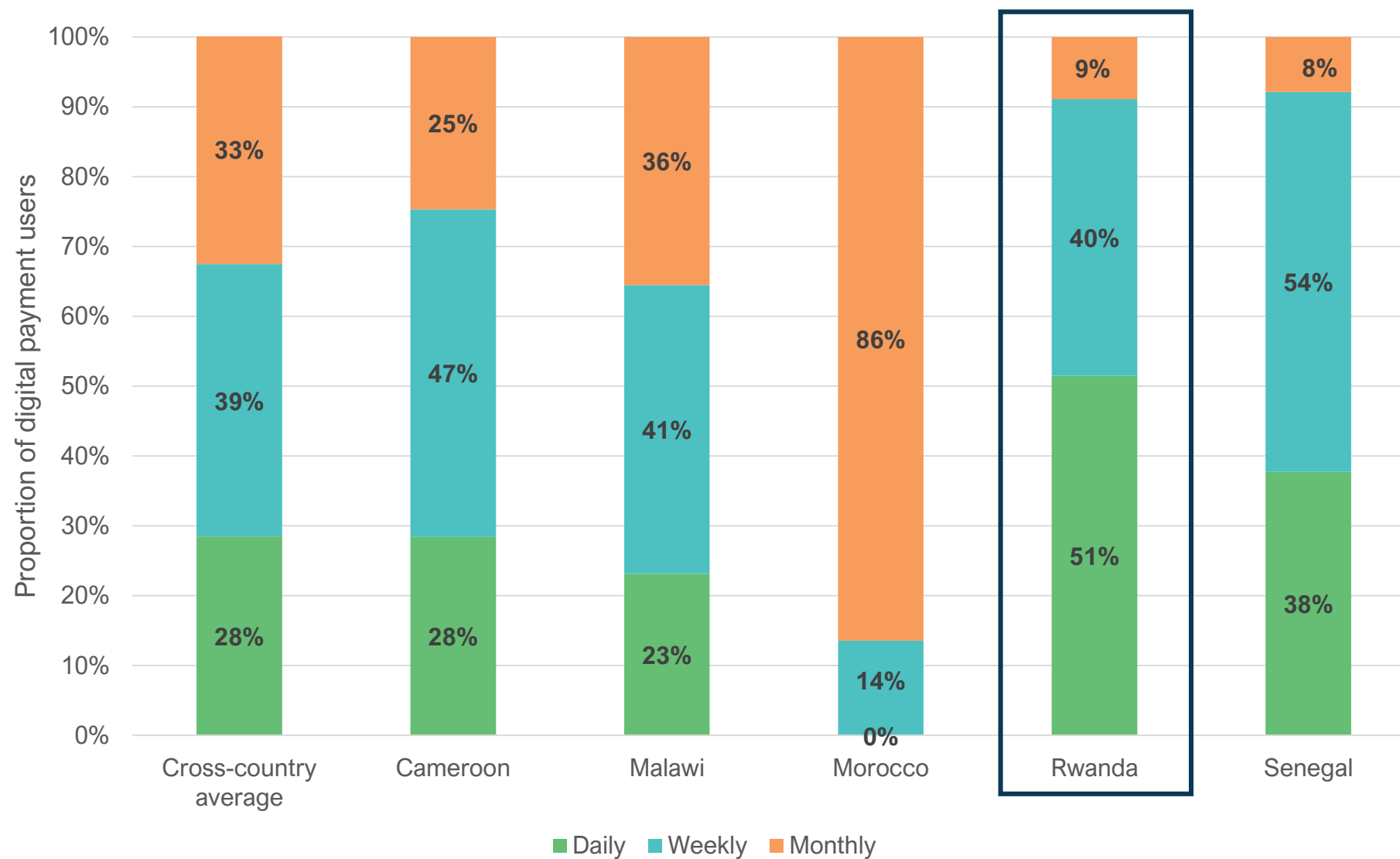
		Leading cluster		Emerging cluster						Nascent cluster				
Share of users	Proportion of population using digital payments over the previous year [Global Findex 2021]	Ghana	Kenya	Cameroon	Malawi	Nigeria	Rwanda	Senegal	Tanzania	Zambia	DRC	Egypt	Morocco	
				66%	78%	50%	40%	34%	39% <i>(2017 data)</i>	53%	50%	46%	22% <i>(2017 data)</i>	20%
Share of "super-users"	Proportion of weekly users out of digital payment users [including agent-assisted payments]	Individuals	86%	82%	83%	57%	83%	90%	94%	21%	53%	26%	14%	17%
		MSMEs	90%	82%	76%	77%	75%	98%	94%	45%	64%	28%	24%	8%

**The most recent FinScope data from 2019 shows that approximately 30% of Rwandans transacted digitally in the past 12 months (AFR 2020).*



Cross-country analysis—frequency of digital payment use: Most Rwandan digital payment users make them daily.

Total number of digital payment users:
513 (101 in Rwanda)

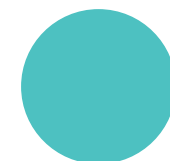
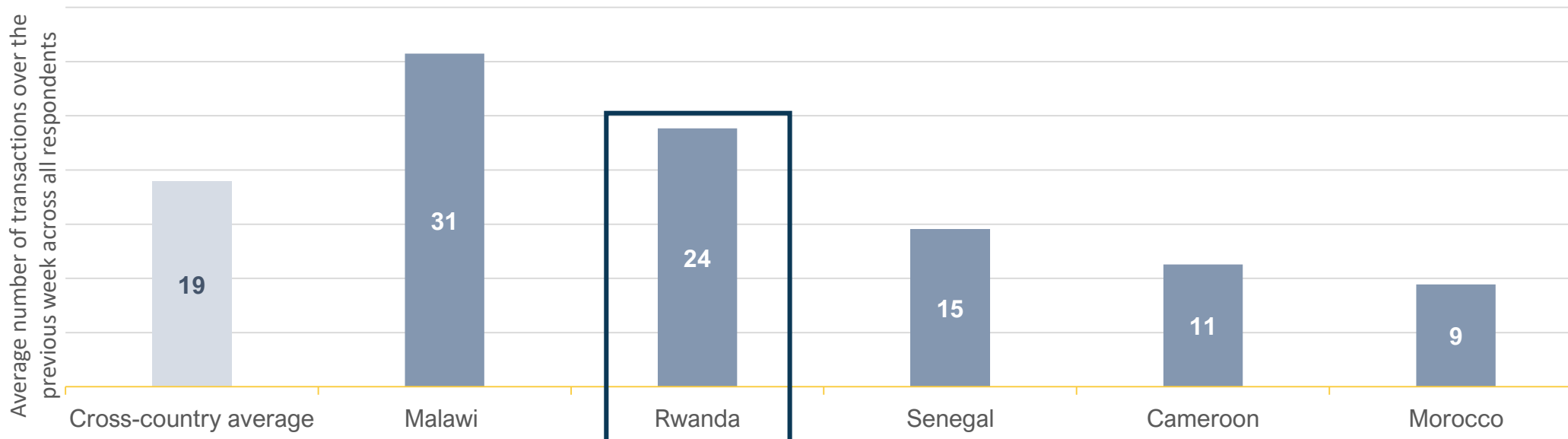


- **91%** of surveyed digital payment users in Rwanda reported using digital payments **at least once a week**.
- The fact that **51%** of surveyed users make digital payments daily indicates that they have fully embraced digital services and integrated them into their daily routines.

Cross-country analysis—weekly transaction profile:

On average, weekly transaction volumes are relatively high in Rwanda.

Total number of respondents: 653 (122 in Rwanda)

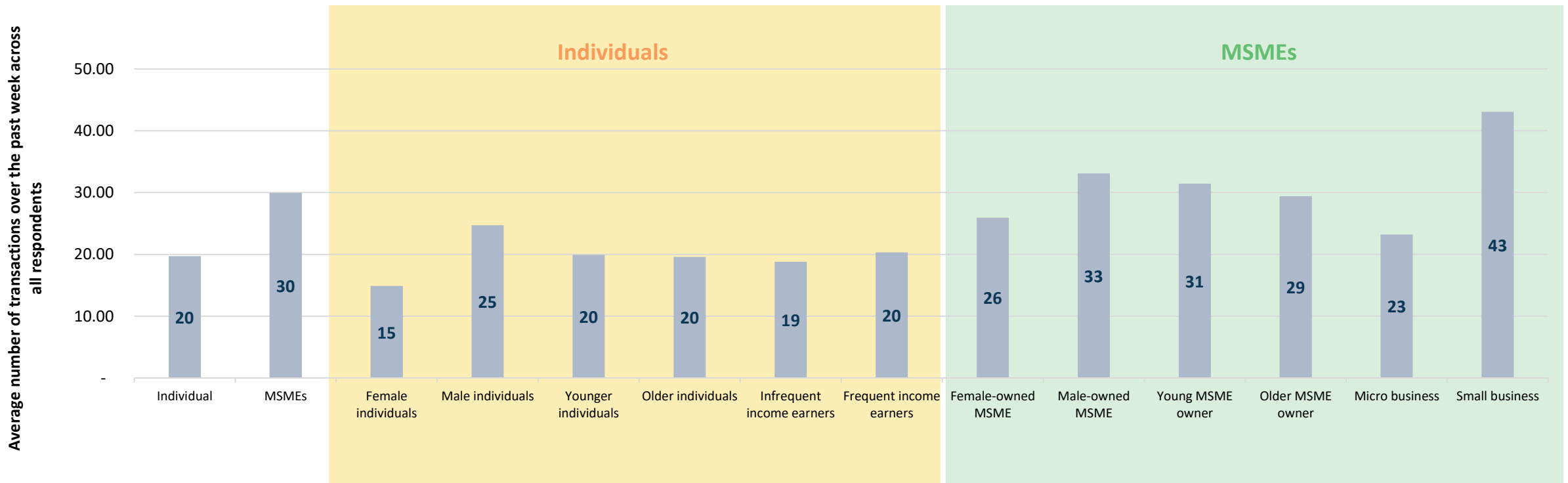


User group analysis—weekly transaction profile:

Female-owned MSMEs have a lower reported weekly transaction volume than male-owned MSMEs.

Total number of respondents: 122

Average number of weekly transactions by user group



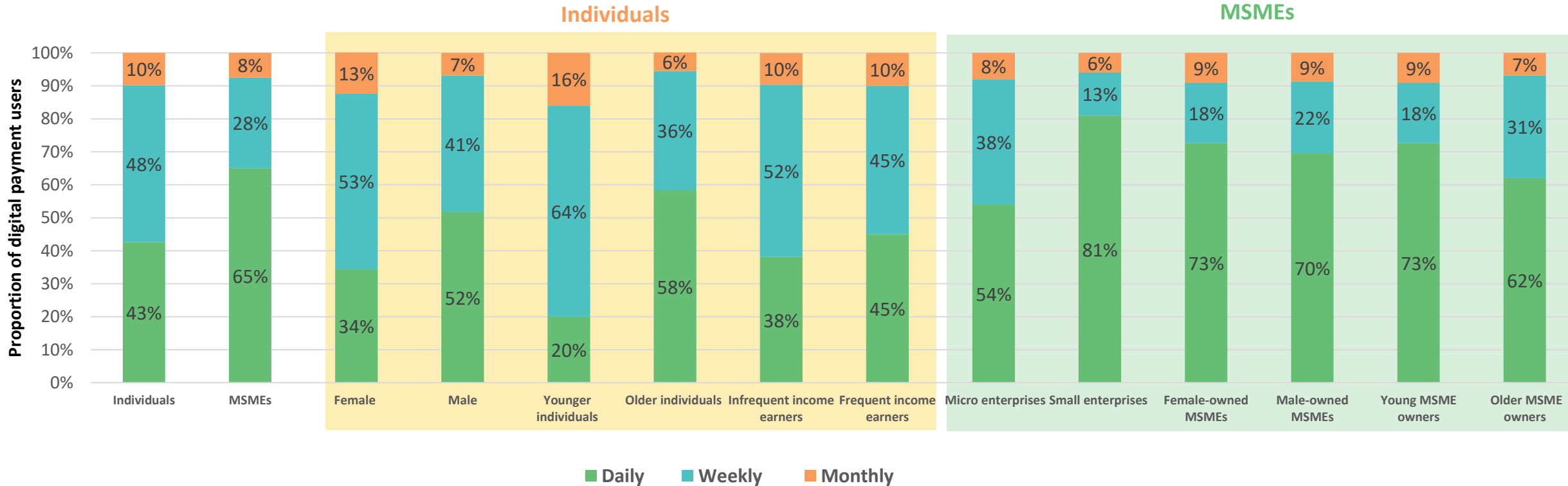
- Individual men and men-owned MSMEs conduct more transactions than women and women-owned MSMEs, respectively.
- No significant age gap exists.



User group analysis—frequency of digital payment usage:
MSMEs are leading daily digital payment usage. A gender gap exists in usage.

Total number of digital payment users sampled: 101

Frequency of digital payment usage per user groups



- MSMEs are significantly more active on a daily basis and women-owned MSMEs have a higher level of daily digital payment usage than men-owned MSMEs.
- Younger individuals use digital transactions less frequently than older individuals, but among MSMEs, a larger share of younger owners are daily users than older ones.



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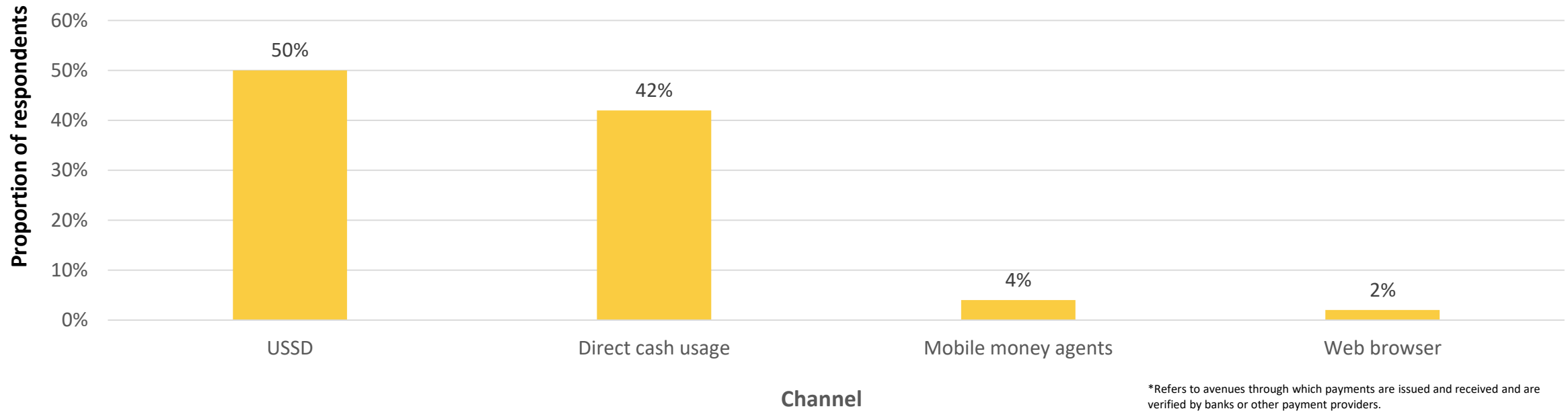
SECTION 2.2: PAYMENT CHANNEL ANALYSIS



Payment channel* analysis:
USSD is the dominant payment channel.

Total number of respondents sampled: 122

Percentage of respondents for whom this is the primary channel



*Refers to avenues through which payments are issued and received and are verified by banks or other payment providers.

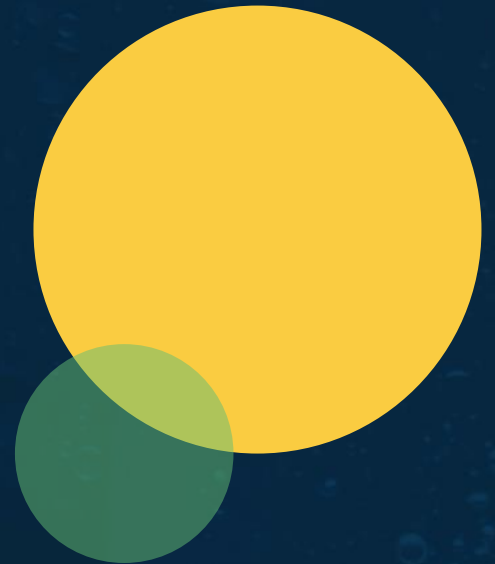
- USSD dominates as a digital payment channel.
- A small share of respondents use either a web browser or a mobile money agent as their primary payment channel.





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SECTION 2.3: USE CASE ANALYSIS



Use case analysis:

There is room to digitalize transport payments and financial product-related payments in Rwanda.

Total number of respondents:
122

The five most common weekly payment use cases for individuals and MSMEs and their level of digitalization

		Individuals	MSMEs
Ranking of weekly use cases by prevalence among individual and MSME respondents [% of transactions that are done digitally]	1	Airtime [80%]	Receive customer payments [95%]
	2	Pay for household goods [74%]	Airtime money for staff [83%]
	3	Transport [53%]	Loan repayments [47%]
	4	Receive salary [70%]	Save income [64%]
	5	Save money [77%]	Transport money for staff [100%]

- Most use cases are digitalized among individual respondents, but the surveyed individuals do not use digital payments for transport as much as they do for other use cases.
- For MSMEs, receiving customer payments and small payments such as airtime and transport money for staff are the most digitalized use cases.

Legend

Use case for which less than 40% of respondents conducted a digital transaction over the past week

Use case for which between 40% and 70% of respondents conducted a digital transaction over the past week

Use case for which above 70% of respondents conducted a digital transaction over the past week



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SECTION 3

UNDERSTANDING CUSTOMER BEHAVIOR





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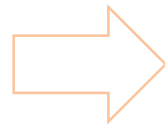
SECTION 3.1: PATHWAY TO HABITUAL USAGE



Digital payment usage framework: The path to habitual digital payment usage follows three phases

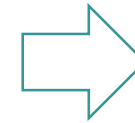
Access

Before consumers can use a digital payment product, they must have a financial account, physical access to agent or bank locations, and account-related documentation.



Early Usage

Account holders must have a compelling reason to use a new digital payment method instead of cash, which can depend on the perceived balance between the costs and benefits of use.

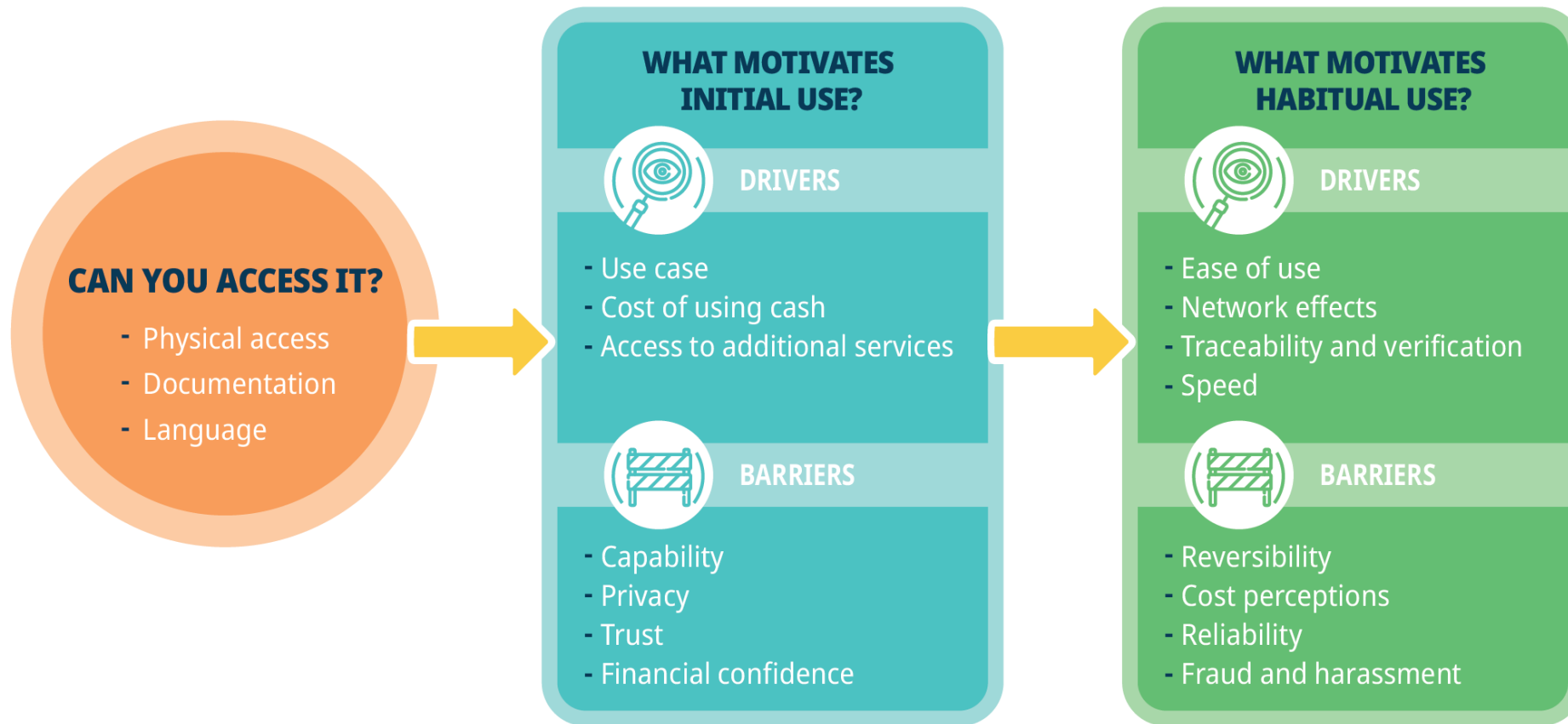


Habitual Usage

Over time and through habituation consumers move from ad hoc transactions to consistent and frequent use of digital payments driven by ease of use, network effects, reliability, recourse, and speed.

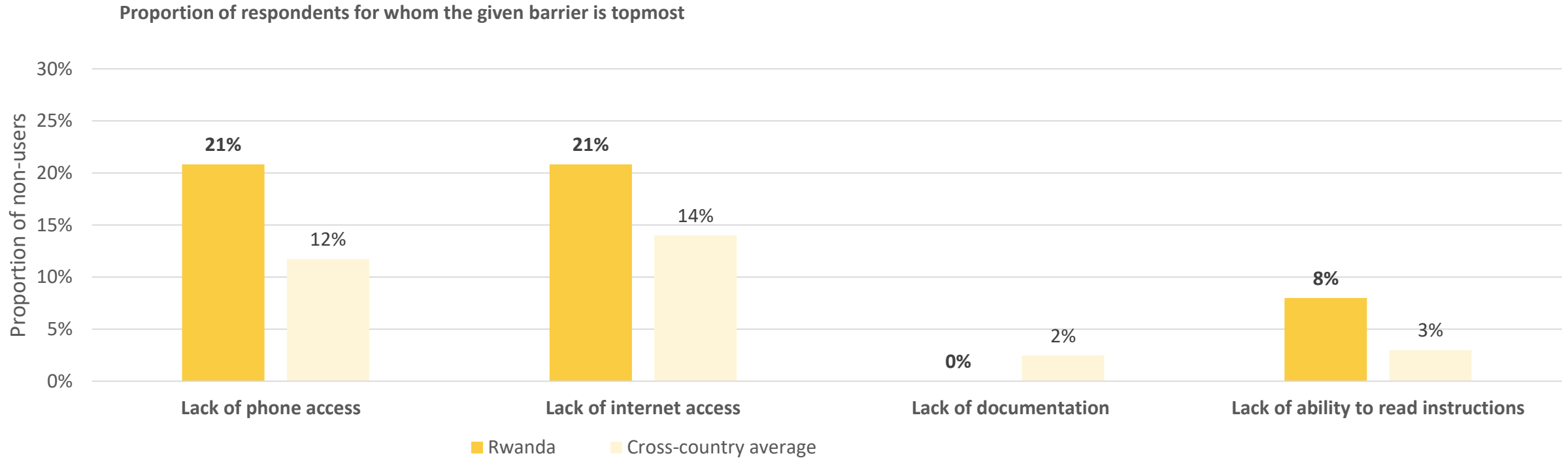


Pathway towards habitual digital payment usage:
Barriers and drivers based on the access, early usage, habitual usage framework



Pathway towards habitual usage—access barriers:
Digital connectivity barriers are significant in Rwanda.

Total number of non-users: 24



- Lack of phone access and internet access are perceived to be the most significant access barriers by the non-users in Rwanda.
- non-users do not perceive lack of documentation as a barrier to access, however the lack of ability to read instructions did come up.



Pathway towards habitual usage—access barriers: Lack of access and internet as barriers.

Lack of phone access

Low-income earners and MSMEs are not able to purchase mobile devices. Lack of mobile phones impedes the use of digital payments.

“When I pay for things like bananas or fruits, I pay in cash because the vendors do not have phones”

Male, 30-44, User, Infrequent income earner

Lack of internet access

Users report poor/lack of internet access affects their transactions processes and may either lose a customer or leave banks without being served.

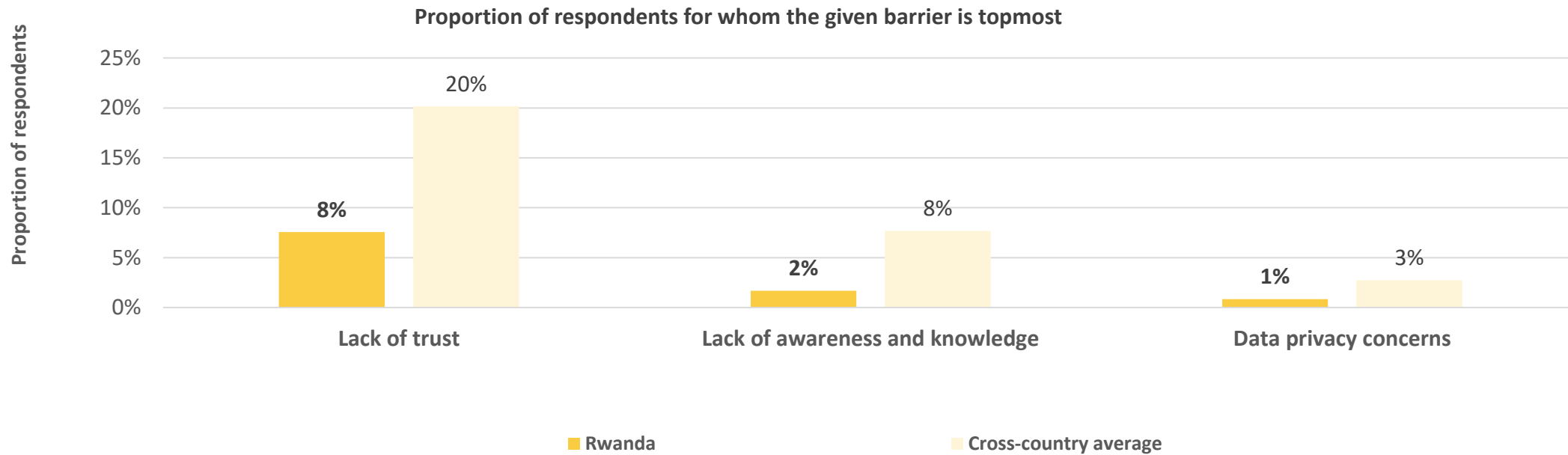
“I only use cash if the sender doesn’t have money on Mobile Money. Or in case there is no internet.”

Male, 45-55, User, Micro enterprise

Pathway towards habitual usage—early usage barriers:

Lack of trust is the topmost barrier, however, a small share of respondents perceived early usage as an issue.

Total number of respondents
sampled: 122



- Trust is the most significant barrier to early usage in Rwanda, although less pronounced than in some of the other countries.
- Data privacy concerns and lack of understanding arise minimally as early usage barriers.



Pathway towards habitual usage—early usage drivers and barriers: The drive to early usage is mainly influenced by social peers.

Main drivers

Awareness

Use of SMS, billboards, radio, and TV to sensitize communities about digital payments have led to adoption.

"{Provider 1} sends us advertisements via SMS and introduces to us the codes we should dial to make payments."

Female, 30-44, User, Frequent income earner

Influence from friends and relatives

Customers were influenced by their friends and relatives to start using digital payments.

"I was introduced to this {digital payments} by my relatives whom I stayed with because they used to pay using their phones."

Female 45-55, User, Frequent income earner

Main barriers

Lack of trust

Customers do not trust digital methods when they are not used by everyone.

"Since everybody doesn't use it, some people don't trust it."

Male, 18-29, User, Small enterprise owner

Perception of low literacy levels

Although older people have phones, youth perceive their elders to have low literacy levels and may not understand how to use phones or digital payments.

"Others have phones but there are old people who think that they can't learn the process of using it."

Female, 18-29, User, Infrequent income earner

Fraud

Customers are sometimes worried that they may lose their money through digital fraud.

"I fear fraud because conmen may take your money."

Male, 30-44, Nonuser, Small enterprise owner

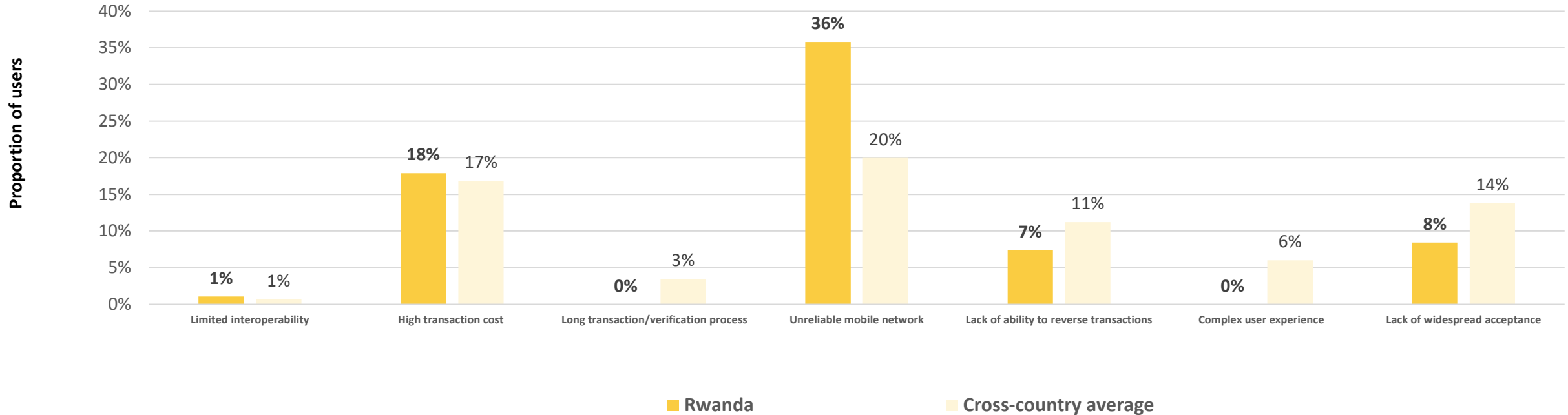


Pathway towards habitual usage—habitual usage barriers:

The main usage barrier preventing further usage of digital payments in Rwanda is the unreliable mobile network.

Total number of digital payment users sampled: 101

Proportion of respondents for whom the given barrier is topmost



- Unreliable mobile networks are the most significant barrier for respondents in Rwanda. It is also high in comparison to other sampled countries.
- High transactional costs also emerge as a clear barrier to habitual usage in Rwanda.



Pathway towards habitual usage—habitual usage drivers and barriers:

Drivers to usage are in convenience, while the barriers are linked to inconvenience.

Main drivers

Access to other financial services

Usage among small enterprise is influenced by getting access to savings and loan services.

“When I save money via mobile money, after two weeks I receive interests according to which amount of money I have. Mobile money can give you a credit (loan) when you get unpredicted issue.”

Female, 45-55, User, Small enterprise

Safety

Digital payment methods are considered safer to use than cash.

“It is safe more than using cash.”

Female, 30-44, User, Infrequent income earner

Speed on transaction

Most users in Rwanda cite using mobile money as fast.

“I am happy because it is fast as the whole transaction has taken less than a minute.”

Male, 18-29, User, Frequent income Earner

Long-distance transfers

Digital payments are particularly attractive for long-distance transfers.

“Most of the time I receive it through the phone when they are far from me.”

Female, 18-29, User Infrequent income Earner

Main barriers

Network challenges

Users complain that slow networks affect them while making digital transactions.

“They should improve on their connection, because there are times you need money urgently and you can’t easily access it at the bank.”

Female, 18-29, User, Infrequent income earner

Errors and mistakes

Customers often make errors inputting the recipient number or amount to send, or during business transactions.

“It happens when someone makes a mistake and pays the money to someone other than the person who was supposed to receive it. Or you can even be sending RWF 1000 and send RWF 10000.”

Female, 18-29, User, Infrequent income earner

Long refund processes

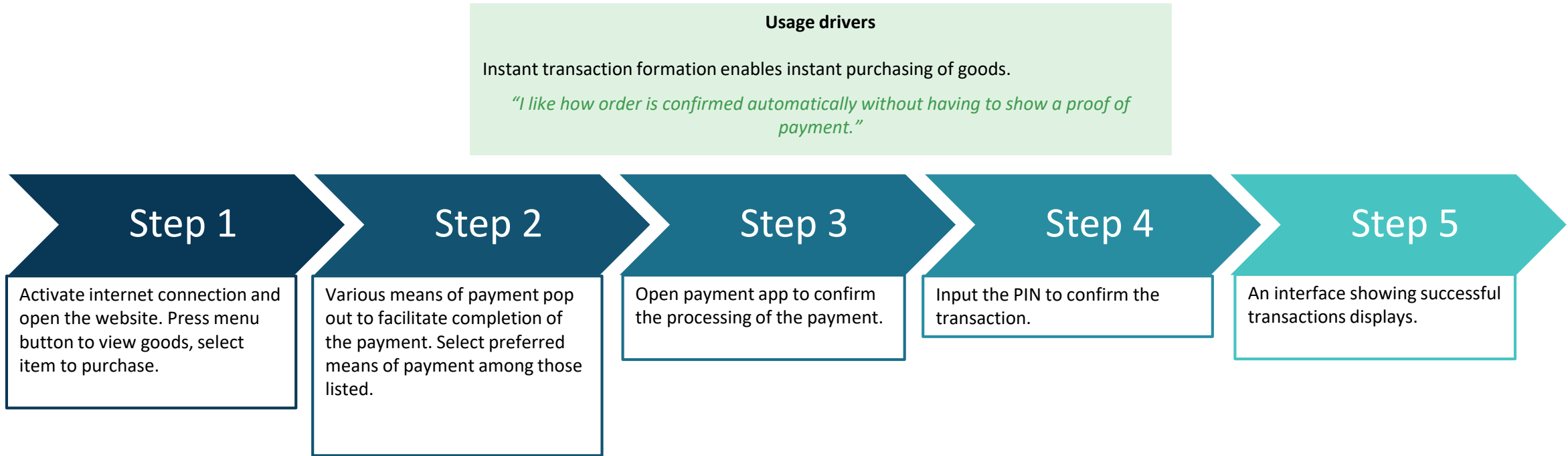
Occasionally, users might want to reverse transactions, but the refund process takes long ti

“When we pay online, you can’t easily reverse the transaction. For example, the delivery may be due in 14 days, but you can spend a whole month without receiving it and no refund.”

Female, 18-29, User, Frequent income earner



INDIVIDUAL USE CASE—PURCHASING HOUSEHOLD GOODS



Usage barrier
Customers are frustrated when they cannot reverse transactions.
"After you have made payment, you can't easily reverse the transaction. For example, the delivery may be due to 14 days but you can spend a whole month without receiving anything and yet you will have already paid and you can't reverse, and there is no refund."



BUSINESS USE CASE—PAYING STAFF MEMBER

Usage drivers

Transaction charges are transparent (visible before transaction)

"It costs me 20 Rwf to send 500 Rwf"

"They don't charge me to buy airtime, but to send money there are costs."

Step 1

Dial "provider code" [Beneficiary phone number]* [airtime amount] then #

Step 2

Confirm beneficiary's name

Step 3

The debit amount and cost of transaction is shown. Input PIN and send.

Step 4

Receive text message confirming that the beneficiary received the funds

Step 5

Receive text message confirmation of funds deducted from account

Usage barriers

- Some users struggle with inputting digits in one step for the beneficiary's phone number, amount sent, and the passcode.

"There are some people who don't know how to do these steps at once. They have to dial one digit at a time, it takes them long"

- Transaction errors are inevitable.

"A customer can do a mistake in sending a payment to the wrong number."





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SECTION 3.2: USER GROUP PERSPECTIVES



User group perspectives—deep dive on merchant perspectives:
Meeting customer demands is the primary reason for merchants to adopt digital payments.

Main early usage driver	To facilitate customer payments	<p><i>“It was the first service provider company and many of my customers use {provider 1}.”</i></p> <p>Female, 45-55, Small enterprise</p>
Main habitual usage driver	Bonuses, rewards, and access to savings and credit products	<p><i>“[...] when I save money on the provider, after two weeks I receive interests according to which amount of money I have.”</i></p> <p>Female, 45-55, User, Small enterprise owner</p>
Main barrier	Unreliable mobile networks	<p><i>“The technology fails; when customers want to pay me, the networks fail.”</i></p> <p>Male, 30-44 ,User, Small enterprise</p>

Merchant case study

Respondent details

- ✓ **Gender:** Female
- ✓ **Age:** 40-55
- ✓ **Occupation:** Tailor
- ✓ **Income:** Small enterprise

“I **buy airtime** vouchers and pay wages to my employees. I use digital payments to make all my payments.

I use a certain bank, but it does not have the withdrawal system using the phone, but I can deposit money on my bank account using the phone. However, there is a particular bank where I can deposit money in my bank account using my phone. Through this bank I can also withdraw through the phone or using an easy bank.

I like using mobile money because it is the easiest method of payment and **fast**. It is **not costly**, and it **helps in financial management**.

I once was sending money to someone and put the wrong code. I tried calling the providers, but **no one answered**. Had they picked my call, I would not have lost my money.”



User group perspectives—deep dive on agent perspectives: The risk of receiving fake notes is a challenge.

Business benefits

Free transactions: Agents can transact freely without incurring transaction costs

“Looking at mobile money, I pay using Mobile Money pay, because it is free of charge. I use the bank app because it is free of charge too.”

Male 30-44, Agent

Real-time information: Agents who access the internet enjoy getting first-hand and real-time information.

“As an agent, I get information on time, I always enjoy the internet (being online)”

Male 30-44, Agent

Challenges and risks

Internet access: Agents may not be able to transact freely due to slow internet access at their business or banks.

“You can leave agents, banks without money, or lose the service because someone can’t pay due to the internet connection which is not functioning”

Male 30-44, Agent

Fake/old bank notes: Agents may not detect fake money and therefore incur business losses. Old notes are unacceptable by some customers and agents have to keep them, which may lead to a loss.

Agent case study

Respondent details

✓ Gender: Male

✓ Age: 30-44

✓ Occupation: Dealer in stationery and electronic devices

“When I started this agent work, I gained knowledge about it in 2019. I saw and learned how people exchanged money electronically and I liked it because it facilitated them [payments].

The payment was or is done regardless wherever the person is located, and it inspired me. When I am receiving a payment, I consider the customers’ choices in payment.

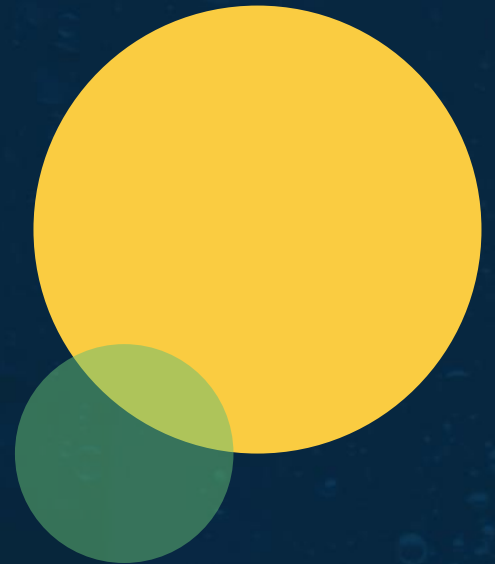
Use of digital payments has **helped control the spread of Covid -19** and other transferable diseases.

However, one can **pay you using fake notes** and you may not notice if you don’t have a counterfeit money detector. Sometimes I may receive old notes, which some customers reject and may be a loss to my business.”



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SECTION 3.3: CORE COUNTRY THEMES



Core country themes: Deep dive on transaction cost perceptions.

“When someone pays me through mobile money without adding withdrawal charges, I can lose maybe 2000 Rwandan Francs per a day.”
Male, 30-44, User, Small enterprise

Withdrawal fees can result in losses for businesses.

Costs are generally perceived as fair.

“ It depends on the amount you’re withdrawing. For example, if you’re withdrawing 40,000Frw, 600Frw is charged and it is fair. ”
Female, 30-44, User, Frequent income earner

Businesses can spend from 300-1000 Rwandan Francs daily on transaction costs.

“[...] yes, we don’t like it, but we have no other choice. It has to happen, and I try to understand it.”
Female, 30-44, User, Small enterprise

Businesses are using digital payments because there is strong demand for it by customers.



Voice of the customer on how digital payments can be improved

Customer training

- Customer outreach and awareness building to increase use of digital payments.
- Offer customer training on digital payments processes and benefits to accommodate more users.

“There is a need of sensitization so that each and everyone know the advantages of payment using the phone and bank or being paid in that method”.

Female, 30-44, Nonuser, Infrequent income earner

Verification process

- Improve verification process before a transaction is completed.

Security enhancement

- Enhance security features to mitigate risks in fraud.

Phone access

- Determine ways in which more people can access phones to use digital payments extensively.

“Provide phones to those who don’t have.”

Male, 30-44, User, Infrequent income earner

Internet access

- Improve/upgrade internet connectivity for quicker transactions.

Customer access

- Enhance customer access to call centers for support.
- Encourage customer support to respond promptly to customer calls.

“Hire someone who responds calls of customers for direct support without losing their money. If you send money to the wrong number, get it back very soon”.

Female, 45-55, User, Small enterprise owner





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SECTION 4

SYNTHESIS AND CONCLUSION



Summary

State of digital payment use in Rwanda

- In Rwanda, the majority of digital payment users make digital payments daily.
- Mobile money using USSD dominates the digital payments landscape, facilitated by network effects unlocked by one large provider.
- Generally, digital payments are perceived as safe and secure for saving and transacting.
- Unstable incomes still affect low-income earners, and the lack of phones remains a problem.
- **Main digital payment service providers**
 - MTN Money
 - Equity Bank
 - Airtel Money
 - Bank of Kigali

Key drivers and barriers of digital payment use

Drivers

- **Customer awareness** is the main driver of early usage of digital payments among individuals and small enterprises. This is mostly through radio, TV, billboards, and SMS advertisements.
- **Government policy** enactment to prevent the spread of Covid-19 led to early usage of digital payment methods.
- **Access to additional financial services** such as credit and savings products.

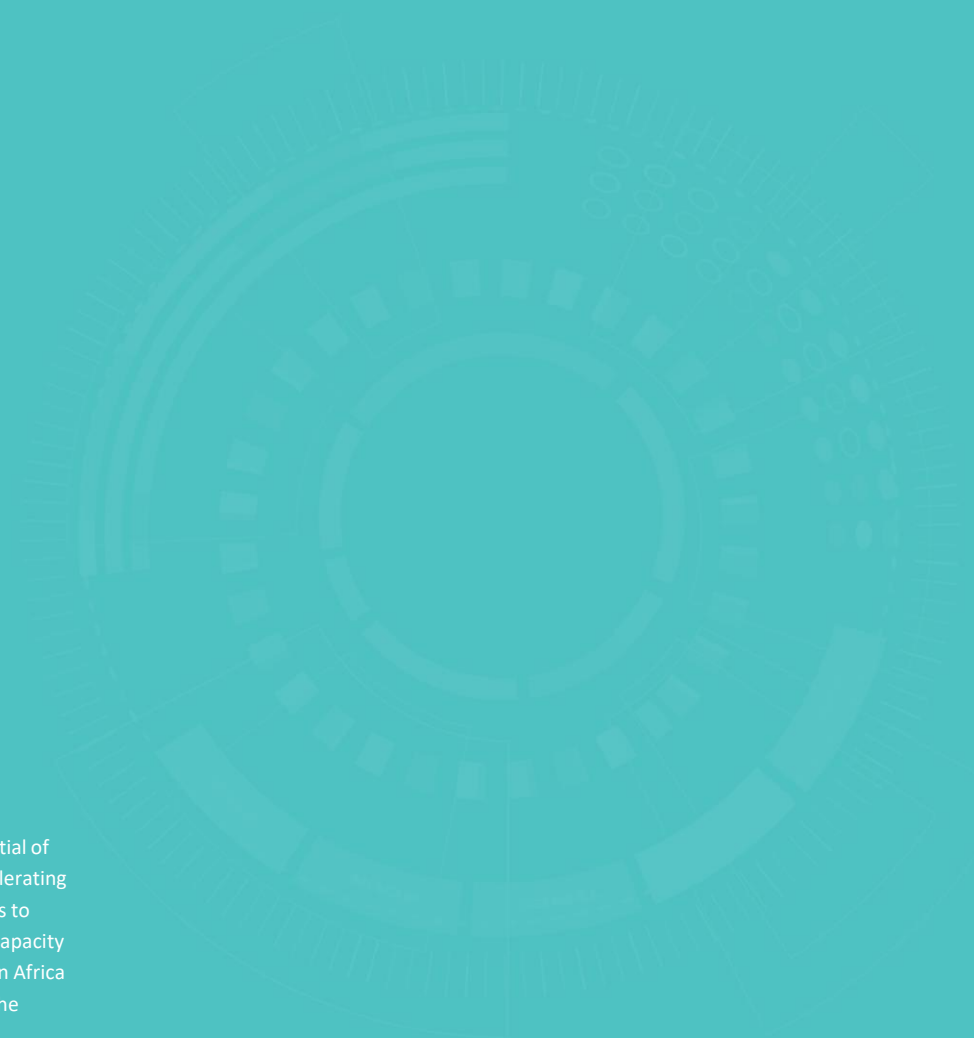
Barriers

- **Lack of mobile phones** is the main barrier of access, while **lack of trust** is a barrier to early usage of digital payments.
- **Lack of internet access and network instability** prevents access, causes delays in transactions, and restricts seamless use of digital payments.
- **Making errors** while conducting a transaction is a major challenge users experience and may lead to lost money in some cases.

Core emerging country themes

- **Errors during transactions:** Making errors seems to be a common challenge among customers. Loss of money may result from making mistakes while transacting money.
- **Internet and network:** Unstable internet connections or networks cause transaction delays and may result in the loss of money or loss of customers.





AfricaNenda is an African-led team of experts committed to unlocking the potential of digital financial services for the financially excluded across the continent by accelerating the scale-up of instant and inclusive payment systems. AfricaNenda's approach is to provide public and private sector stakeholders with technical expertise and the capacity to reduce barriers to digital payments. AfricaNenda wants to enable everybody in Africa to make digital transactions seamlessly and at a low cost wherever they are on the continent by 2030.

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