

FINANCIAL INCLUSION INDEX REPORT



AN ASSESSMENT OF DIGITAL AND TRADITIONAL
FINANCIAL INCLUSION OF MICRO, SMALL AND
MEDIUM ENTERPRISES (MSMES) IN KENYA,
MALAWI AND ZAMBIA

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TABLE OF CONTENTS

List of Figures	3
List of Tables	4
Summary	5
Introduction	7
Background	8
Financial Inclusion in Context	8
Financial Inclusion and the African Development Agenda	9
Digital Financial Inclusion as a Determinant of Financial Inclusion	11
Financial Inclusion and MSMEs	13
Methodology	16
Definition of Financial Inclusion, Compliance and	
Micro, Small and Medium Enterprises	16
Survey Methodology	19
Index Methodology	20
Findings	21
<i>The Compliance Dimension</i>	21
<i>The Digital Dimension</i>	22
Access to Digital Financial Products and Services	22
The Usage of Digital Financial Products and Services	24
<i>The Access Dimension</i>	27
Access to Standard Financial Products and Services	27
Access to Formal Financial Products and Services	27
Access to Informal Financial Products and Services	28
Comparison of Access to Formal and Informal Products and Services	29
<i>The Usage Dimension</i>	31
<i>The Barriers Dimension</i>	32
<i>Level of Knowledge of MSMEs in Kenya, Malawi and Zambia</i>	33
<i>Inclusion Measures for Micro Small and Medium Enterprises</i>	
<i>in Kenya, Malawi and Zambia</i>	35

The Level of Inclusion Based on Gender	35
The Level of Inclusion Based on Enterprise Size	49
The Level of Inclusion Based on the Age of Enterprise Owner	49
The Level of Inclusion Based on Location of Enterprise	56
Overall Financial Inclusion Index Scores	60
Discussion	61
Recommendations	63
Recommendations for Government	63
Recommendations for Financial Service Providers	64
Recommendations for Trade Organisations and MSME Associations	64
Conclusion	65
References	66

LIST OF FIGURES

Figure 1: Compliance Dimension Comparisons- Kenya, Malawi and Zambia	22
Figure 2: Digital Dimensions of Access and Usage- Kenya, Malawi and Zambia	23
Figure 3: Country Access to Tools That Enable Digital Inclusion	24
Figure 4: Usage of Digital Products and Services	25
Figure 5: Usage of Digital Support Services	26
Figure 6: Access Dimension Comparisons of Formal Sources – Kenya, Malawi and Zambia	28
Figure 7: Access Dimension Comparisons of Informal Sources- Kenya, Malawi and Zambia	29
Figure 8: Comparison of Formal and Informal Financial Products Services	30
Figure 9: Usage of Digital and Non-Digital Financial Products and Services	32
Figure 10: Barriers to Inclusion	33
Figure 11: Level of Knowledge of Select Financial Products and Services	34
Figure 12: Level of Financial Inclusion Based on Gender of Enterprise Owner	36
Figure 13: Barriers Experienced Based on Gender	37
Figure 14: Differences in Compliance Based on Gender	38
Figure 15: Differences in Access and Usage of Digital Products Based on Gender	39
Figure 16: Difference in Knowledge of Financial Products and Services Based on Gender	40

Figure 17: Size of Enterprise and Its Influence on Inclusion	41
Figure 18: Differences in Size and How They Affect Access	42
Figure 19: Size and Access to Formal and Informal Investments	43
Figure 20: Size and Barriers Experienced	44
Figure 21: Size and Its Influence on Compliance	45
Figure 22: Size and Its Influence on Digital Product Use	47
Figure 23: Size and Its Influence on How Financial Products and Services Are Used	48
Figure 24: Size and Its Influence on Knowledge of Digital Products and Services	49
Figure 25: Age of Enterprise Owner and Influence on Access	50
Figure 26: Different Access By Age to Financial Products and Services	51
Figure 27: Age of Enterprise Owners and Its Influence on Barriers	53
Figure 28: Age and Its Influence on Compliance	53
Figure 29: Age and its Influence on the Use of Digital Products and Services	54
Figure 30: Age and Its Influence on Knowledge of Digital Financial Products and Services	55
Figure 31: Location and Its Influence on Formal and Informal Inclusion Access	56
Figure 32: Barriers Experience by MSMEs in Different Locations	57
Figure 33: Changes In Compliance Based on Location	58
Figure 34: Changes In Digital Tool Use Based on Location	59
Figure 35: Overall Financial Inclusion Index Scores	60

LIST OF TABLES

Table 1: Characteristics of MSMEs in Kenya, Malawi and Zambia	18
Table 2: Estimated Number of MSMEs in Kenya, Malawi and Zambia and Corresponding Survey Sample Size	19
Table 3: The Five Dimensions of The SIVIO Financial Inclusion Index	20

SUMMARY

Access To Digital Financial Products and Services

- All three countries ranging from 54 % in Zambia, 52% in Kenya and 37% in Malawi, have access to digital tools that enable some level of digital interaction. However, usage goes down significantly with all three countries scoring lowly on this metric at 24% for Zambia, 22% for Kenya and 14% for Malawi.
- The smartphone is accessed by 86% in Zambia, 76% in Kenya and 46% in Malawi and contributes to the access that MSMEs have to digital financial products and services.
- Social media use is fair with 81% in Zambia, 51% in Kenya and 49% in Malawi.
- Very few MSMEs use a website for their business i.e. 21% in Kenya, 15% in Zambia and 0% in Malawi; whilst even fewer use online payment platforms and gateways to process transactions online (15% in Kenya, 6% in Zambia and 0% in Malawi).
- Almost no MSMEs use online bill payment systems except for 6% in Kenya, the other countries have zero use.
- Thirty percent (30%) in Zambia and 21% in Kenya use credit cards as a source of regular credit. Only 2.5% have used credit card facilities in Malawi.
- Only 4% and 1% in Kenya and Zambia respectively use money transfer services for their businesses.

Access To Traditional Financial Products and Services

- In Kenya access to traditional financial products and services is high: 67% access formal savings accounts; 73% have access to a bank account; 28% have previously made a loan application from a formal institution; 38% have business investments; 33% have business insurance and 11% have a pensions policy for their workers.
- In Malawi 70% have access to a formal savings account; 28% have a mobile money account; 16% have previously made a loan application and 35% have business investments; 8% have business insurance and 5% have pensions policy for their workers.
- In Zambia 43% have a formal saving accounts; 83% have a mobile money account; 19% have made a formal loan application; 10% have access to business investments and 20% have access to business insurance and 10% have a pensions policy for their workers.

Access To Informal Financial Products and Services

- Informal access is highest for access to information with 70% in Zambia, 60% in Kenya and 54% in Malawi. Access to informal loan applications is low with 10% in Zambia, 6% in Malawi and 2.5% in Kenya whilst informal savings account access is equally low with only 15% in Kenya; 5% in Zambia, 6% in Malawi.

Access Relative to Subsequent Usage

- Although access to financial products and services is high, usage is low.
- Key barriers are a lack of knowledge, compatibility and affordability of financial products and services.
- Male led enterprises have higher rate of inclusion in all three countries compared to female led enterprises.

Exclusion by Size

- Generally, more micro enterprises are excluded with 26% micro compared to 20% small and medium in Kenya; 43% micro compared to 38% small and medium in Malawi and 29% micro compared to 20% small and medium in Zambia.

Compliance

- Kenya has higher compliance scores at 64% compared to Zambia and Malawi at 59% and 26% respectively.

In general, small, and medium enterprises have more access to formal and informal products as well as digital and non-digital products and services. Our study also notes that male-led enterprises have more access than female-led enterprises.

INTRODUCTION

In 2021 SIVIO Institute (SI) conducted a survey of Micro, Small and Medium Enterprises (MSMEs) in all ten (10) administrative provinces of Zimbabwe. The survey was used to collect data on MSMEs to develop a Financial Inclusion Index for the country. The development of the index was prompted by recent claims of financial inclusion progress by the Government of Zimbabwe through their implementing institution - the Reserve Bank of Zimbabwe - at the end of the first phase of the Zimbabwe National Financial Inclusion Strategy 1 of 2016 to 2020. SI saw the need for independent and credible data on financial inclusion to provide an opportunity for triangulation of the financial inclusion progress in the country. This led to the aggregation of the collected data and the development of the first iteration of the SIVIO Institute Financial Inclusion Index ([SI-FIndex](#)) (SIVIO Institute, 2022).

In 2022, Mozilla Foundation presented SIVIO Institute with an opportunity to expand the work from Zimbabwe into other African countries through the In Real Life (IRL) Fund by opening up the SI-FIndex into three other African countries namely Kenya, Malawi and Zambia. It is anticipated that with time, the SI-FIndex surveys will be longitudinal, covering several African countries at the same time. In this report, we spotlight MSMEs in Kenya, Malawi and Zambia to understand their level of financial inclusion given the development milestones of those countries and Africa as a whole. In this study, our particular focus was on digital financial inclusion with an assessment across the three countries of their level of inclusion for small firms using both conventional forms of access as well as digital forms of financial access. We recommend that this report be read alongside an exploration of the SI-FIndex which has been expanded to include data on the level of inclusion of MSMEs from Kenya, Malawi and Zambia in addition to previous data on Zimbabwe.



BACKGROUND

Financial Inclusion in Context

Africa post-COVID-19 pandemic is in many ways different to Africa before the pandemic. For one thing, Africa experienced lower rates of transmission and fatalities than previously estimated by experts at the start of the pandemic. Not only did previous knowledge on emergency response come into play but the small gains made with digital financial products assisted many communities to survive the pandemic. The result was a notable increase in digital technologies on the continent during and post the pandemic, much more than was witnessed on other continents. Bearing in mind the progress made to date, it is important to note that the progress is being made on a background of high levels of inequality where gains may look significant in context but the situation on the ground is one where millions still experience high rates of poverty. There is still a lot of work to be done to promote inclusion and financial access on the continent. To date, 57% of Africa remains unbanked (Chironga et al., 2018). However, the opportunities for banks and neo-banking institutions cannot be ignored as one considers that 80% of the population have mobile subscriptions and can access financial products and services using financial technology (fintech) on mobile devices. (Payment Genes, 2023).

A number of reasons have been noted for communities remaining unbanked. These reasons include other members of the family having accounts, insufficient funds to sustain an account, religious reasons, lack of trust in the financial systems, lack of appropriate documentation, financial services being too expensive and financial institutions being too far away (Chaora, 2022). Financial inclusion efforts have steadily

aimed to address each of these aspects using various interventions over time.

It is important to note that financial inclusion is a means to achieving a desired state of development and not an end in itself. It is argued that it contributes to poverty reduction, job creation, economic growth, food security, it promotes resilience and empowers women and youth, whilst raising the status of vulnerable communities (International Telecommunications Union, 2016). To this end, many African countries have put in place financial inclusion strategies to outline how inclusion efforts should be directed and which groups should be targeted to promote inclusion and foster economic growth.

Financial Inclusion and the African Development Agenda

Financial Inclusion is the term used to refer to the access that individuals and businesses have to useful and affordable financial products and services that meet their needs whilst being delivered to them in a responsible and sustainable manner. Such products and services may include transactions, payments, savings and investments, credit, and insurance (World Bank, 2023).

Financial inclusion is intended to foster the sustainable provision of affordable financial services by bringing the poor into the formal economy, effectively ‘including’ them in the system of financial products and services. Inclusive financial systems create multiple opportunities for the transfer of funds, capital growth and reduction of financial risk (International Telecommunications Union, 2016), as was witnessed by many small businesses during the pandemic.

A key aspect of financial inclusion has been the development of digital financial inclusion as products, services and activities that have advanced in leaps and bounds into digital networks, making use of advancements in the internet in the last two decades. Across the world, several organisations and groups of countries have recognised the need for financial inclusion of women, youth and MSMEs as a key development indicator including the G20 group of global leaders, the Alliance for Financial Inclusion (AFI), the International Finance Corporation (IFC), the World Bank Group, the African Union (AU), the Common Market for East and Southern Africa (COMESA), and the Southern African Development Community (SADC), to name a few. In Africa, achievement of financial inclusion is key for the achievement of at least 13 of the

17 United Nations Sustainable Development Goals (SDGs) making it a critical component of development at national, regional and global levels. (International Telecommunications Union, 2016).

The International Telecommunication Union (2016) lists some of the benefits of an inclusive digital financial services ecosystem as outlined below:

- ***Savings incentives:*** Digital technology has been used to promote innovative financial products and services. Digital technology creates access to interfaces with savings and investment products. Digital payment services can be utilised alongside other applications and types of technology to schedule reminders, automate payments and create positive default options to assist people overcome barriers to saving.
- ***Reduced risk and increased resilience:*** When communities can save, they are less prone to shock which improves their level of resilience to economic risk.
- ***Safety and security:*** Digital products give people, including the poor, access to mechanisms to store and manage the value of money in a digital location away from physical risks such as theft, fire, and other natural disasters.
- ***Speed:*** Digital payments can be made at the click of a button resulting in faster transactions which largely benefit traders, allowing them to enjoy faster turnovers.
- ***Flexibility across borders:*** Digital payments have enhanced the speed and efficiency of remittance services, especially for the rural poor who now have the flexibility of receiving money from relatives in other parts of the world, providing systems of support that were previously difficult to administer.
- ***Transparency:*** Payments made digitally are easier to track and less prone to leakage or arriving 'in part' as is the case for hand-delivered cash payments.
- ***Reduced costs:*** Digital payments have reduced the costs of transactions for sending and receiving payments for goods and services, as well as for remittances across borders.

Since the 2008 global financial crisis, 'financial inclusion' has become increasingly central to global and national development agendas. Enhanced access to financial services for the poorest has been widely embraced as a policy goal by major development agencies and is

increasingly seen as a necessary condition for ‘inclusive’ and sustainable growth, financial stability, and poverty reduction (Alliance for Financial Inclusion, 2010). Yet there has, thus far, been little clear evidence of benefits for target populations. Critics have, from the start, highlighted the exploitative character of financial markets being developed under the rubric of ‘financial inclusion’ e.g. (Soederberg, 2013), and called into question the ‘win-win’ narratives underlying them (Mader, 2019). For that matter, there is, at best, limited evidence that such policy efforts have even led to wider access to financial services. Borrowing from formal financial institutions continues to be heavily outweighed by borrowing from family and friends or informal lenders in most developing regions. The growth of ‘access’ to formal credit has been slow, uneven, and even prone to reversals in particular cases. Indeed, the slow progress of financial inclusion has arguably been a major driver of the embrace of fintech by global policymakers (Bernards, 2022).

Digital Financial Inclusion as a Determinant of Financial Inclusion

Similar to traditional financial inclusion, digital financial inclusion has been observed to be directly correlated with economic growth as seen from trends in 52 Asia-Pacific countries (Sahay, et al., 2020). According to the Global Partnership for Financial Inclusion (GPFI) (2023), digital financial inclusion promotes efficient interconnection in economic activities within the financial ecosystem. In addition to promoting economic growth, digital finance can broaden access, prompting productivity, investment, and reduction in rates of poverty whilst empowering vulnerable groups like women and youth (Manyika et al., 2016). Digital finance has been noted to promote the establishment of profitable and sustainable businesses in the general economy as well as financial service-related businesses that act as service providers creating interconnections in the digital system (Rekha et al., 2021).

Innovations in the digital landscape have advanced with the expansion of internet promotion and the proliferation of technologies that connect rural poor and underserved households to financial institutions and other digital currencies or payment gateways. Greater advancement has been achieved as digital payments have continued to evolve beyond just payment-based platforms to include lending, savings, investment and insurance platforms (Asia Pacific Economic Cooperation, 2022). Innovations in Financial Technology have resulted in much

lower transaction costs leading to information symmetry, faster transactions and more accessible products and services (Asia Pacific Economic Cooperation, 2022).

Financial technology (Fintech) refers to the use of technology to automate and improve traditional financial services and processes including products and service such as online banking, mobile payments, peer to peer lending, digital wallets, and financial management tools (Statista, 2024). Ordinarily, fintech uses advances such as block chain, artificial intelligence, deep learning, machine learning and big data configurations to develop products that are best fit for customers. According to Statista (2024), Fintech is comprised of:

1. Digital payments composed of digital commerce, Mobile POS payments and digital remittances.
2. Digital capital raising namely crowd funding, crowd lending, crowd investing and marketplace lending.
3. Digital investments which can be carried out by Robo advisors, Neo brokers.
4. Neo banking which are digital only banks without a physical presence.
5. Digital assets which are Crypto currencies, non-Fungible tokens (NFTs) or Decentralised Finance (DeFi).

According to the International Telecommunication Union (2016), a healthy digital financial ecosystem that is promoting inclusion, aims to support all people and enterprises within a country. That system should additionally support national development goals for financial inclusion, promote economic health, and promote the stability and integrity of in-country financial ecosystems.

Disadvantages of digital payments do exist in that most financial applications available in Africa to date, use English as the main medium of communication. Although this is good for universality, it is not suitable for rural communities or countries where English is not common. In such cases, access is restricted until versions of the application can be made in local languages. In addition, access may continue to be denied to individuals who lack identification documents and who cannot open financial accounts with banks and financial institutions. The infrastructure of financial institutions may be limited and unable to handle identification through social media accounts, mobile numbers or bank accounts. Digital access has removed many barriers but there remains a need for identification of users according to most countries'

KYC (Know Your Client) requirements. This is a challenge for migrant communities or people displaced by civil unrest or where identification just cannot be obtained. For some, lack of access may be created because of the type of devices they use which may not meet the minimum requirements of the operating systems. Similarly, infrastructural inadequacies i.e. poor access to power or poor internet connectivity, will affect the use of digital financial products and services. Not only do users need access to electricity but the service providers of digital products such as banks, microfinance institutions or tech companies need electricity to operate. Access to the internet is a key aspect of digital health although Internet access is not yet robust on the African continent, with variations in the speed and efficiency of internet provision. It must be noted that the type and quality of infrastructure and the efficiency of the software running the infrastructure are strong determinants of access where the constant need for upgrades may not be possible for all financial institutions on the continent.

Aside from all the above challenges, there remains the challenges created by cyber security breaches such as hacking, phishing, ransomware, malware, cyberbullying, identity theft and spamming to name a few. This new world in the digital space has its own rules and unfortunately, most Africans in underprivileged communities may not be aware of the grave risks associated with the space and how to avoid them.

A healthy digital ecosystem is promoted by laws and regulations, national policies and standards set by regulating authorities in the respective countries which have an enormous bearing on the attitudes of communities towards certain products and services. A clear example is that only 10 out of 54 countries in Africa are actively trading in cryptocurrency, while some countries are indifferent, and others have taken a strong stance to ban the trade and use altogether (Babatunde, 2021). Improving these laws and interactions will create more options for how money can be saved, borrowed, or invested safely in keeping with global developments.

Financial Inclusion and MSMEs

Financial Inclusion has led to an improvement in livelihoods and allowed millions at the bottom of the financial wealth pyramid to expand their operations. For example, the mobile money app M-Pesa introduced on the continent 15 years ago currently has a reach of 52 million active users in seven countries allowing users to trade with communities they would previously struggle to trade in, with speed and convenience. M-Pesa claims that 17.6 million of these users in Ghana, Tanzania, Malawi, Kenya and Mozambique had never been part of a formal financial system before they joined the M-Pesa network with 12.3 million of them now able to secure credit for the first time through this one application (Lopokoityit & Mitha, 2022). It is important to note that large sections of underserved communities in Africa are also micro and small businesses, many of whom are informal and may not be eligible for access to funding from formal financial institutions. The International Labour Organisation (ILO, 2022) states that 83% of employment in Africa is found in the informal sector. Mobile Network Operations (MNOs) and other Financial Service Providers (FSPs) therefore create opportunities for funding, savings, insurance and investment that were previously unavailable to large proportions of the African continent. It is estimated that MSMEs make up 90 % of the private sector in Sub-Saharan Africa alone. An estimated 44 million MSMEs are in existence, most of whom are informal. It is also estimated that up to 51% of these businesses require funding to which they currently do not have access to (Runde et al. 2021).

Access to savings facilities, insurance and credit is crucial for small businesses to survive and even scale their operations. Where such access is not possible, entities stagnate leading to poor growth outcomes. It is estimated that only 20 to 30% of MSMEs have access to a bank loan or line of credit in Africa. Even those with access still face the added challenge of unaffordable products and services. Interest rates for loans taken from formal institutions can be high, so high it becomes a deterrent for small businesses. Microfinance companies can have even higher interest rates (Runde et al. 2021). It is important to note that MNOs have given MSMEs options which are cheaper, faster, and more secure in the form of digital financial products and services which are key drivers for financial inclusion in Africa. According to FinMark Trust (2020), the infrastructure challenges faced by MNOs, banks and neo-banks may not necessarily be fixed overnight and will inevitably delay the progress to complete financial inclusion. The debate to promote inclusion should therefore be robust and captured by national and regional policies in multiple spheres for inclusion to be a success.

Online payment gateways such as PayPal, Google Pay, Flutter Wave, Stripe, Skrill, Apple Pay, and Amazon Pay, to name a few, have made it possible for MSMEs to get their businesses trading online and grow their digital presence. Some African banks are yet to integrate with these payment gateways. This means if it were left to the banks alone, many MSMEs would struggle to grow digital brands or even receive payments across borders. Thankfully the applications are available freely on the internet making them easily accessible to African users.

Noting the large influx of remittances on the continent from remittance platforms such as World Remit, Money Gram, Western Union and Mukuru, we have to consider their impact on MSMEs. In our 2020 study of Zimbabwean MSMEs (Chaora , 2022) we noted that up to 19% of investment funds to start small businesses came from family and friends both locally (11%) and in the diaspora (8%). A huge portion (80%) of startup funds come from savings, some of which may be accumulated from remittance income or regular family support. These trends make it important to map the impact of remittances' sources, the applications used and the MSMEs assisted by them.

All the countries chosen in this study have financial inclusion policies in place. However, the levels of inclusion and the quality of products and services differ including the perceptions of some products and their usefulness. Kenya has a high rate of inclusion according to The Global Partnership for Financial Inclusion starting at 82% whilst Zambia is at 46% and Malawi is at 34%. The level of inclusion is determined by several factors such as the type and quality of infrastructure, legislation, level of education of users and the presence of other cultural and environmental barriers to access and use products as this study details (Bank of Zambia, 2017); (GPFI, 2023).

METHODOLOGY

Definition of Financial Inclusion, Compliance and Micro, Small and Medium Enterprises

Definition Of Financial Inclusion

The definition of financial inclusion is different in many African countries (Central Bank of Kenya (2021); United Nations (2021); World Bank (2024)). Some countries in SADC such as Zimbabwe refer to access (to financial products and services) referring only to formal products and services whilst other countries such as those profiled in this study use more flexible definitions which also include access to informal services as a measure of inclusion. In this study, we chose to use the broad definition applied by SADC which refers to financial inclusion as:

“The delivery of financial services and products in a way that is available, accessible and affordable to all segments of society and plays a pivotal role in combatting poverty and contributing to inclusive economic growth.”

In this definition three main dimensions are used:

- Access: the combination of both the availability and appropriateness of financial products and services.
- Usage: the frequency of interaction with the product or service; and
- Quality: the combination of product fit, value add, convenience and risk (Southern African Development Community, 2016).

In this broad definition, it is noted that exclusion can also be voluntary or involuntary. However, the SADC secretariat in its definition has focused on how people are excluded where they have not chosen to be excluded (i.e. the system excludes them rather than an individual choosing not to take part in an activity). This definition results from assessments of groups with low incomes and high-risk profiles in the underserved segments of society. Exclusion can be created by formal structures and systems, but we have observed that the level of informality of MSMEs on the continent points to both individual preferences as well as systematic failure to address the needs of small businesses. Exclusion should be considered from the perspective of institutional barriers over and above the preferences of start-up founders. In our definition, we broadened our scope to include distinctions created by the types of service providers as

highlighted in the Kenya definition of financial inclusion where formal service providers are further divided into formal prudential, formal non-prudential and formal registered (Muthiora, 2015).

The *formally served* entities are entities that have/use financial products and/or services provided by a formal financial institution (bank and/or non-bank). A formal financial institution is governed by a legal precedent of any kind and bound by legally recognised rules. The *Informally served* have/use financial products and/or services which are not regulated and operate without recognised legal governance, for example loan sharks or Income, Savings and Lending Small Groups.

Financial Inclusion has been determined by the Asia Pacific Economic Cooperation (2022) and World Bank (2023) as a combination of the level of access to, use of, and quality of financial products and services. SIVIO Institute (SI) has taken this a step further to include the state of compliance of MSMEs (i.e., whether the entities under study are registered formally or not) with the understanding that informal enterprises contribute to as much as 83% of the private sector development (International Labour Organisation, 2022). A large percentage of the formations under study are informal and are in essence cut off from formal products and services. It is, therefore, important to measure their level of compliance to determine if registration is indeed a determinant of inclusion for MSMEs. Our survey therefore measures access to, use of, barriers experienced and level of compliance (Cross and Chaora, 2022a) as the four key dimensions of the study and subsequently the index.

Definition of MSMEs.

In this study, we chose to observe the definition of MSMEs used by each country (Daroll, 2012), FinMark Trust (2019), Zambia (Republic of Zambia, 2008) and Kenya. This was done to avoid confusion since the index is meant to provide governmental and other stakeholders with comparative information on their progress toward inclusion. Additionally, we sought to ensure that we maintain the definitions in order for MSMEs and enumerators to accurately diagnose their entities during sampling. The table below outlines the definitions of MSMEs in the study countries.

Table 1: Characteristics of MSMEs in Kenya, Malawi and Zambia

	Micro	Small	Medium	Large
Zimbabwe				
# employees	1 – 5	6 – 30	31 – 75	
Annual turnover	Up to US\$ 30,000	US\$ 30,001 – US\$ 500,000	US\$ 500,000 – US\$ 1,000,000	More than US\$ 1 million
Gross assets	Up to US\$ 10,000	US\$ 10,001 – US\$ 250,000	US\$ 250,000 – US\$ 500,000	More than US\$ 1 million
Malawi				
# employees	1 – 4	5 – 20	21 – 100	100+
Annual turnover	Up to K5 million	K5 mil – K50 million	K50 mil – K500 million	More than K500 million
Gross assets	K1 million	K20 million	K250 mil	More than K250 mil
Zambia				
# employees	1 – 10	11 – 50	51 – 100	100+
Annual turnover	Up to K150,000	K151,000 – K300,000	K301,000 – K800,000	More than K800,000
Gross assets	Up to K80,000	K80,000 – K200,000	K201,000 – K500,000	More than K500,000
Kenya				
# employees	Less than 10	Oct-50	51 – 99	100+
Annual turnover	Below KShs 1 million	KShs 1 million – KShs 5 million	KShs 5 to 10 million	More than K800,000
Gross assets				

Source: Cross and Chaora, (2022a); FinMark Trust (2019); National Assembly of Zambia (2017); (Kenya Ministry of Industrialisation, Trade and Enterprise Development, 2020)

Survey Methodology

We reviewed the survey tool we used in Zimbabwe in 2021, modifying it to include more questions on digital access and the challenges associated with digital products and services. Our survey tried to determine the wide use of various Fintech components, however because mobile money has been widely researched, we limited our questions on mobile money and POS transactions to focus on the other components of fintech ecosystem. We did this to understand the level of interaction of MSMSEs to the other digital fintech products outside of mobile money and their level of preparedness and value addition in business in a digital ecosystem.

Our survey was conducted using quota sampling methods in the months of August to September 2023 and focused on the capital cities Lilongwe, Lusaka and Nairobi. We targeted entities that match our criteria for MSMEs using the definitions outlined in Table 1 and the sample size indicated in Table 2.

Table 2: Estimated Number of MSMEs in Kenya, Malawi and Zambia and Corresponding Survey Sample Size

County	Estimated # MSMEs in the Capital Cities	Survey Sample Size	Target Areas
Kenya	1,105,000	100	Central Province Nairobi
Malawi	570,892	100	Central Region Lilongwe
Zambia	525,000	100	Lusaka Province Lusaka

Source: (Finmark Trust, 2019); (Republic of Zambia, 2023)

Index Methodology

We identified five (5) dimensions that influence inclusion namely compliance, access to standard financial products and services, barriers, usage and access to digital financial products and services. We combined the data from the capital cities and aggregated it for the index to demonstrate the differences. This report further refines inclusion based on

what we have defined as inclusion measures (Cross & Chaora, 2022b) namely inclusion by gender, location, size, age of enterprise and differences in inclusion based on business sector. This report is a summary of the data available in the online repository of the [SIVIO Institute Financial Inclusion Index](#) (SI-FIndex). Table 3 explains the dimensions used in the SI-FIndex.

Table 3: The Five Dimensions of The SIVIO Financial Inclusion Index

Dimension	Parameters	Dimension	Parameters
Compliance	Full compliance Partial compliance Non-compliance	Access	Formal products and services Informal financial products and services Financial exclusion
Barriers	Knowledge Affordability Documentation Trust Compatibility Bureaucracy Complexity of the system	Usage	Frequency of use of bank accounts Frequency of use of mobile money accounts Frequency of use of business insurance products Use of formal and informal information sources
Digital	Access to digital products and services Usage of digital products and services		

Source: Cross and Chaora (2022b)

Our data assessed a similar number of enterprises in each country to come up with a weighted index contribution for each city.

FINDINGS

The Compliance Dimension

The compliance dimension is a dimension unique to our study, measuring the changes in the level of inclusion derived from registration of the business as either a sole proprietorship, partnership, corporation, or company (unlimited liability, limited liability and companies limited by guarantee and cooperatives (Zambia Development Agency, 2019). We additionally chose to consider other forms of registration such as registration for tax including value-added tax, employee payments registration for exports and city council/ municipality licensing which may give MSMEs in different countries the right to operate (Monkey Pesa, 2022).

We classified compliance as a dimension because financial inclusion as a concept is validated by inclusion into either formal (registered) or informal (unregistered) financial products and services depending on the country. The compliance status of an enterprise therefore becomes one of the strongest measures of potential access or lack of access. We classified compliance into:

1. Full compliance: The entity is registered as a business and is tax-compliant.
2. Partial compliance: The entity is registered as a business, but it is not yet tax-compliant.
3. Non-compliant: The entity is not registered as a business and is not tax-compliant.

Formal inclusion refers to access from registered and regulated authorities like mobile money operators, bank accounts, and microfinance institutions whilst informal inclusion refers to access to products and services from unregulated sources like ROSCAs, family and friends and other unregulated sources including some found online. Kenya had the highest number of fully compliant entities at (64%) compared to Zambia at (59%) and Malawi (26%). Kenya also had the highest number of partially compliant (10%) compared to 1% for both Malawi and Zambia. Malawi has the highest level of non-compliance at 73%, Zambia moderate levels at 40% and Kenya has the lowest numbers at 26% as indicated in Figure 1.

Country

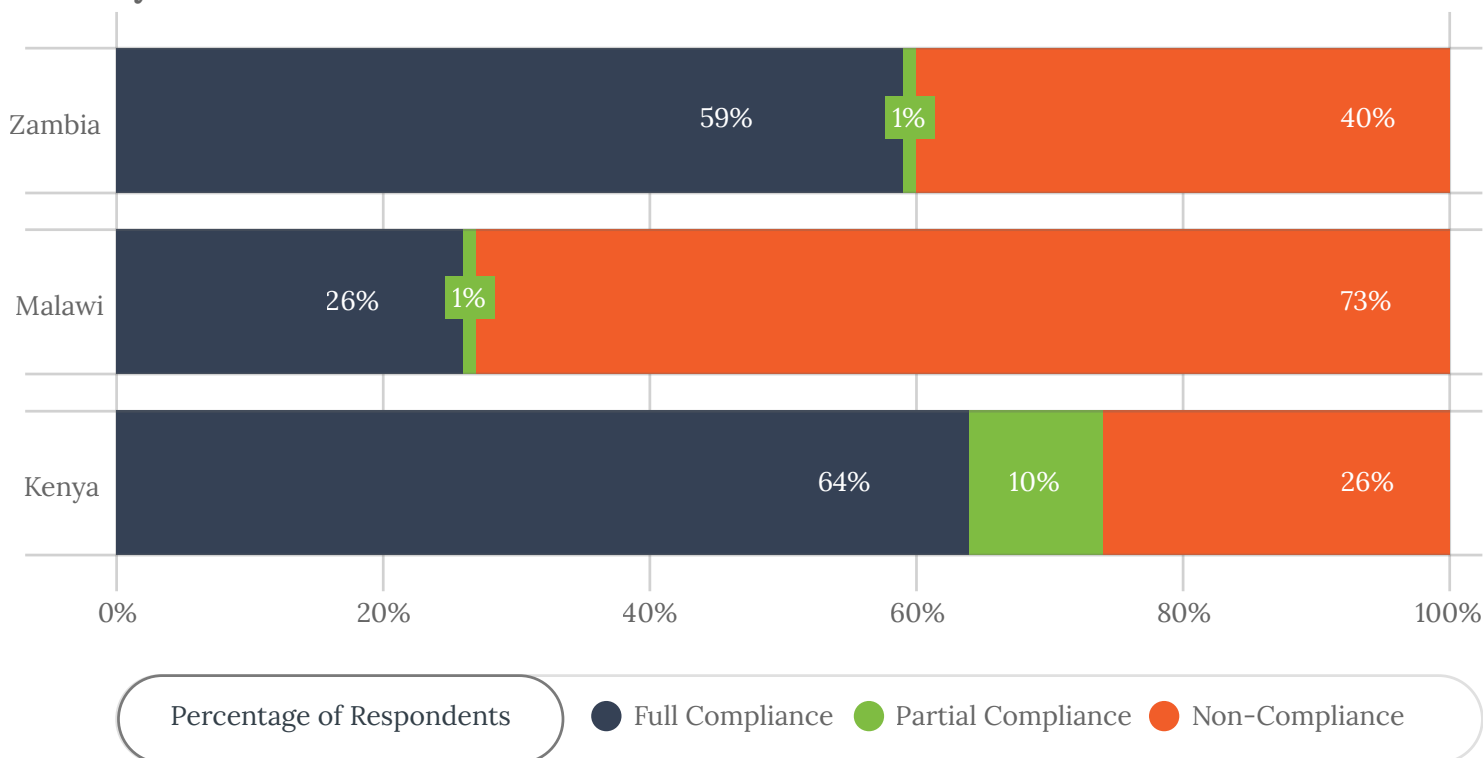


Figure 1: Compliance Dimension Comparisons- Kenya, Malawi and Zambia

Our assessment of compliance demonstrates that Kenyan entities are more likely to have access to formal products and services based on their high rates of full and partial compliance. Zambian entities are next most likely to be included and Malawian entities are least likely to be included because they are mostly non-compliant with only 26% full compliance. The top reason why Malawian organisations are not compliant is the cost of registering where 67% of respondents highlighted as their reason according to the survey report.

The Digital Dimension

Access to Digital Financial Products and Services

As indicated in Figure 2, MSMEs in all three (3) countries ranging from 37% in Malawi, 52% in Kenya to 54% in Zambia have access to digital tools that enable some level of digital interaction. These tools include access to a mobile phone, smart phone, computer, and internet connection. Only a small number use these tools productively as demonstrated in Figure 2. The data on the right of the chart shows that usage goes down significantly with all three countries scoring lowly on this metric with 24% for Zambia, 22% for Kenya and 14% for Malawi.

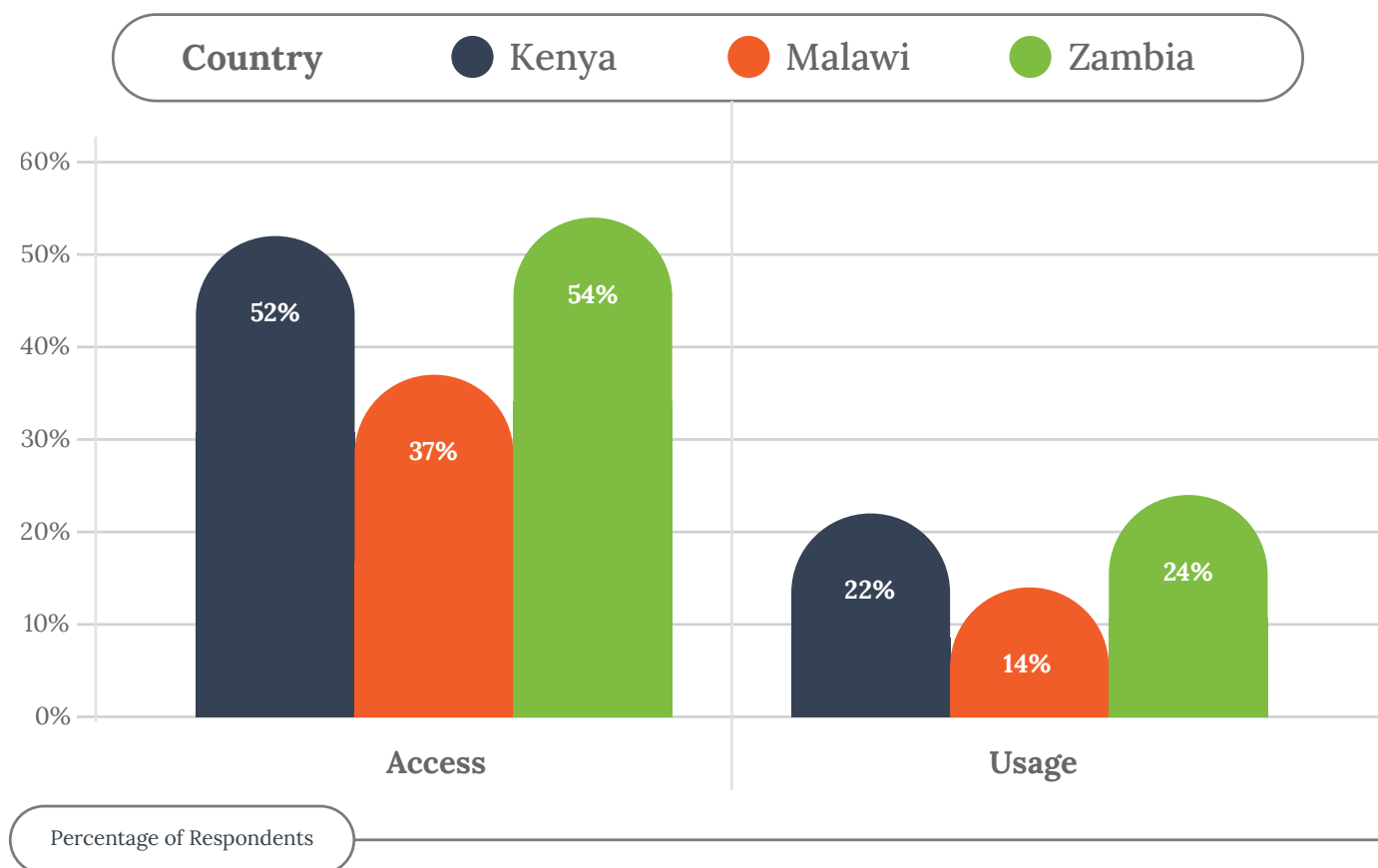


Figure 2: Digital Dimensions of Access and Usage- Kenya, Malawi and Zambia

The most significant enabling tool for promoting digital integration and digital access is the mobile phone (any type of mobile device regardless of capability- with at least access to a mobile network) shown by 99% in Zambia, 95% in Malawi and 66%in Kenya. The smartphone (mobile phone with advanced capabilities) is the second closest contributor and is accessed by 86% in Zambia, 76% in Kenya and 46% in Malawi as shown in Figure 3. Access to the internet is significant for Zambia and Kenya (62% and 60% respectively) but it is relatively low for Malawi (31%). This shows that although MSMEs have the tools to access digital tools, products, and services they may not be fully aware of how the tools can be used productively for their businesses.

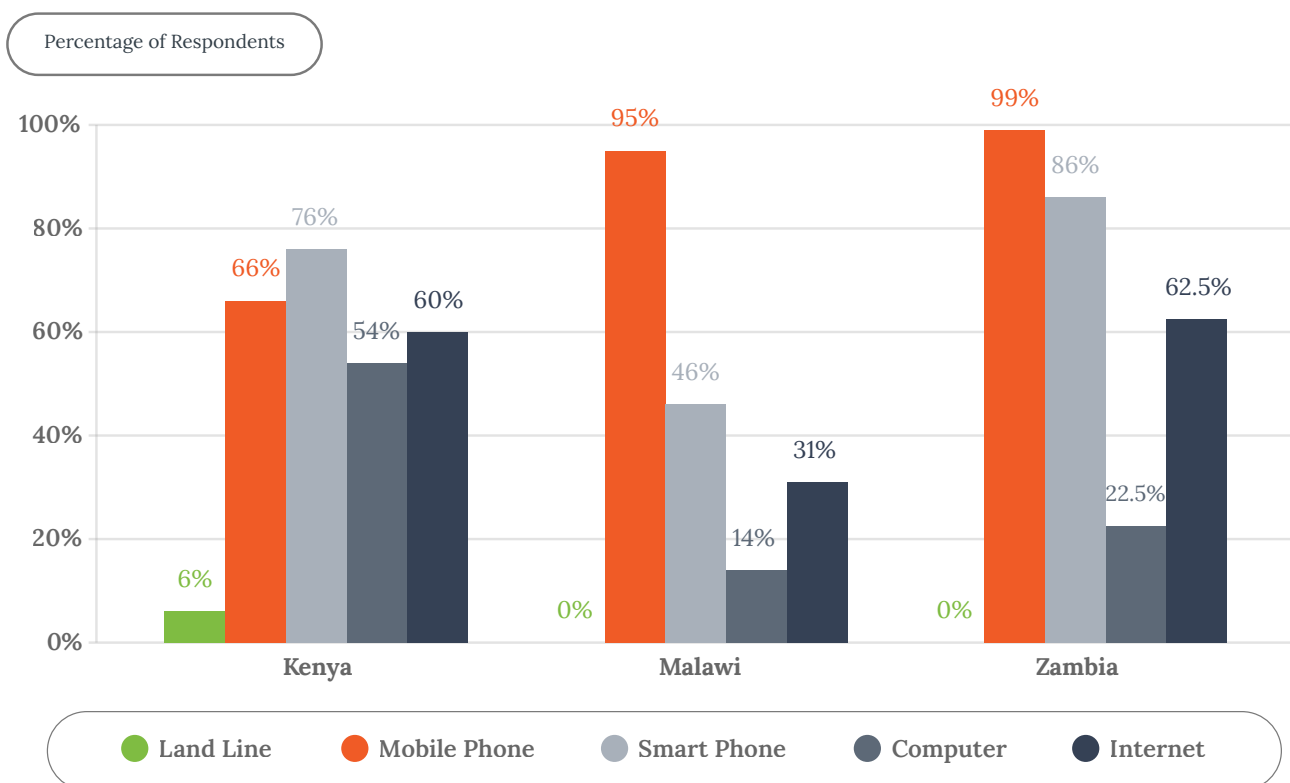


Figure 3: Country Access to Tools That Enable Digital Inclusion

The Usage of Digital Financial Products and Services

We determined products as ‘digital’ where they rely on or work alongside access to the internet existing in intangible electronic forms without reliance on Mobile Networks Operators (to differentiate from mobile money and related products). Typically, these products are created, purchased, sold or used online.

With regards to the usage of digital products and services, we inquired about the use of products such as cryptocurrency, social media, Ecommerce, digital payment gateways and use of web hosting site facilities. These products may seem standard to some MSMEs in other countries but the limited use in Kenya, Malawi and Zambia shows how little penetration digital products and services have had to date in African economies. Figure 4 shows that 35% of MSMEs in Zambia will predominantly use social media platforms (33% in Malawi and 28% in Kenya) without any of the other tools, whilst 81% in Zambia, 54% in Kenya and 49% in Malawi will use WhatsApp for Business as the primary tool for transactions. This demonstrates the important role that WhatsApp is playing in giving MSMEs access to ‘online communities’ where other products and services are yet to meet their needs.

Few MSMEs use a website (21% in Kenya, 15% in Zambia and 0% in Malawi); whilst even fewer use online payment platforms and gateways to process transactions (15% in Kenya, 6% in Zambia and 0% in Malawi). Cryptocurrency or other block chain technologies are rarely used however there is some penetration in Kenya (5%) whilst both Malawi and Zambia have 0% penetration of these services.

Usage of email facilities is more common in Zambia and Kenya (31% and 25% respectively) but is 1% in Malawi.

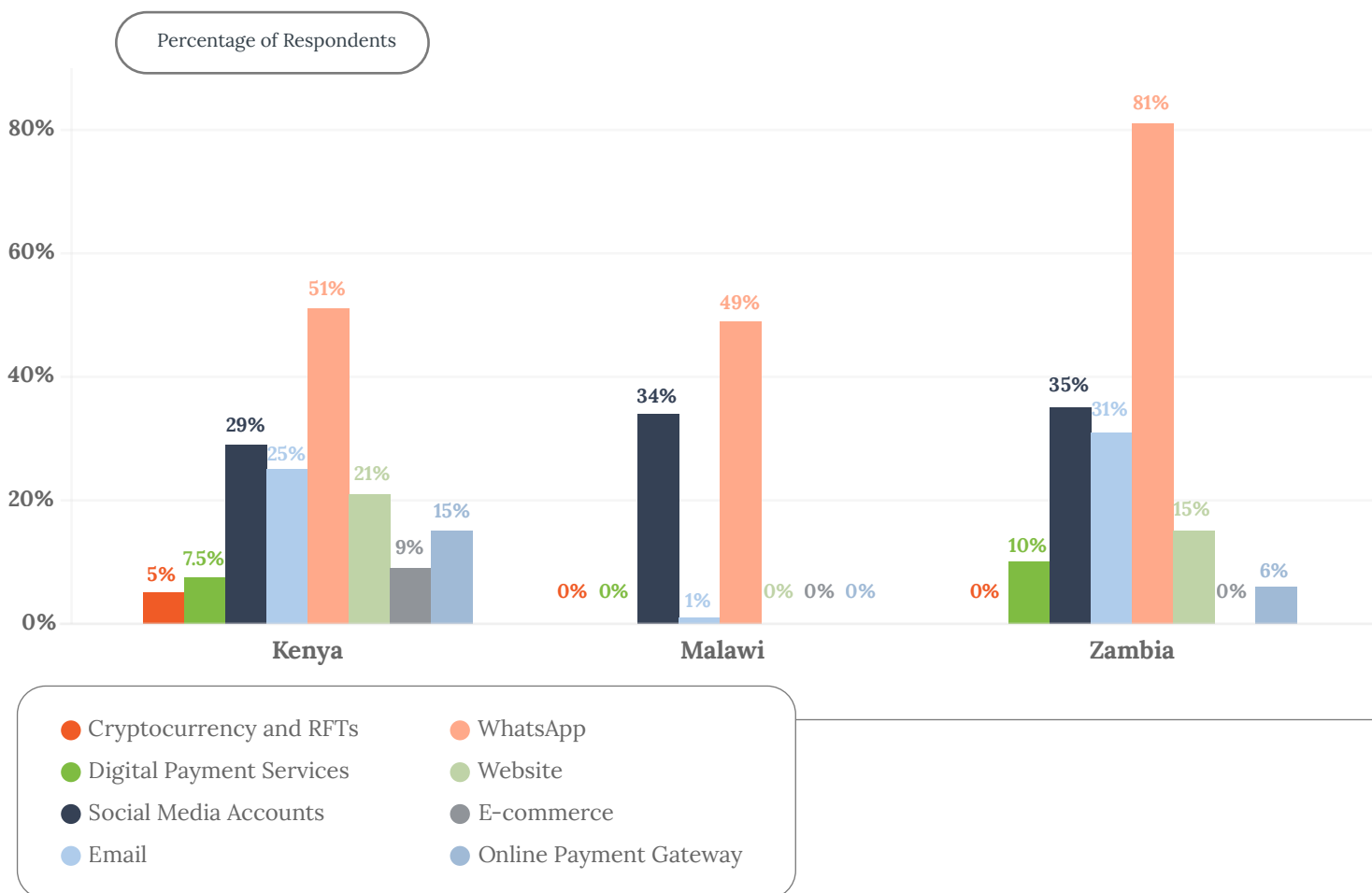


Figure 4: Usage of Digital Products and Services

We inquired about the use of money transfer services, bill payment systems and credit cards. These, although not fundamental to financial access, point to the efficiency of processes and systems around the micro or small business operations. We noted that few use accounting systems and bill payments (7.5% in Kenya and 1% in Malawi; and 6% in Kenya and 0% in Zambia and Malawi respectively). However, the use of credit cards (to access lending facilities) is more

pronounced showing some evolution in the advancements of products and services offered by banks to MSMEs to provide different forms of credit. This metric (credit card access) is 30% in Zambia and 21% in Kenya. Notably, Malawi had relatively low scores indicating low usage for all products and services except for mobile phone and WhatsApp Access. This shows that MSMEs in Malawi are most reliant on these products to access online communities.

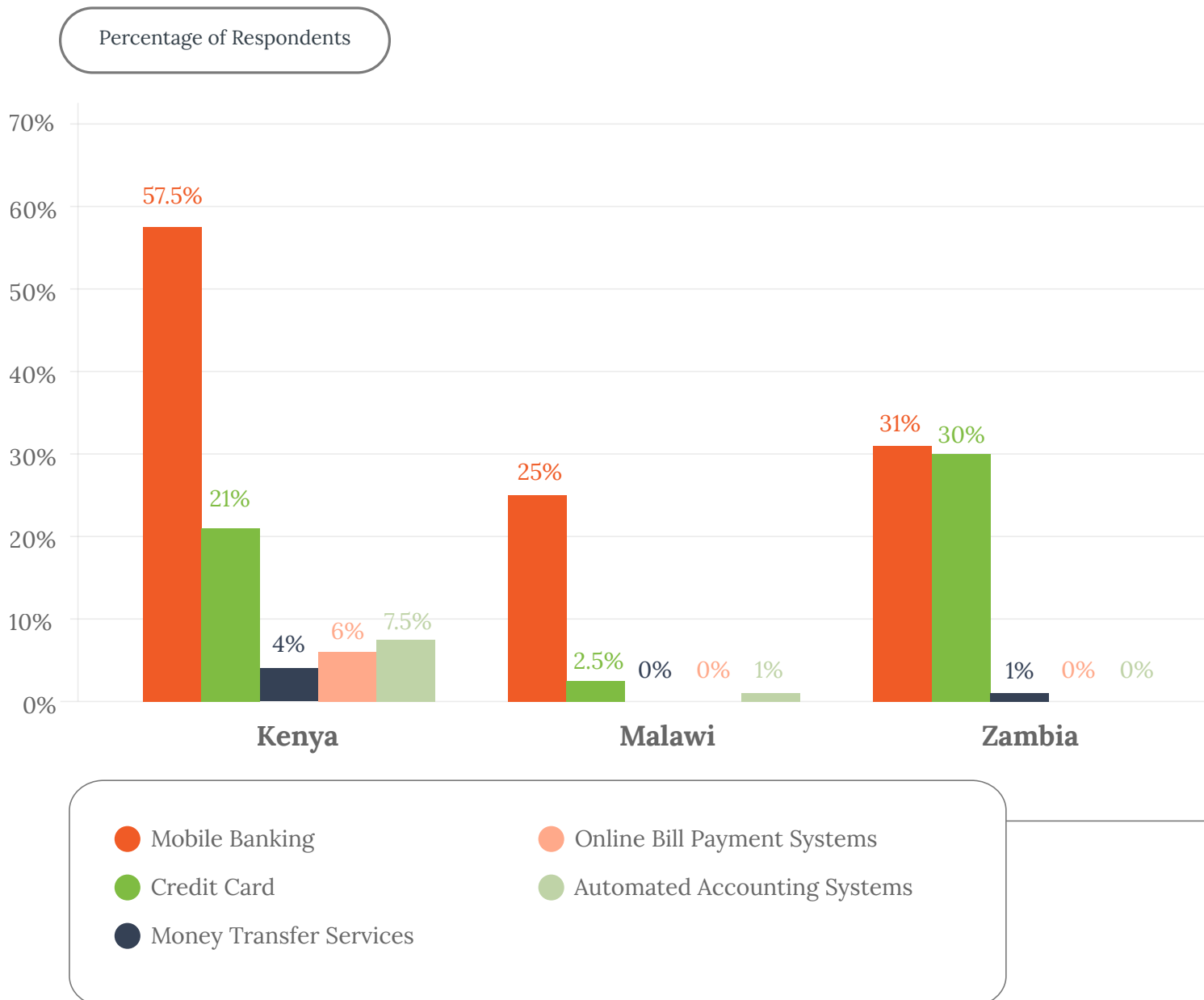


Figure 5: Usage of Digital Support Services

Figure 5 shows that although money transfer services are important for personal use, few MSMEs utilise these for business. This is probably because the charges are considered high

when using the service for a business transaction, but this cost is considered insignificant when making remittance payments for friends and relatives. Few MSMEs in Zambia, Kenya and Malawi utilise automated accounting systems and online bill payments indicating that such products and or services need to be modified to be a better fit for MSMEs to adopt them.

The Access Dimension

Access to Standard Financial Products and Services

We analysed the level of access, differentiating between access to formal products and services and informal products and services.

Access to Formal Financial Products and Services

The formal services are those which are regulated by authorities requiring some form of registration (on the part of the service provider) to the respective reserve banks or trade authorities. Generally, MSMEs cannot access formal products and services without themselves being registered and therefore regulated. Formal loan access includes loans from microfinance institutions, banks, order finance companies, NGOs, credit unions and the respective governments. Formal savings refers to savings carried out through a bank account or mobile money account. Whilst formal investments refer to investments through stocks and shares. Our index shows that Kenya has comparatively higher access to formal savings accounts, general accounts, loans, investments, and business insurance as demonstrated in Figure 6. Malawi has slightly higher proportions of savings accounts compared to Kenya and Zambia, but Kenya still has higher rates of access to all the other standard financial products and services. Zambia's level of access to financial products and services is second to that of Kenya for other bank account access, loan access, business insurance and pensions policy. However mobile money access is highest in Malawi despite Malawi having less progress in all the other indicators. Malawi is only stronger than Zambia with regard to investments for MSMEs. Typically, these investments are made using fixed assets (67%) or by investing in other businesses (30%) according to the survey report.

Percentage of Respondents

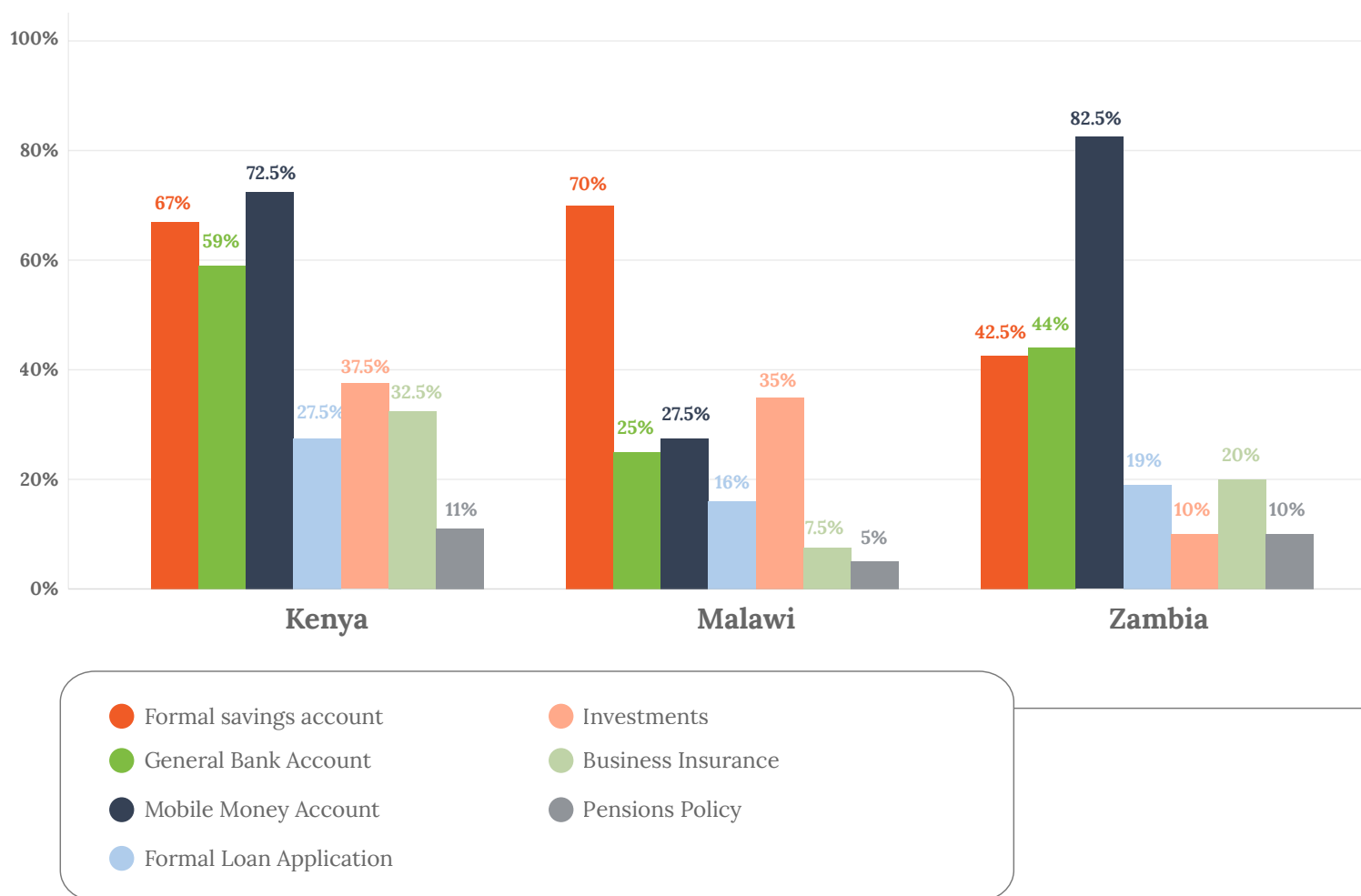


Figure 6: Access Dimension Comparisons for Formal Sources – Kenya, Malawi and Zambia

Access to Informal Financial Products and Services

Informal products and services are those which are not regulated and can be accessed without registration and regulation with state authorities such as Rotating Savings and Lending Groups (ROSCAS) or Income Savings and Lending groups (ISALs), family and friends, savings in the form of foreign currency, cryptocurrency and investment into other businesses since these are not regulated and usually do not have a paper trail for most MSMEs. Informal loans can be accessed from loan sharks, money clubs (ROSCAs) and ISALs, family and friends, and online platforms such as PayPal, Google Pay, Apple pay and other online Payment gateways. Zambia scored highest when it comes to accessing informal loans at 10% compared to both Malawi and

Kenya which scored at 6% and 2.5% respectively for informal loan access. Zambia also scored highest for informal access to information at 70% compared to Kenya at 60% and Malawi at 54% shown in Figure 7.

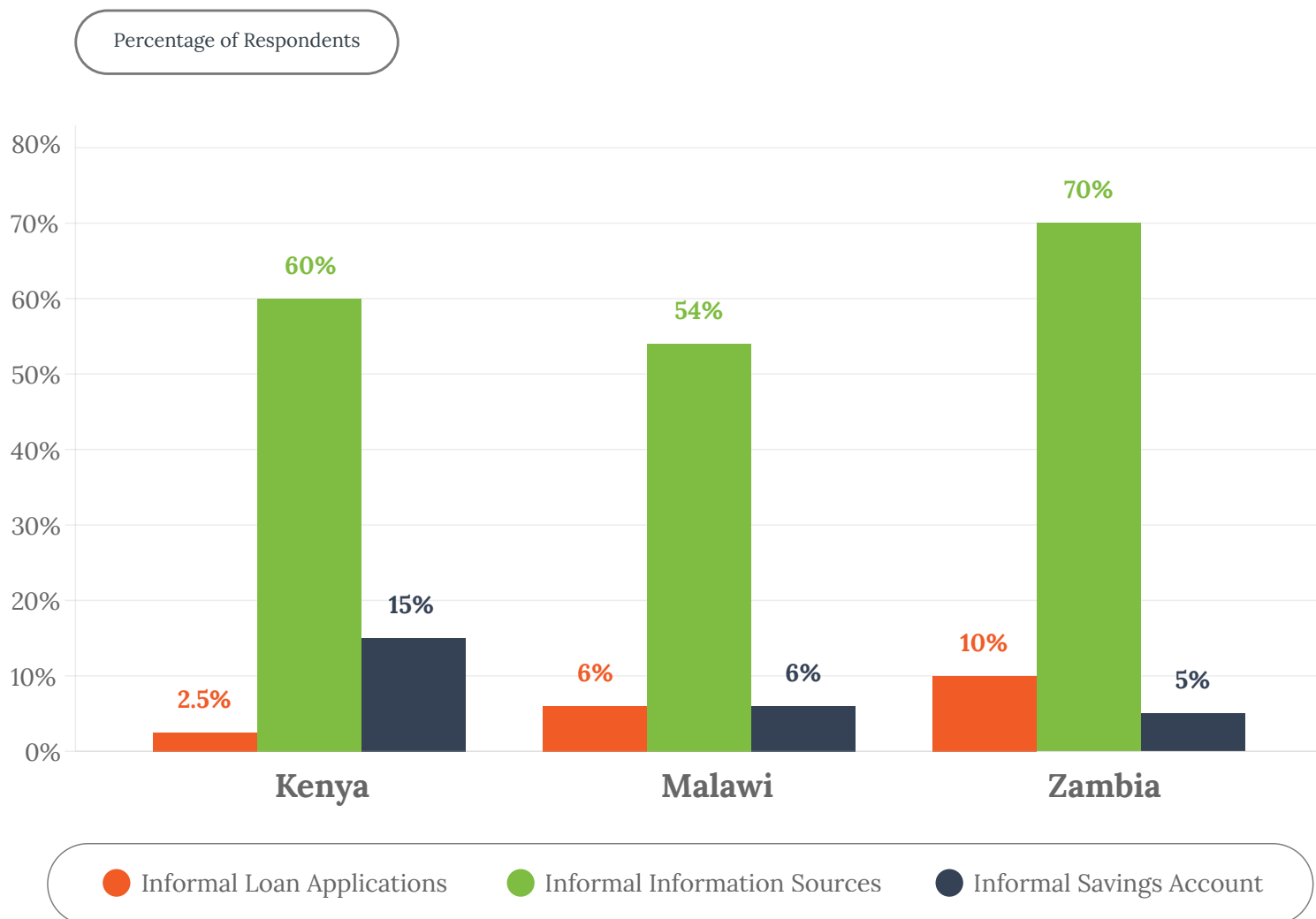


Figure 7: Access Dimension Comparisons of Informal Sources- Kenya, Malawi and Zambia

Comparison of Access to Formal and Informal Products and Services

Figure 8 summarises the relative scores for the access dimension comparing access to formal products and services and informal products and services. Our index determined that MSMEs in Kenya have greater access to formal products and services (42%) compared to informal products and services (26%). One-third (32%) of MSMEs are excluded from standard financial products and services. (Refer to the previous section on access to digital products and services).

Zambian MSMEs have an equivalent reliance on informal products and services with 28% accessing informal products and services compared to 32% of MSMEs who access formal products and services. Relative access to formal and informal products and services is similar for Malawi with a 25% score for formal access and a 22% score for informal access as demonstrated in Figure 8.

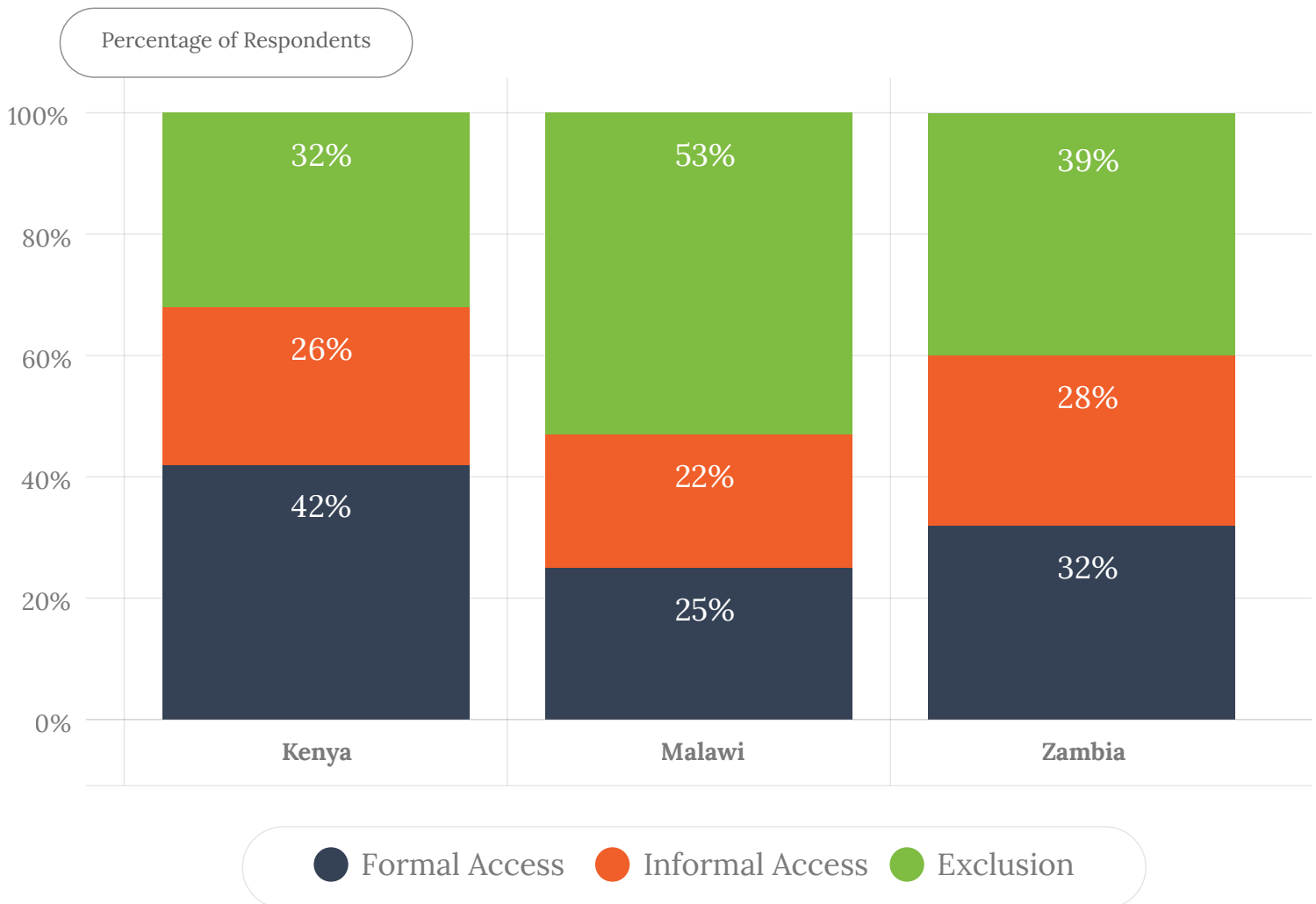


Figure 8: Comparison of Formal and Informal Financial Products



The Usage Dimension

The dimension of usage measures the level of interaction that MSMEs have with a product or service. To measure this metric, we combined the digital and non-digital products and services and weighted the frequency of their use:

- The frequency with which bank accounts are accessed per week, month or half-year
- The number of accounts held at a bank indicates the appetite for the banking products or services and the adequacy of the product for the MSME needs which motivates use. This is closely tied in with accessing more than one service from the bank as well as demonstrating that the swath of activities made available is a good fit for MSMEs
- Loan access with subsequent ability to pay back a loan and the perception of interest rates as a measure of their potential to re-use that loan service later
- Lack of restrictions -which make products easier to use
- The time to open a bank account or mobile money account infers a level of ease of access.

The index score reveals that Zambia had significantly higher scores for usage of all products and services. The findings suggest that the products and services offered to Zambian MSMEs are more fully utilised than in other countries as shown in Figure 9. Research data shows that Malawi only has higher figures for the frequency of bank account use and the lack of restrictions for mobile money indicating that where these products are available, they are provided in a manner that meets the needs and conveniences of MSMEs.

Percentage of Respondents

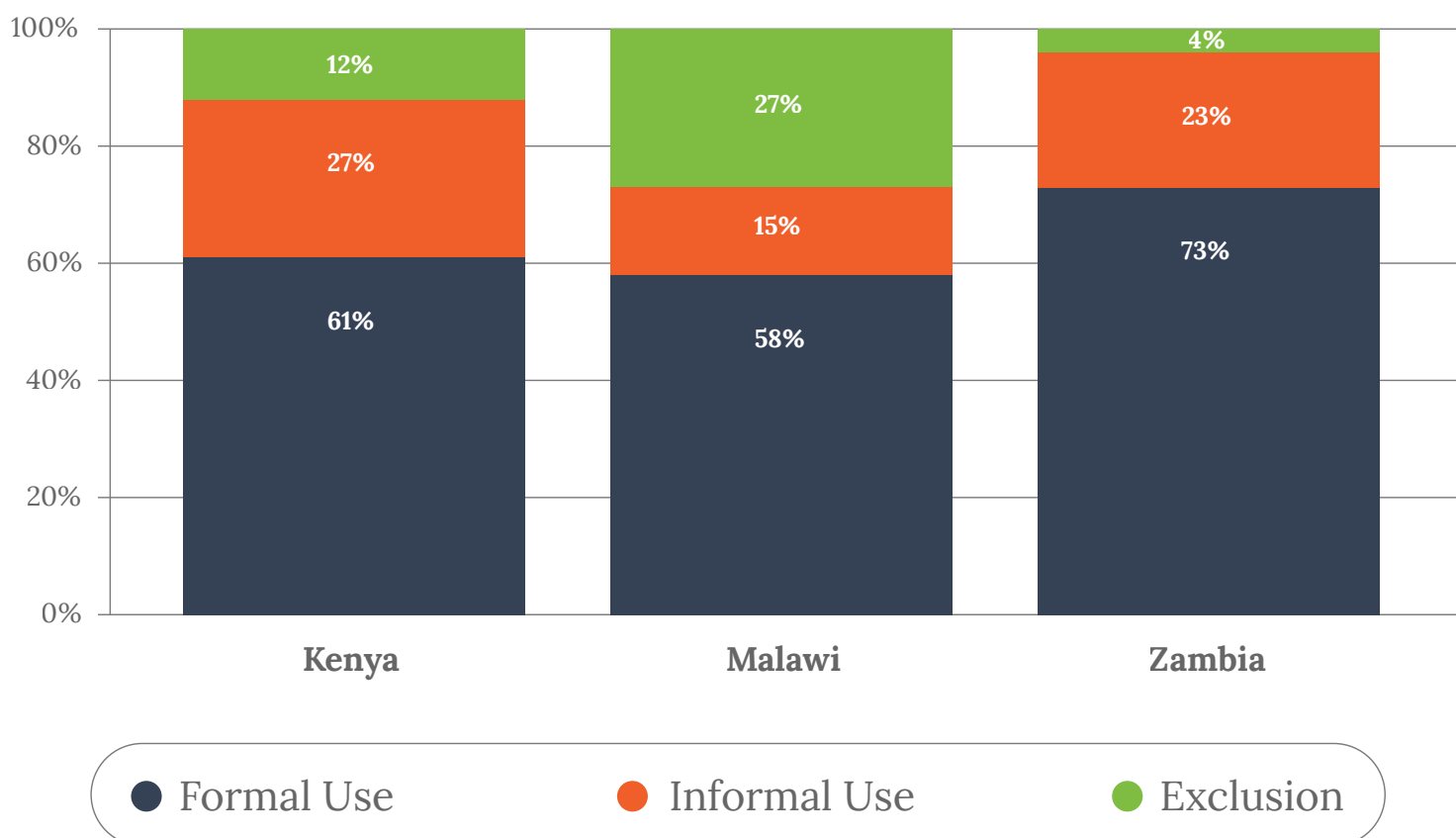


Figure 9: Usage of Digital and Non-Digital Financial Products and Services

The Barriers Dimension

The Barrier Dimension outlines the barriers that MSMEs are likely to face in the interaction with both digital and non-digital financial products and services as shown in Figure 10.

Typical barriers include a lack of knowledge of products or services, missing documentation, high costs associated with a product or service, lack of trust in a product, service or system, bureaucracy, complicated procedures and poor compatibility with a product or service.

Affordability (or lack thereof) was a significant factor in all countries at 28% in Malawi, 24% in Kenya and 14% in Zambia. MSMEs also highlighted a lack of knowledge, 24% in Malawi, 7% in Kenya and 7% in Zambia whilst the lack of compatibility was significant in Malawi 33%, Zambia 21% and Kenya 15%. The findings suggest that there is need to improve the affordability of products for MSMEs. There is also a need to ensure that information surrounding the available products and services is disseminated more effectively. New products need to be developed with the preferences of MSMEs in mind as a significant number feel the products and services are not compatible.

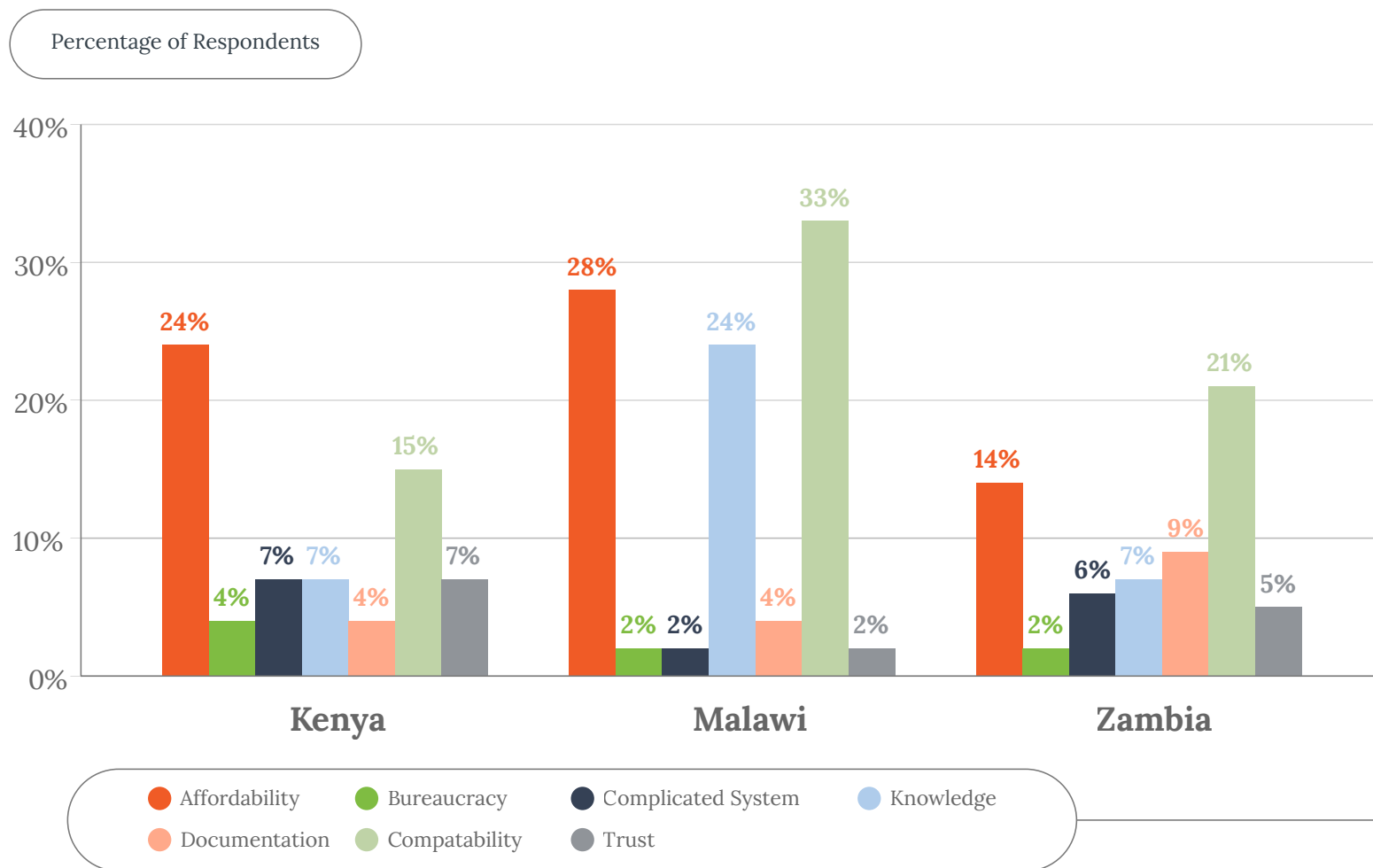


Figure 10: Barriers to Inclusion

Level of Knowledge of MSMEs in Kenya, Malawi and Zambia

We inquired about the level of understanding of mobile money services, capital markets, business insurance products, pension products, credit from commercial banks, credit from microfinance institutions, credit from ROSCAs, the availability of digital services and opportunities in the digital landscape which requires navigation for them to be fully understood.

Figure 11 demonstrates that Zambian MSMEs have the highest levels of knowledge with the most significant knowledge factor being knowledge of mobile money services (96%), knowledge of investments and capital markets (62%), knowledge of business insurance products (64%), availability of loans from ROSCAs (83%) knowledge of the digital products available (80%) and how MSMEs can promote their products online (72%). Kenya only surpasses the other countries in relation to knowledge of banking services available (79%), knowledge of taxation and compliance requirements (77%), and understanding of digital services available (80%).

● Kenya ● Malawi ● Zambia

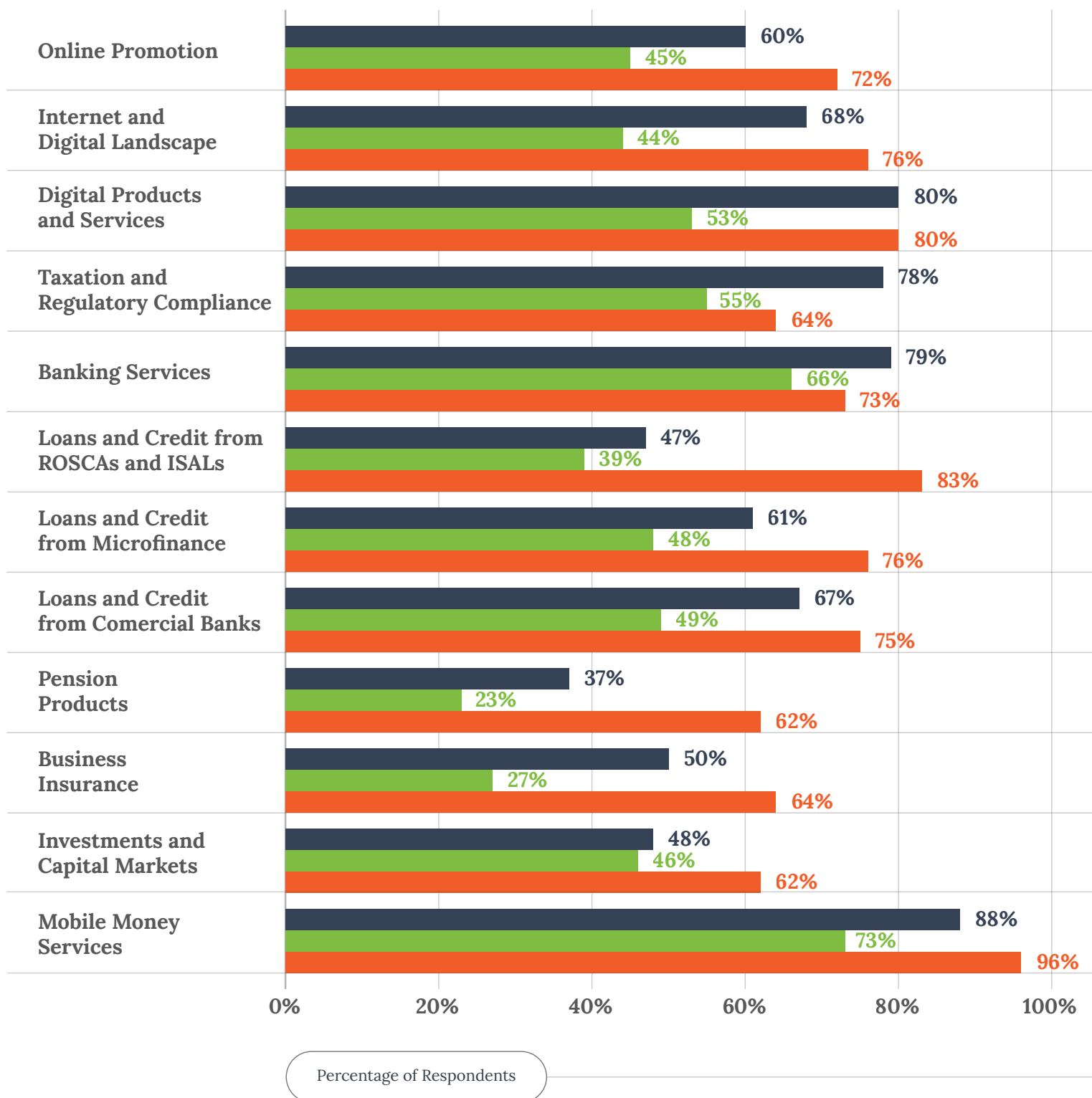


Figure 11: Level of Knowledge of Select Financial Products and Services

Inclusion Measures for Micro Small and Medium Enterprises in Kenya, Malawi and Zambia

A set of four (4) parameters was analysed to assess differences in key population groups with the aim of uncovering nuanced differences or preferences for products used in the groups.

These inclusion measures are:

1. **Gender:** Assessments of access, barriers and usage by gender with the understanding that men and women are affected by cultural contexts differently. With their vastly differing roles, they may also interact with financial products and services differently.
2. **Age:** Assessments of access, barriers and usage by age, understanding that enterprise founders of different ages have different preferences and behaviours in relation to digital and traditional financial products and services.
3. **Location:** Assessments of access, barriers and usage by location with the understanding that enterprises in different areas may have unequal access to financial products and services.
4. **Size:** Assessments of access, barriers and usage by enterprise size. We have observed that micro-enterprises behave very differently and have different levels of access compared to small or medium enterprises.

The Level of Inclusion Based on Gender

Figure 12 shows that the level of inclusion based on gender is marginally different in all the countries. Female-led MSMEs in Kenya and Zambia experience lower rates of inclusion for both formal and informal inclusion but in Malawi female-led MSMEs experience slightly higher levels of inclusion. The difference in inclusion between female-led and men-led enterprises is very slim in Kenya, as 44% of male entrepreneurs and 44% of female entrepreneurs are formally included whilst 33% of male MSMEs are informally included compared to 31% of female entrepreneurs. In Zambia, 48% of male-led MSMEs are formally included compared to 39% of female-led MSMEs in the country. In Malawi, 30% of female-led MSMEs are formally included compared to 35% of male-led MSMEs. In addition, informal inclusion in Zambia is tilted towards female-led enterprises, where 37% are included compared to 29% of male-led enterprises. The strong representation of women in Malawi is because of a higher proportion of women with savings accounts (76%) compared to their male counterparts (67%).

Percentage of Respondents

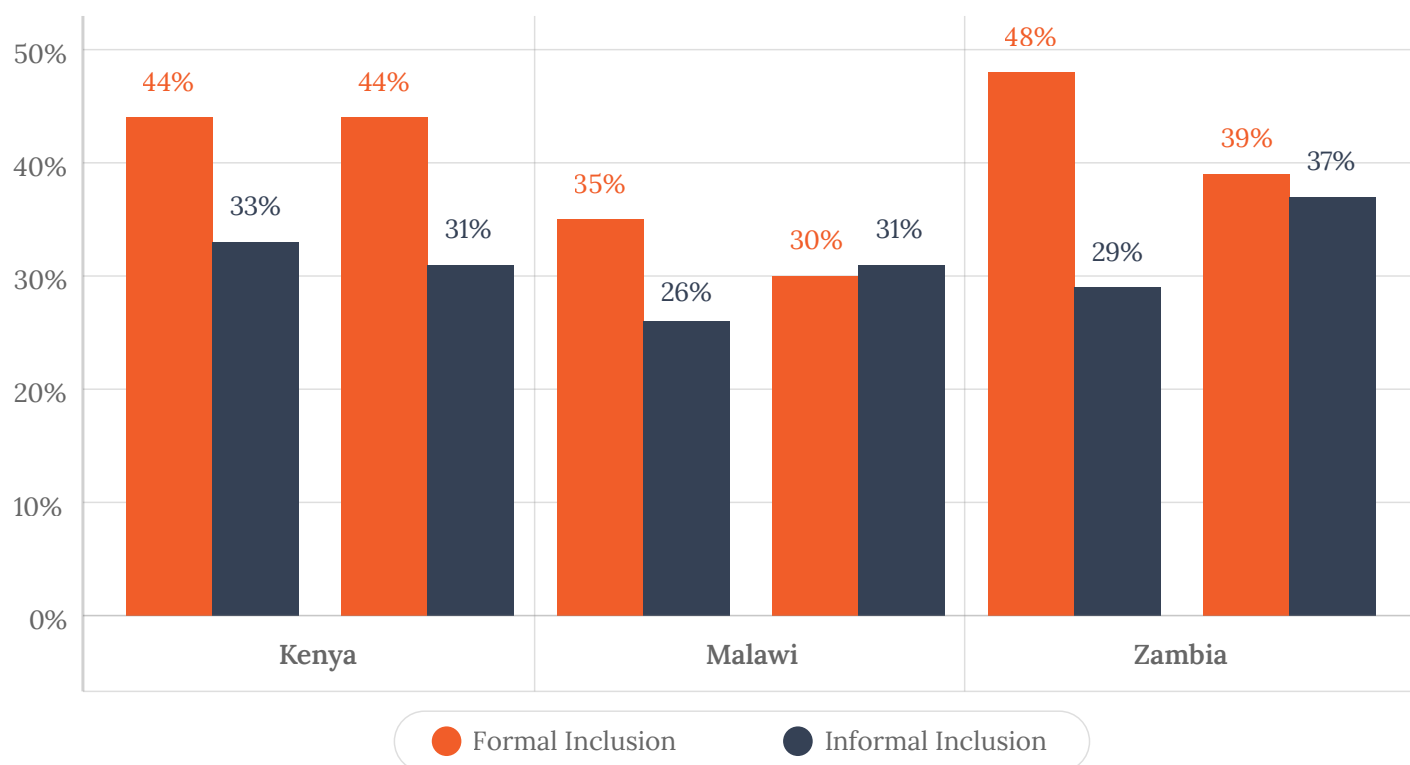


Figure 12: Level of Financial Inclusion Based on Gender of Enterprise Owner

We assessed the barriers to inclusion based on gender. We determined that in Kenya affordability is more significant for men as a barrier (28%) compared to women (26%). This is also true in relation to the compatibility of the product for 22% of men compared to 13% of women. Lack of knowledge is significant for 9% of men and 7% of women. However, for women founders in Kenya, the complexity of the system is more significant for them (11%) compared to men 7% whilst trust is the most significant barrier as stated by 22% of women compared to 8% of men as shown in Figure 13.

In Zambia, compatibility is a stronger barrier for men (33%) than women (22%) followed by documentation (11% for men and 8% for women). However, for women, the affordability of the system (17%) is significant compared to 13% of men alongside the complexity of the systems (8% of women compared to 5% of men). Knowledge (or lack of it) is a barrier for 11% of women in Zambia compared to 5% of men.

In Malawi compatibility was raised as a concern (35% of women and 32% of men), as well as affordability (33% of women compared to 27% of men) and lack of knowledge (31% of women compared to 27% of men).

Across all three (3) countries affordability, compatibility and lack of knowledge stand out as the strongest barriers to digital and traditional financial inclusion.

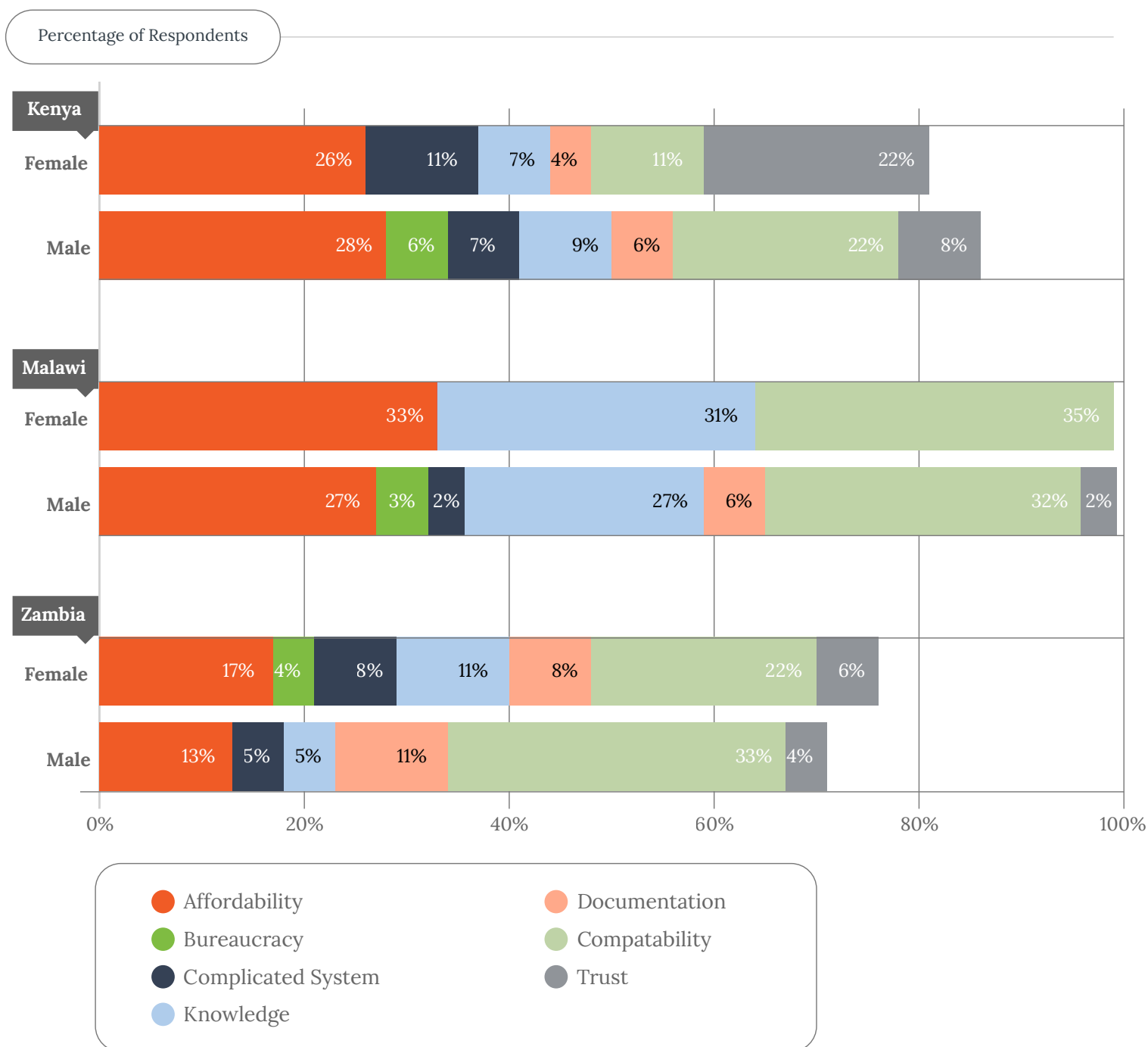


Figure 13: Barriers Experienced Based on Gender

We sought to understand how different genders respond to the requirements to comply.

We discovered that full compliance is more common amongst female founders in Kenya and Malawi as shown in Figure 14. Female founders in Zambia are more likely to be non-compliant whilst in Kenya and Malawi men are more likely to be non-compliant. This is also true for 28% of men and 24% of women in Kenya; 75% of men and 68% of women are non-compliant in Malawi.

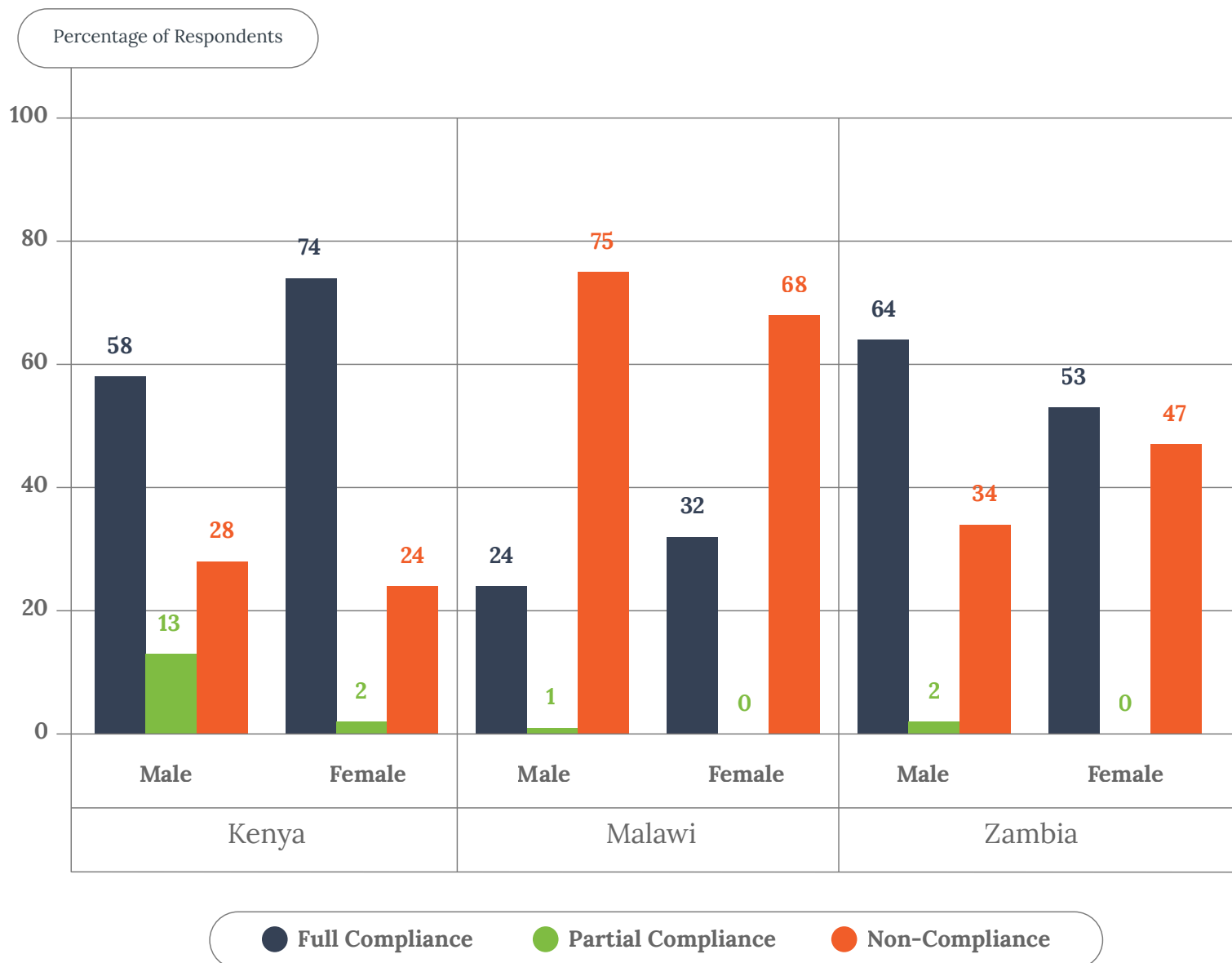


Figure 14: Differences in Compliance Based on Gender

We sought to understand how men and women founders use digital products differently. We discovered that in Kenya and Zambia, men have more access and subsequently use digital products more than women founders. According to Figure 15, 54% of men in Kenya have access to digital products and services compared to 50% of female-led MSMEs, whilst in Zambia 60%

of male-led MSMEs have access compared to 48% of female-led MSMEs. Comparatively 23% of male-led MSMEs in Kenya have demonstrated robust usage of digital products and services in comparison to 21% of the female-led MSMEs, whilst in Zambia 28% of men-led MSMEs demonstrate robust usage of digital products and services compared to only 20% of women in Zambia.

The case for Malawi is slightly different. In Malawi, women demonstrate both stronger access and usage of digital products and services where 39% of female-led MSMEs have access compared to 36% of male-led MSMEs. Similarly, 15% of female-led MSMEs demonstrate usage compared to 12% of male-led MSMEs in Malawi.

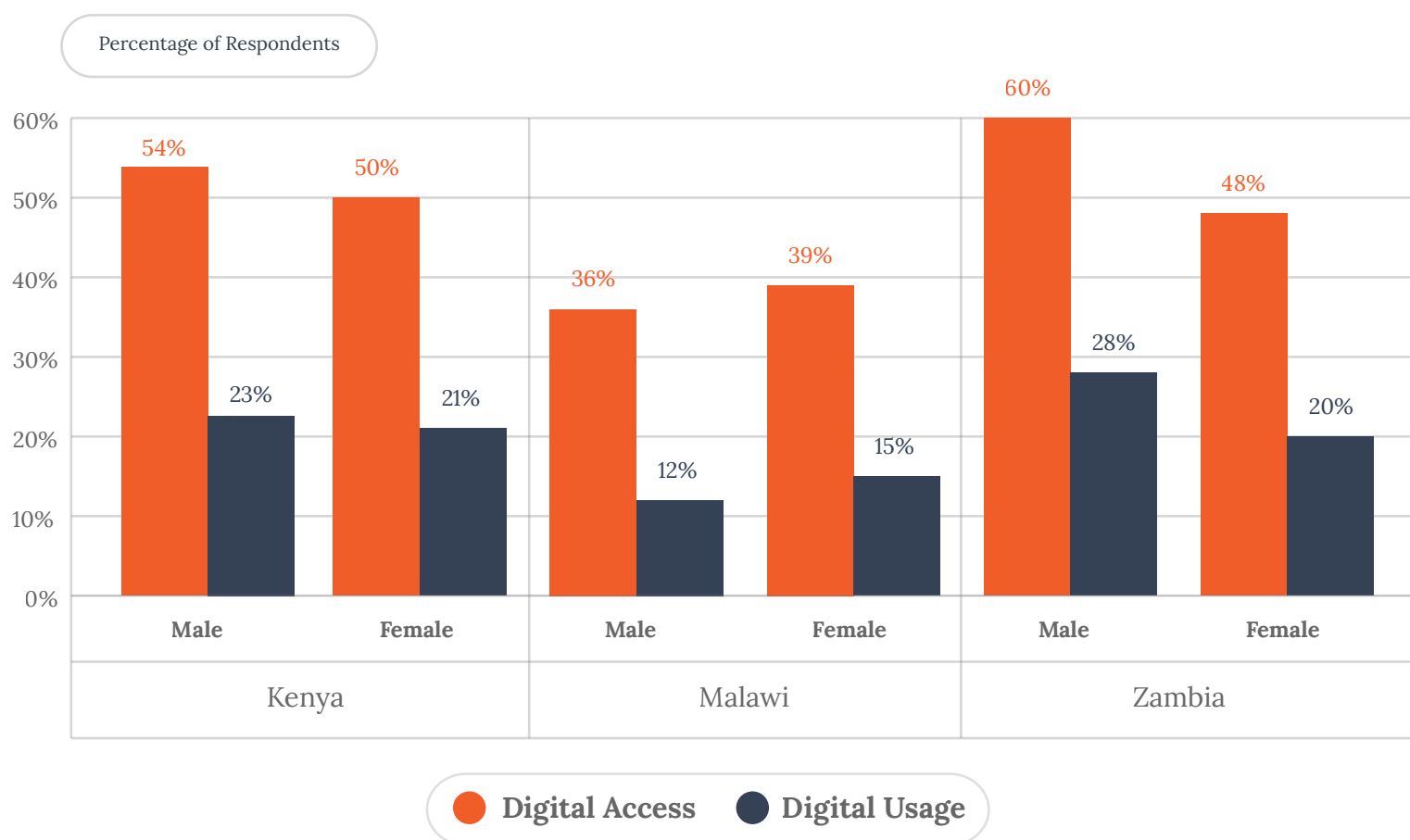


Figure 15: Differences in Access and Usage of Digital Products Based on Gender

Figure 16 shows that there are more male entrepreneurs in Kenya, Malawi and Zambia with knowledge of digital products and services than their women counterparts. In Kenya and Malawi, women however show a better understanding of the digital landscape and how to promote products and services online. Knowledge levels of digital products and services are generally higher in Zambia, followed by Kenya, with Malawi demonstrating the lowest level of knowledge.

Percentage of Respondents

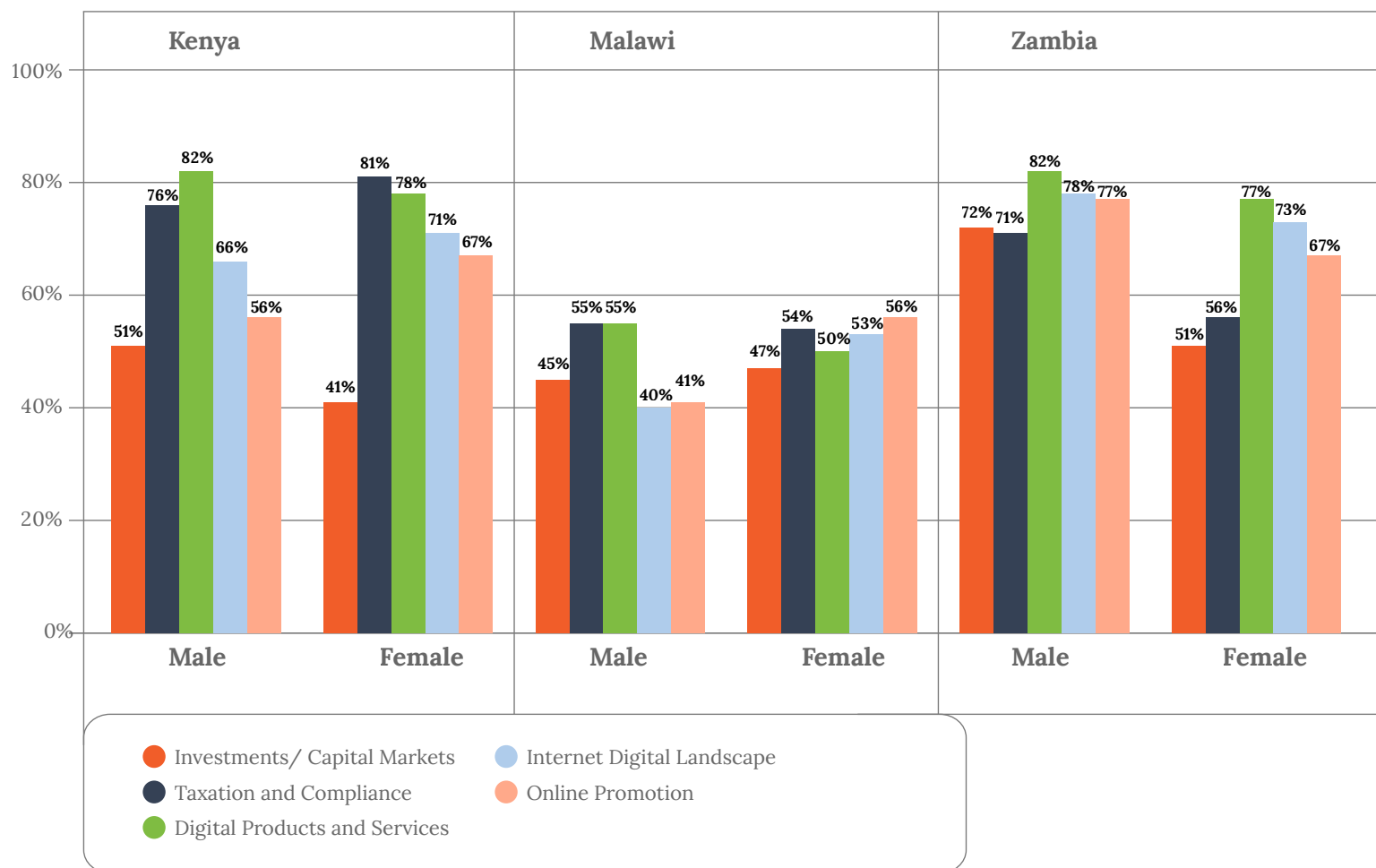


Figure 16: Difference in Knowledge of Financial Products and Services Based on Gender

The Level of Inclusion Based on Enterprise Size

The size of an enterprise is a strong indicator of inclusion in both the digital and traditional financial inclusion spaces. Micro enterprises are most unlikely to be included as demonstrated in Figure 17 showing that in Kenya, Malawi and Zambia micro enterprises have lower levels of inclusion into formal financial spaces. However, the reverse is true, informal inclusion is more prominent amongst micro enterprises than small and medium enterprises as demonstrated in Figure 17.

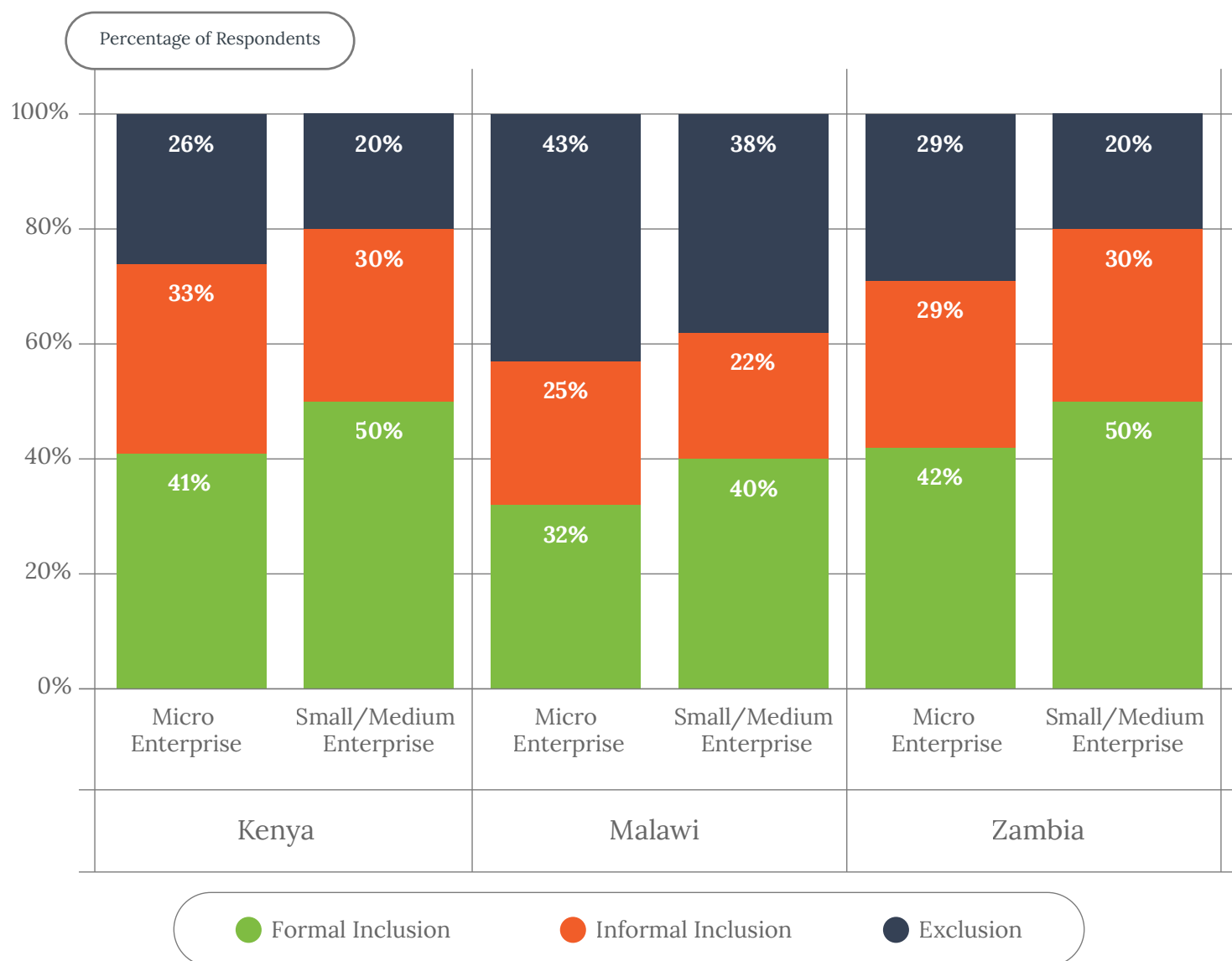


Figure 17: Size of Enterprise and Its Influence on Inclusion

Regarding the type of access as determined by size, Figure 18 shows that small and medium enterprises have more access to bank accounts, have made successful loan applications in the past and have some form of insurance for the business. In all three countries, inclusion through access to formal products and services is higher for small and medium enterprises. Micro enterprises are more likely to have access to informal products and services.

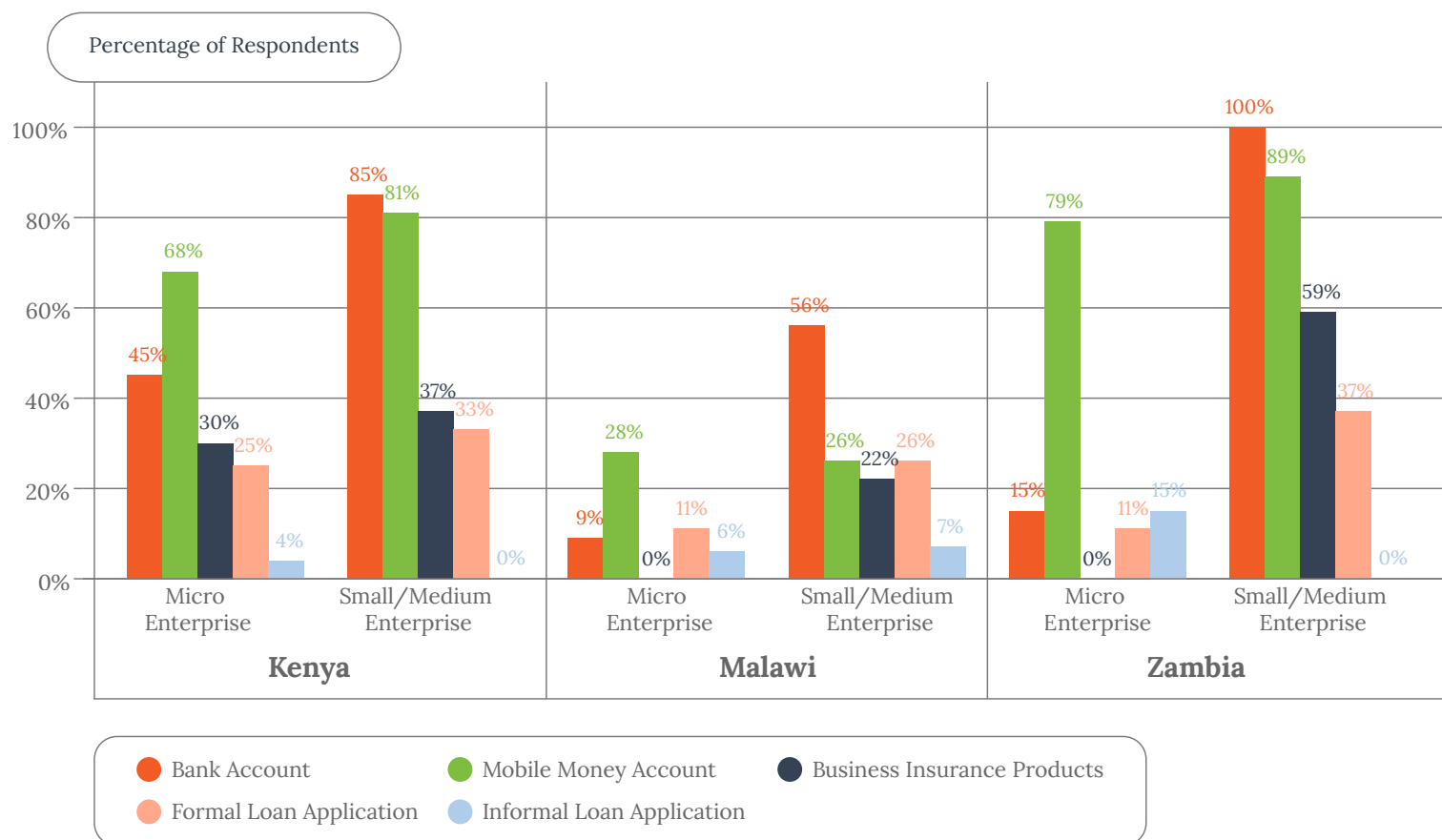


Figure 18: Differences in Size and How They Affect Access

Figure 19 shows similar trends that small and medium enterprises have more access to formal savings and investment vehicles in all three countries. Micro enterprises have more access to informal sources in all three countries. This shows that size is important for formal access and micro enterprises in these countries require support to grow into larger entities with less reliance on informal sources of financial products and services.

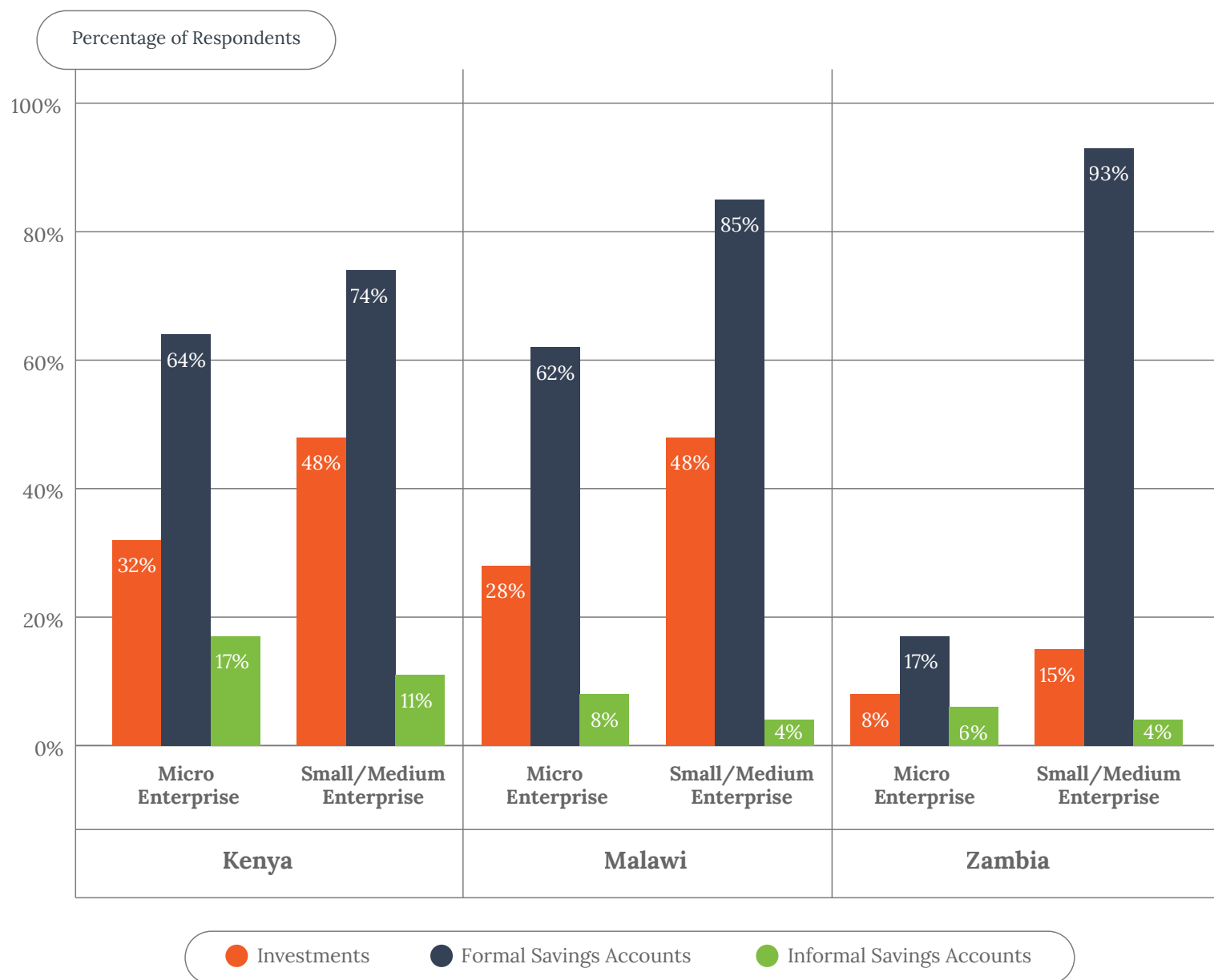


Figure 19: Size and Access to Formal and Informal Investments

The most common barriers for enterprises of all sizes are the lack of compatibility of products and services, their lack of affordability and the lack of knowledge by start-up founders on their existence or how to use them. As Figure 20 indicates small enterprises in Zambia and Malawi especially indicated that compatibility was a more significant issue for them than for their micro-enterprise counterparts. In Kenya, the most significant concern was the lack of affordability of the products and services.

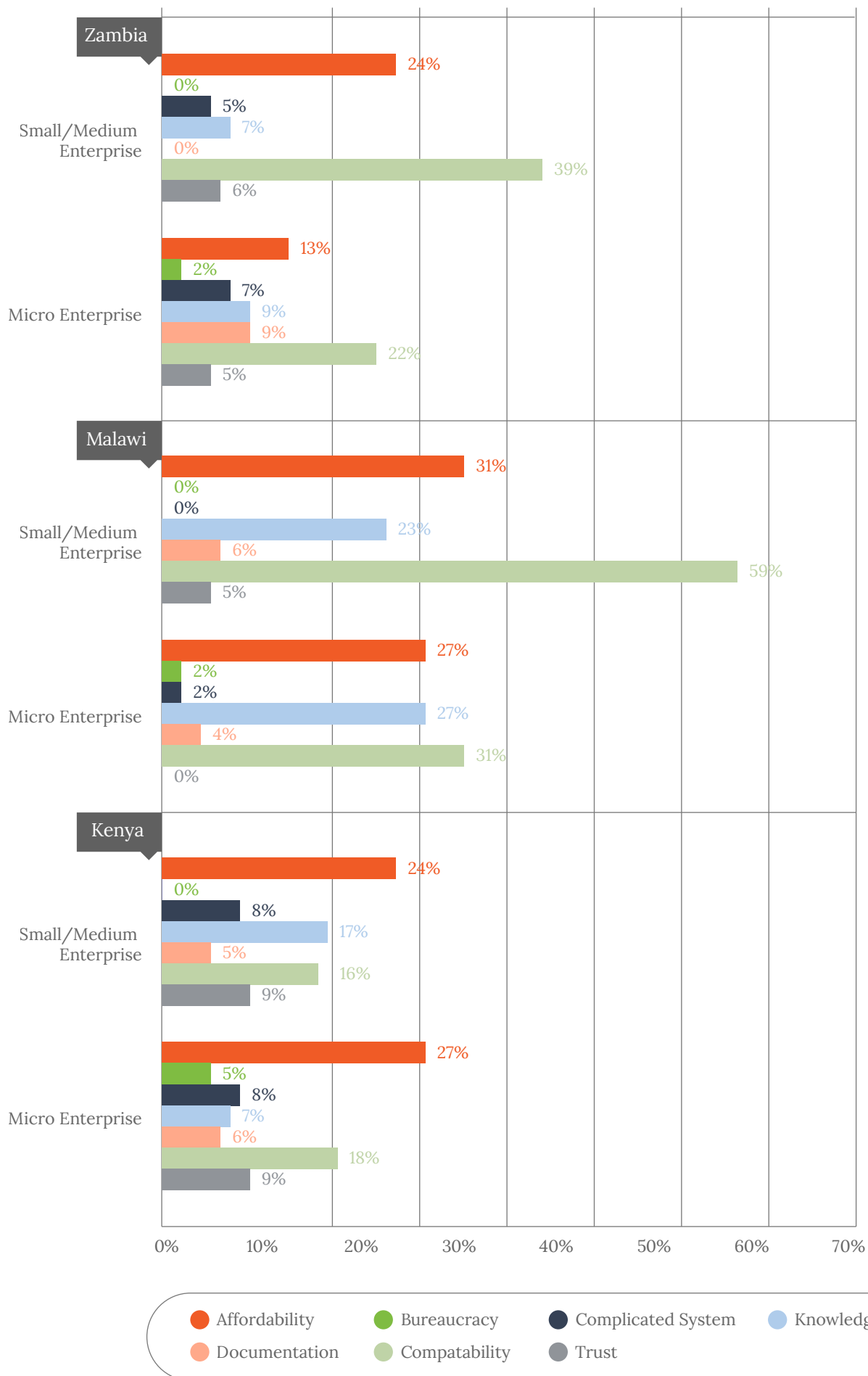


Figure 20: Size and Barriers Experienced

As Figure 21 shows, in Kenya, 48% of micro-enterprises are fully compliant while a corresponding 94% of small and medium enterprises are partially compliant. For Malawi, only 9% of micro-enterprises are fully compliant and 59% of small and medium enterprises are fully compliant. And in Zambia, 38% of micro-enterprises are fully compliant whilst 100% of small and medium enterprises are fully compliant. Malawi seems to have the strongest compliance concerns with the highest rate of non-compliance of micro-enterprises at 89% and only 9% full compliance of micro-enterprises.

Country	Size of Enterprise	Compliance Level	Percentage
Kenya	Micro Enterprise	Full Compliance	48%
		Partial Compliance	14%
		Non-Compliance	38%
	Small Enterprise	Full Compliance	3%
		Partial Compliance	94%
		Non-Compliance	3%
Malawi	Micro Enterprise	Full Compliance	9%
		Partial Compliance	2%
		Non-Compliance	89%
	Small Enterprise	Full Compliance	59%
		Partial Compliance	0%
		Non-Compliance	41%
Zambia	Micro Enterprise	Full Compliance	38%
		Partial Compliance	1%
		Non-Compliance	61%
	Small Enterprise	Full Compliance	100%

Figure 21: Size and Its Influence on Compliance

Figure 22 shows the results of our assessment of how digital financial products and services are used. Micro and small enterprises in Kenya have high levels of use of smartphone, computers, the Internet, digital payment systems, websites, cryptocurrency and e-commerce platforms. Small and medium enterprises in both Malawi and Zambia also demonstrate strong use of smartphones, computers, the internet, digital payments systems and website use. Zambia and Malawi however have little evidence of cryptocurrency platform use or e-commerce platforms. Micro enterprises in Malawi and Zambia have some evidence of using smartphones, computers and the Internet but little evidence of using any of the other digital products and services. Needless to say, smartphone penetration seems highest in Zambia with 100% of small and medium enterprises having access to smartphones which can connect them to the internet and 93% having consistent access to the internet.



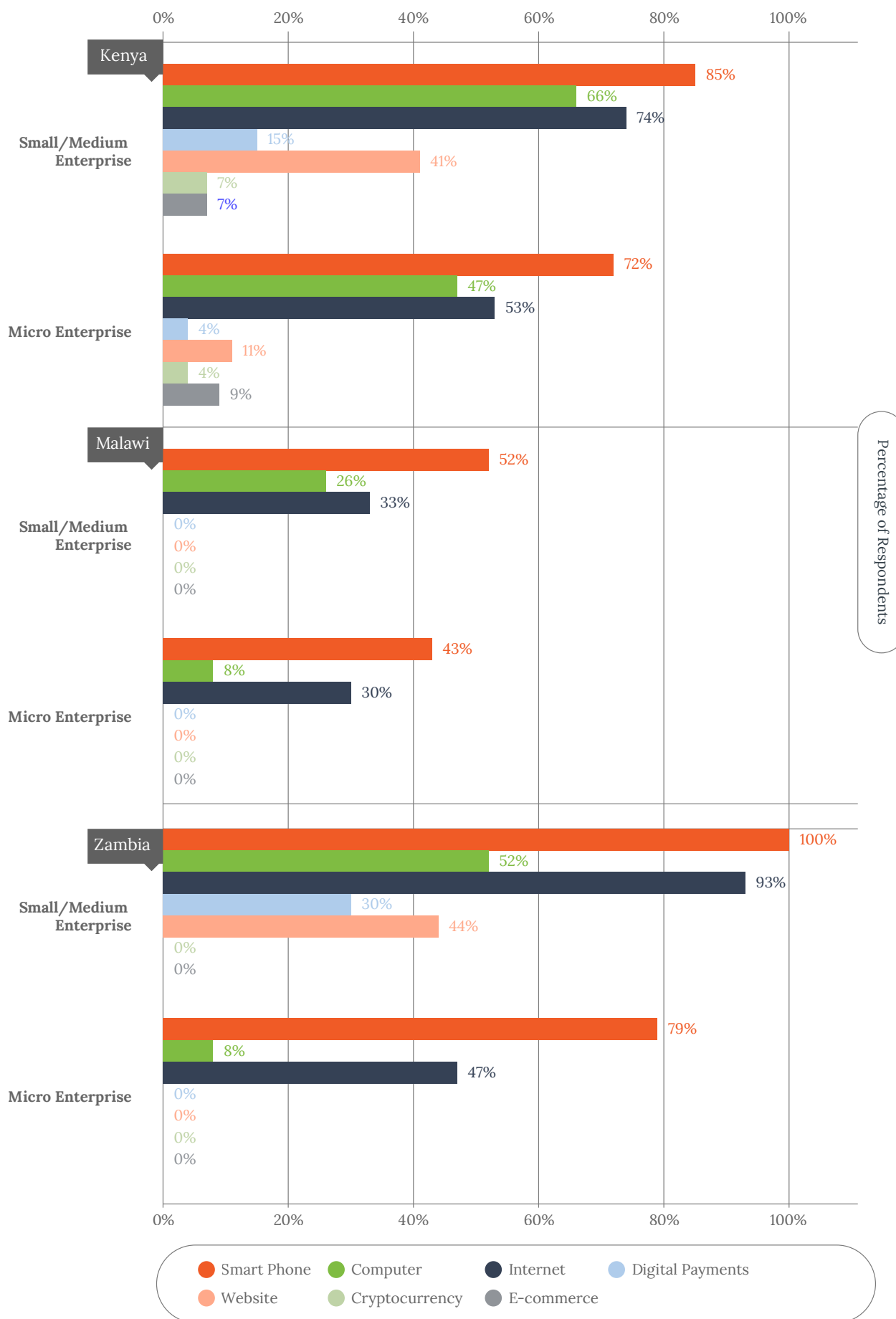


Figure 22: Size and Its Influence on Digital Product Use

Figure 23 shows the influence of size on how traditional financial products and services are used. In Kenya, Malawi and Zambia we see that the numbers of micro and small enterprises using more than one bank service are very low except by small and medium enterprises in Zambia. This implies that the other products and services the bank offers may not be suitable or compatible with their needs. Regarding restrictions to banking services which determine the level of accessibility of those financial products and services, we see that across all three (3) countries, the number of MSMEs stating they have no restrictions is very high implying that regular financial products and services are easy to access across all sizes of enterprise and in all countries. We also see that it is easy for micro and small enterprises in all of these countries to access loan services with the ease being higher for small and medium enterprises in all three countries. We note as well that the perceptions of loan interest rates being low are stronger with small and medium enterprises in Kenya and Malawi as shown in Figure 23.

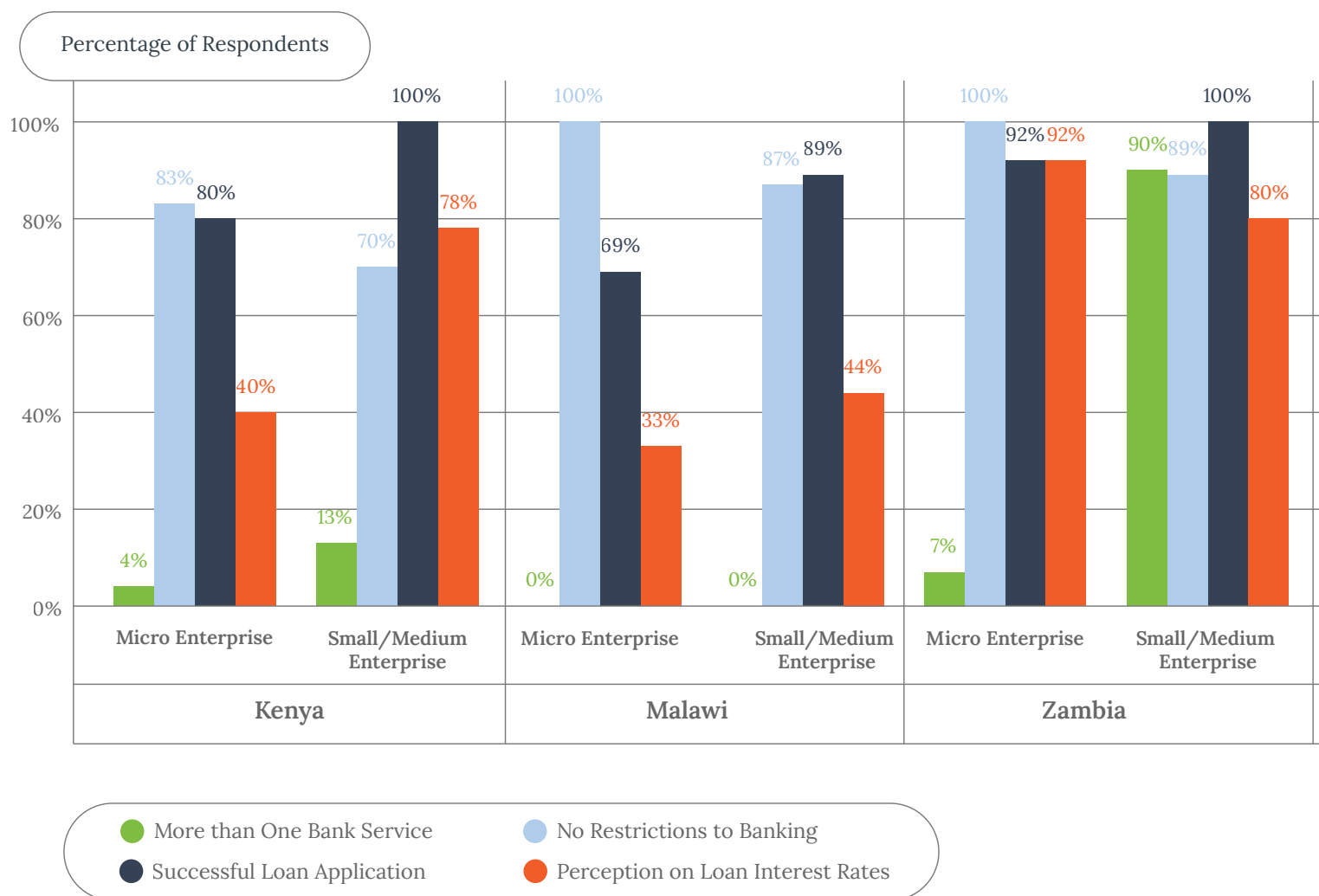


Figure 23: Size and Its Influence on How Financial Products and Services Are Used

As Figure 24 demonstrates, in all three countries small and medium enterprises demonstrate higher levels of knowledge and higher levels of confidence than micro-enterprises when discussing topics about the digital landscape, digital products and services or how products can be promoted online or in digital spaces. Small and medium enterprises also demonstrate higher levels of knowledge when considering traditional financial products and services such as investments or capital markets and important aspects such as taxation and compliance.

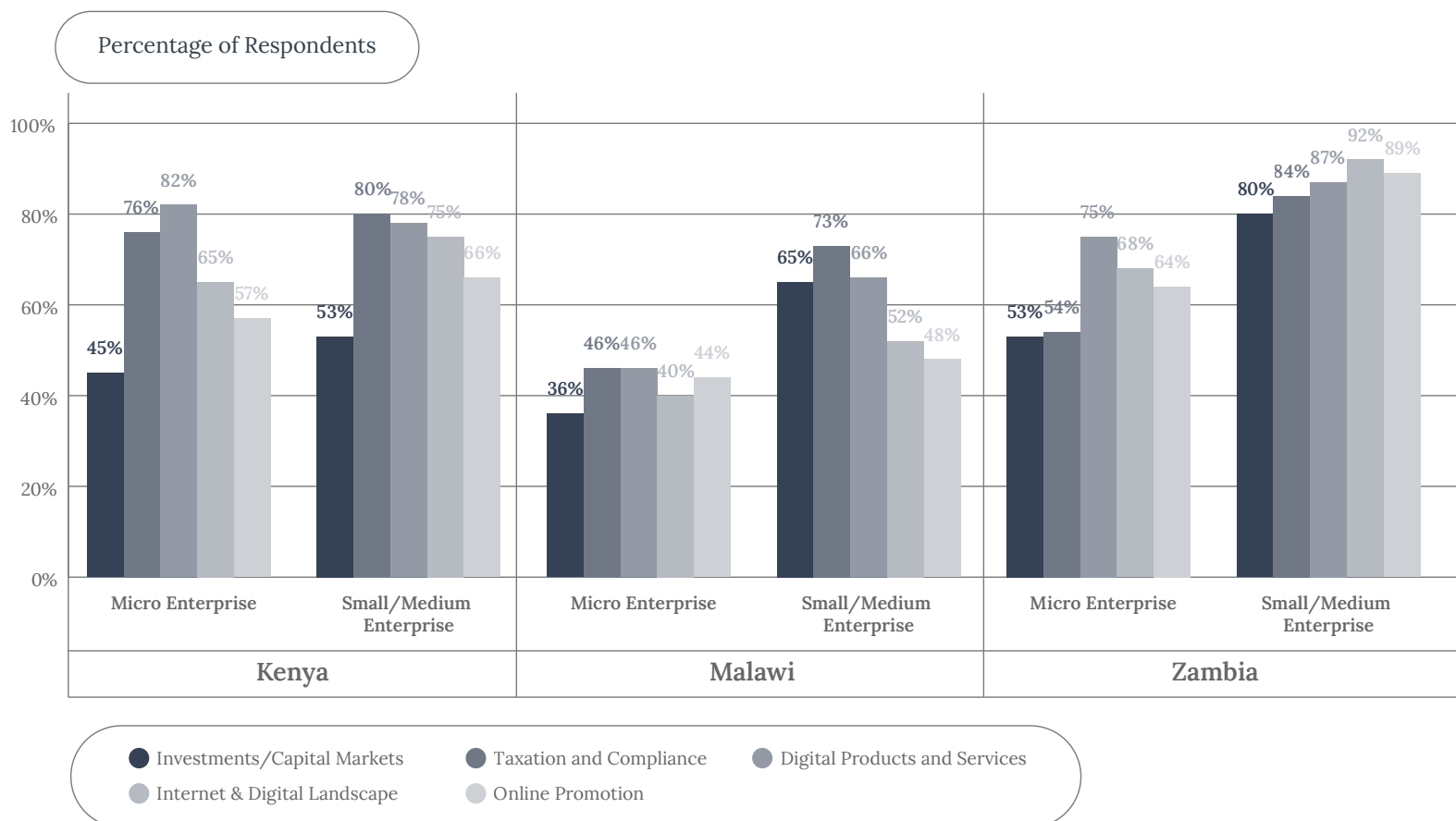


Figure 24: Size and Its Influence on Knowledge of Digital Products and Services

The Level of Inclusion Based on the Age of Enterprise Owner

The age of the enterprise owner is a factor affecting how both digital and traditional financial products and services are accessed as demonstrated in Figure 25. Here we see that younger enterprise owners i.e. between 15 and 35 years have similar access with very slight differences to older enterprise owners who are 35 years and above.

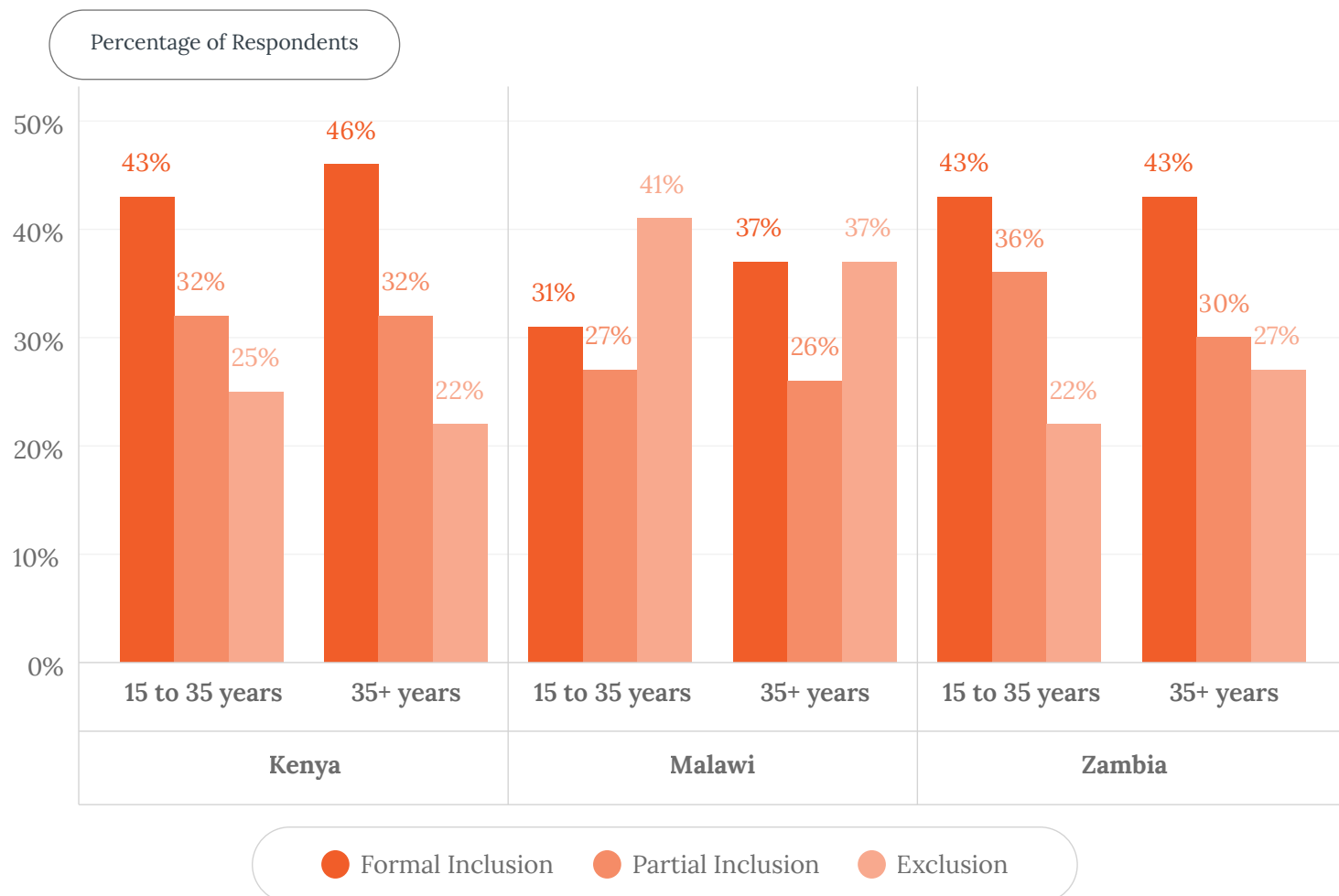


Figure 25: Age of Enterprise Owner and Influence on Access

Younger enterprise owners seem to have more access to savings accounts (both formal and informal) and more access to mobile money accounts as shown in Figure 26. However, older entrepreneurs seem to have more access to investments and capital markets in Malawi and Zambia as shown in Figure 26. Both age groups have access to formal and informal sources of information with older founders in Kenya, and Malawi having favoured access to informal sources and better access to formal sources in Zambia and Kenya. Older enterprise owners also have better access to investments and capital markets in Malawi and Zambia whilst young founders lead in Kenya for investments.

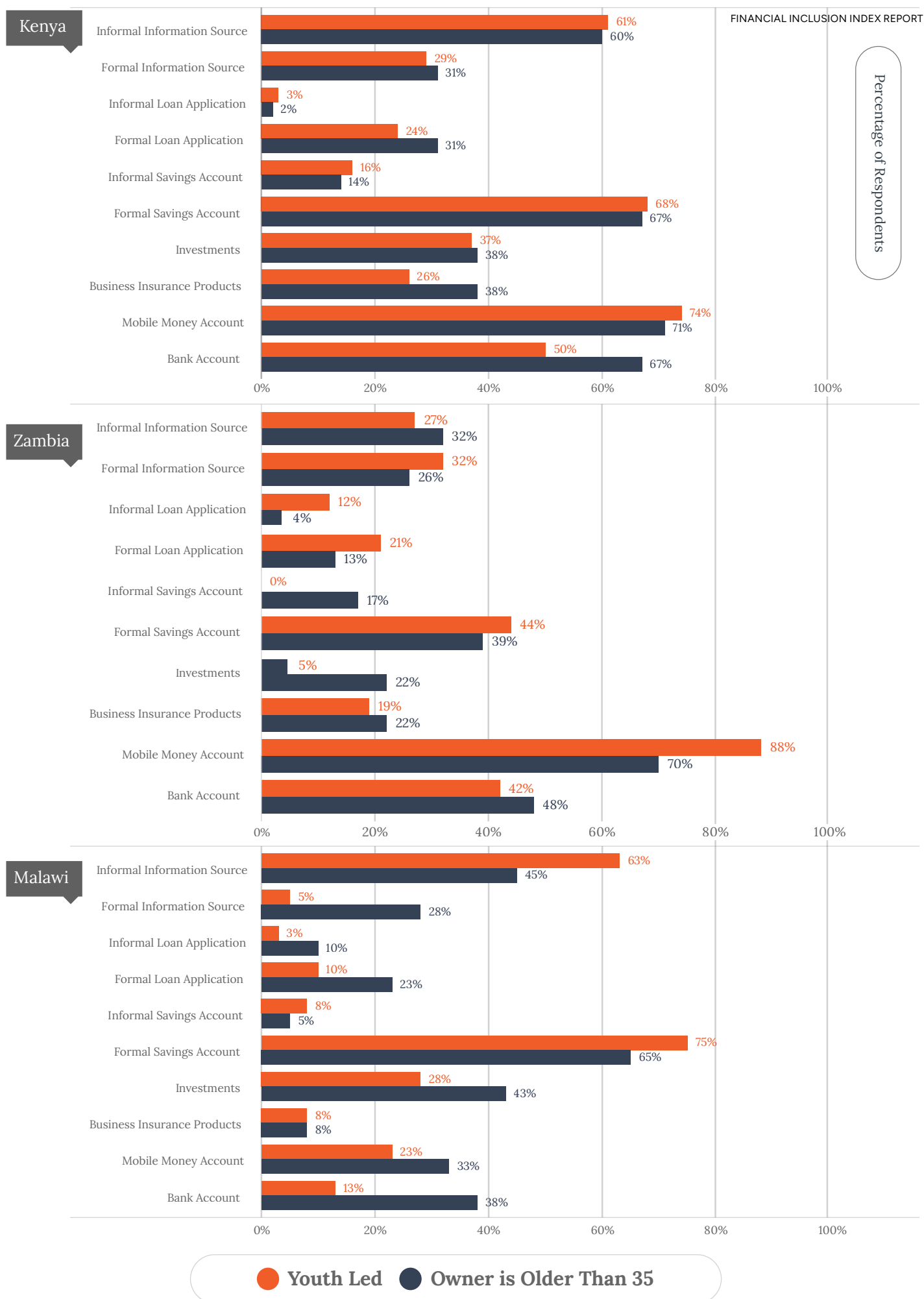


Figure 26: Different Access by Age to Financial Products and Services

Figure 27 shows level of access to both traditional and digital financial products. Younger enterprise owners expressed fewer barriers in Zambia and Kenya compared to older enterprise owners. This is because younger enterprise owners have fewer challenges with documentation, but have lower trust issues with the system and are less likely to complain about the affordability of the products and services. They also exhibit higher levels of knowledge about how the system works and so are less likely to find a lack of information as a barrier.

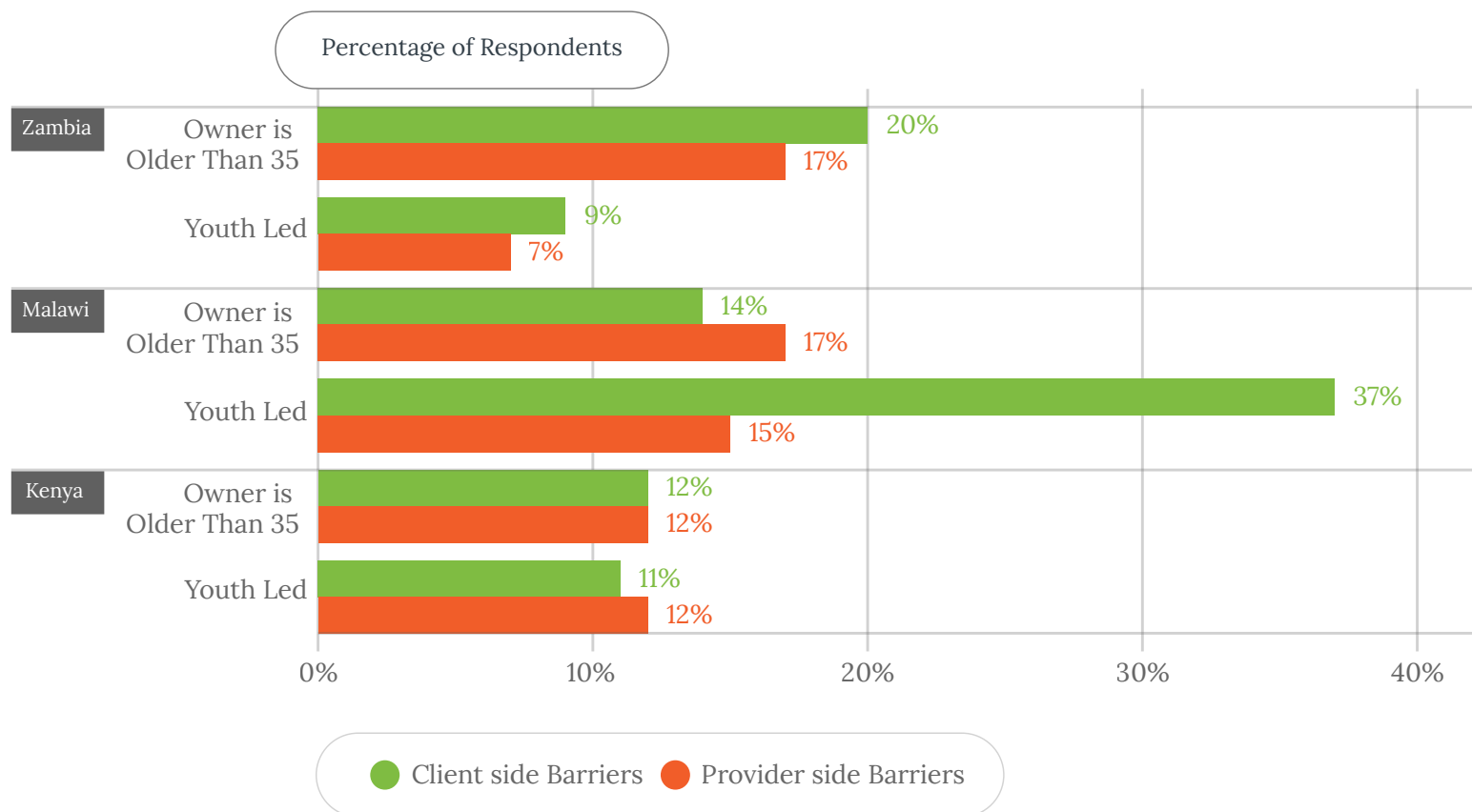


Figure 27: Age of Enterprise Owners and Its Influence on Barriers



Despite the slightly higher access rates of young people, Figure 28 shows that non-compliance is higher amongst young enterprise owners across all three (3) countries which lowers their inclusion score. This, once again, points to the importance of compliance in promoting inclusion. In all three countries, full compliance is more prevalent among older enterprise owners. Although younger owners have an edge in terms of access to products and services (including digital products that promote digital inclusion) they become excluded because of their non-compliance.

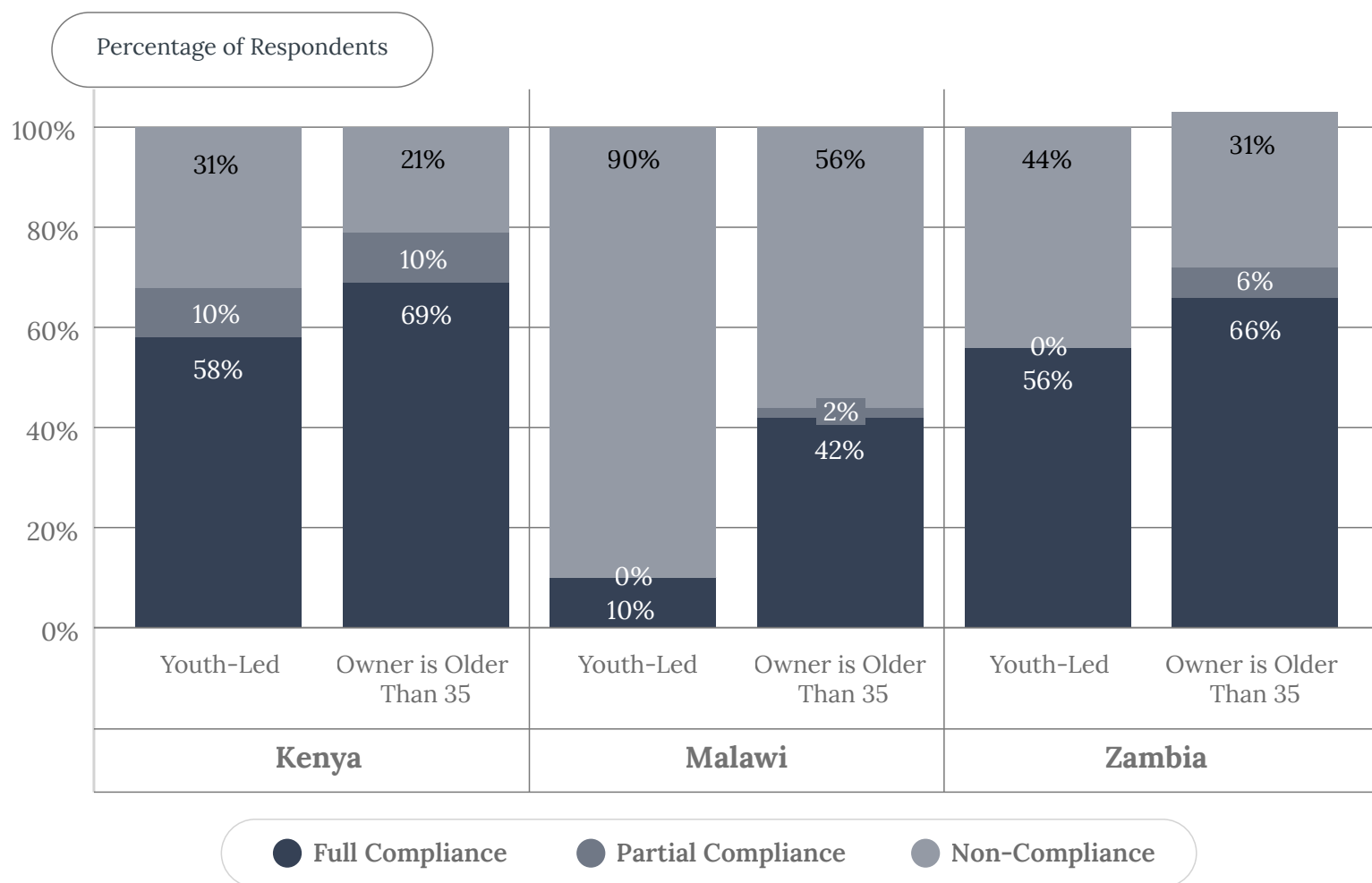


Figure 28: Age and Its Influence on Compliance

Figure 29 shows that younger enterprise owners in all three countries are more likely to have access to a smartphone. Computer access in Kenya and Malawi favours older enterprise owners over the age of 35 years. Access to the Internet varies across the three countries with older people in Zambia and Kenya having more access to the Internet whilst younger people in Malawi have more access to the Internet than their older counterparts.

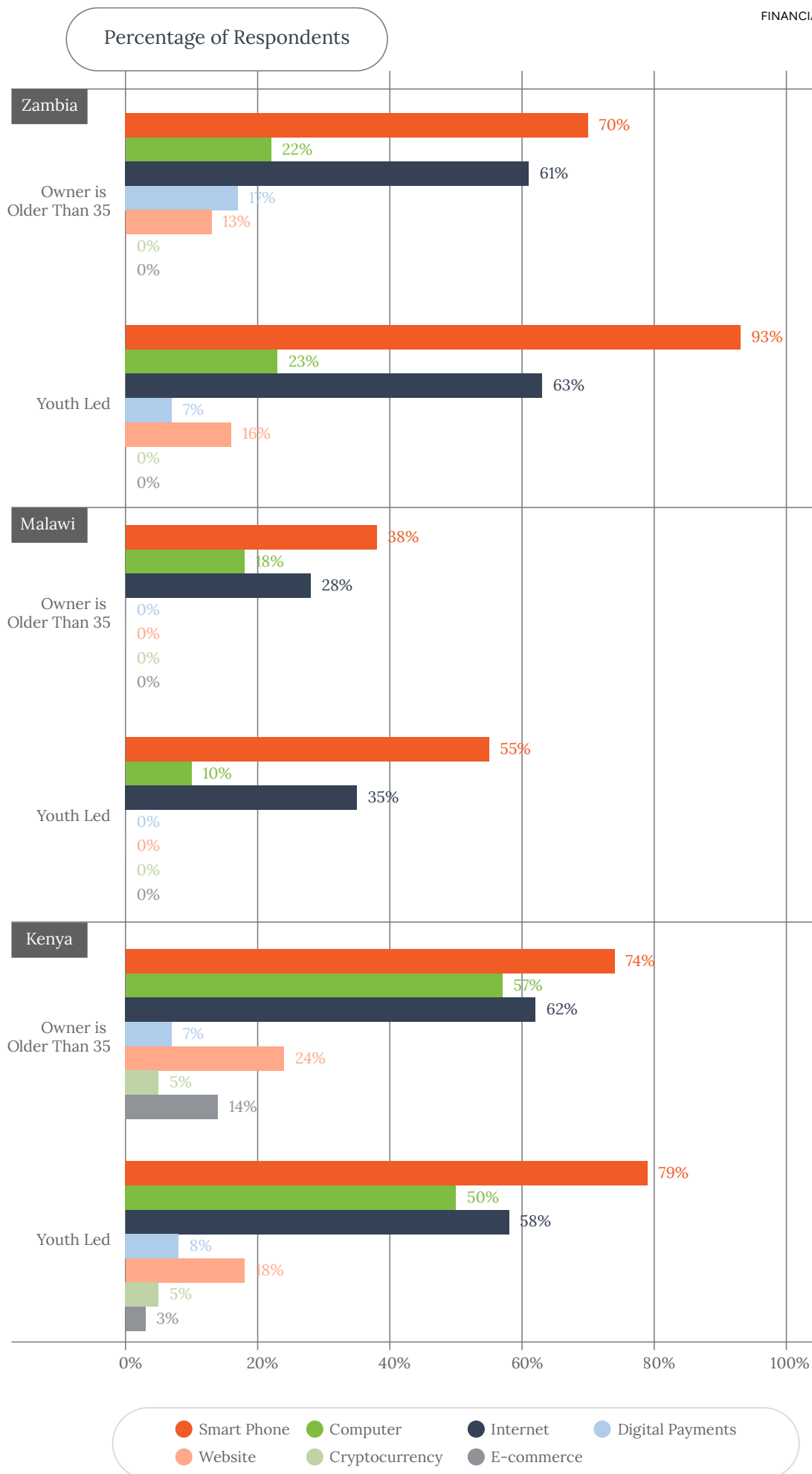


Figure 29: Age and its Influence on the Use of Digital Products and Services

Despite young people having strong access to products and services, their level of knowledge regarding key financial products and services is not always commensurate with their level of access as shown in Figure 30, something which also brings down their inclusion score. In Kenya and Malawi, they have more access but don't always know how to navigate certain systems for compliance, or investment. For example, young people in Kenya are less likely to have a robust knowledge of taxation and compliance. In Malawi, young founders are less likely to know about investments and capital markets, taxation and compliance, and the availability of digital products and services. However young people in Malawi do exhibit more knowledge about how products can be promoted online. When comparing age groups in Zambia, it is noted that younger enterprise owners seem to demonstrate higher levels of knowledge all round. For example, younger enterprise owners have higher levels of knowledge when considering investments and capital markets, taxation and compliance, knowledge of the digital landscape, and knowledge of online platforms and how products can be promoted online.

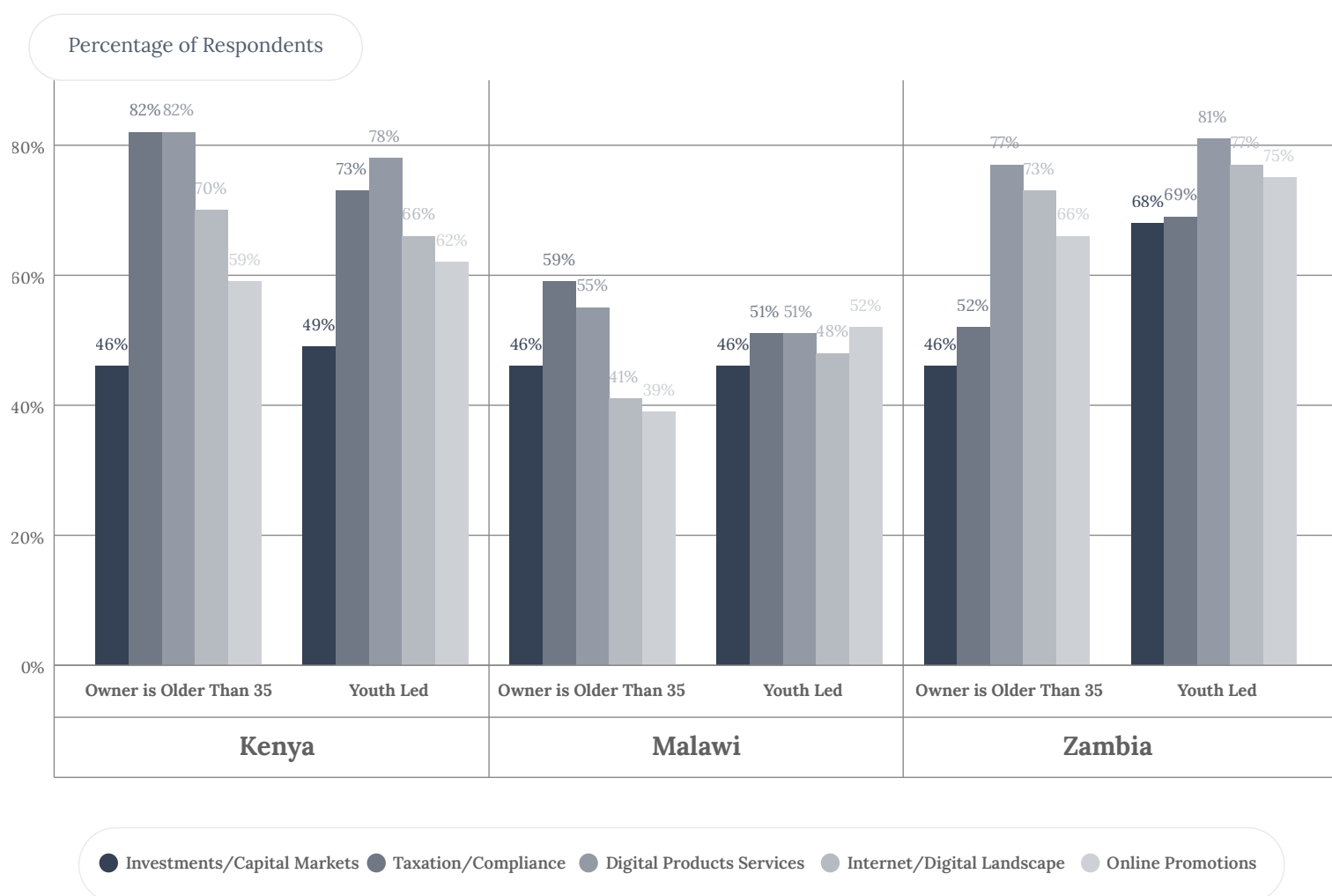


Figure 30: Age and Its Influence on Knowledge of Digital Financial Products and Services

The Level of Inclusion Based on Location of Enterprise

Regarding informal inclusion access, the differences are not as profound across all three countries.

Figure 31 shows that in Kenya, urban-based MSMEs have slightly more access (27%) compared to MSMEs in other areas (21%). In Malawi, urban-based MSMEs have slightly less access to informal products and services (21%) than those who are in other areas (23%). In Zambia, urban-based enterprises (28%) have more access than those in other areas (31%).

However formal access metrics demonstrate stronger differences. In Zambia and Malawi, urban-based MSMEs have stronger access as noted by 26% of urban MSMEs in Malawi with access compared to 25% in other areas; whilst in Zambia 36% of urban MSMEs have access to formal services compared to 26% of MSMEs in other areas.

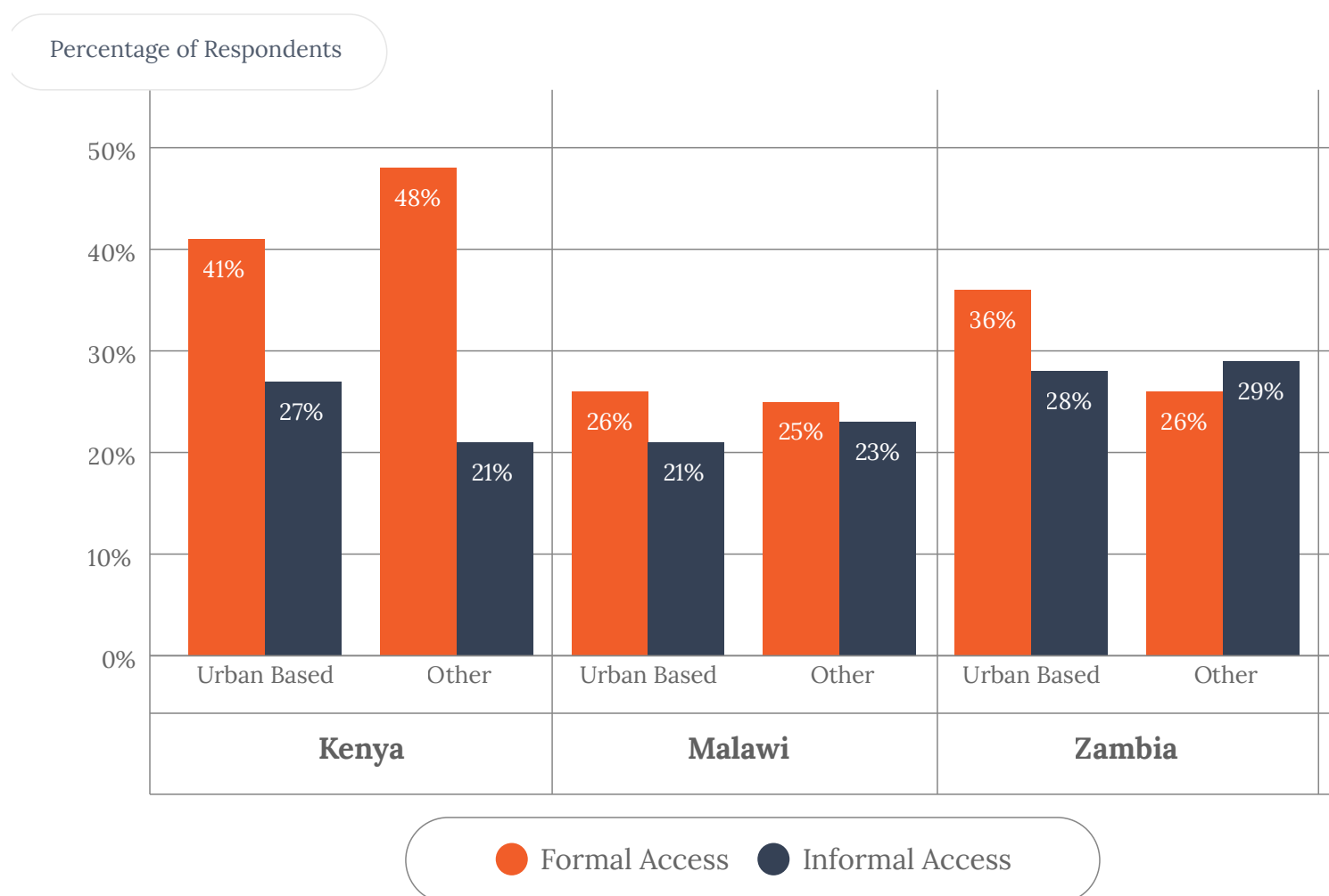


Figure 31: Location and Its Influence on Formal and Informal Inclusion Access

In Kenya MSMEs in other areas have more barriers as compared to those in urban centres. The major barriers which prompted these differences include affordability and systems which seem more complicated for the MSME systems.

Urban-based MSMEs in Malawi have more barriers. These MSMEs cited affordability and the complexity of the system as the reason for barriers possibly because products and services are not fit for purpose and the associated costs may not support the financial position of the enterprise owners.

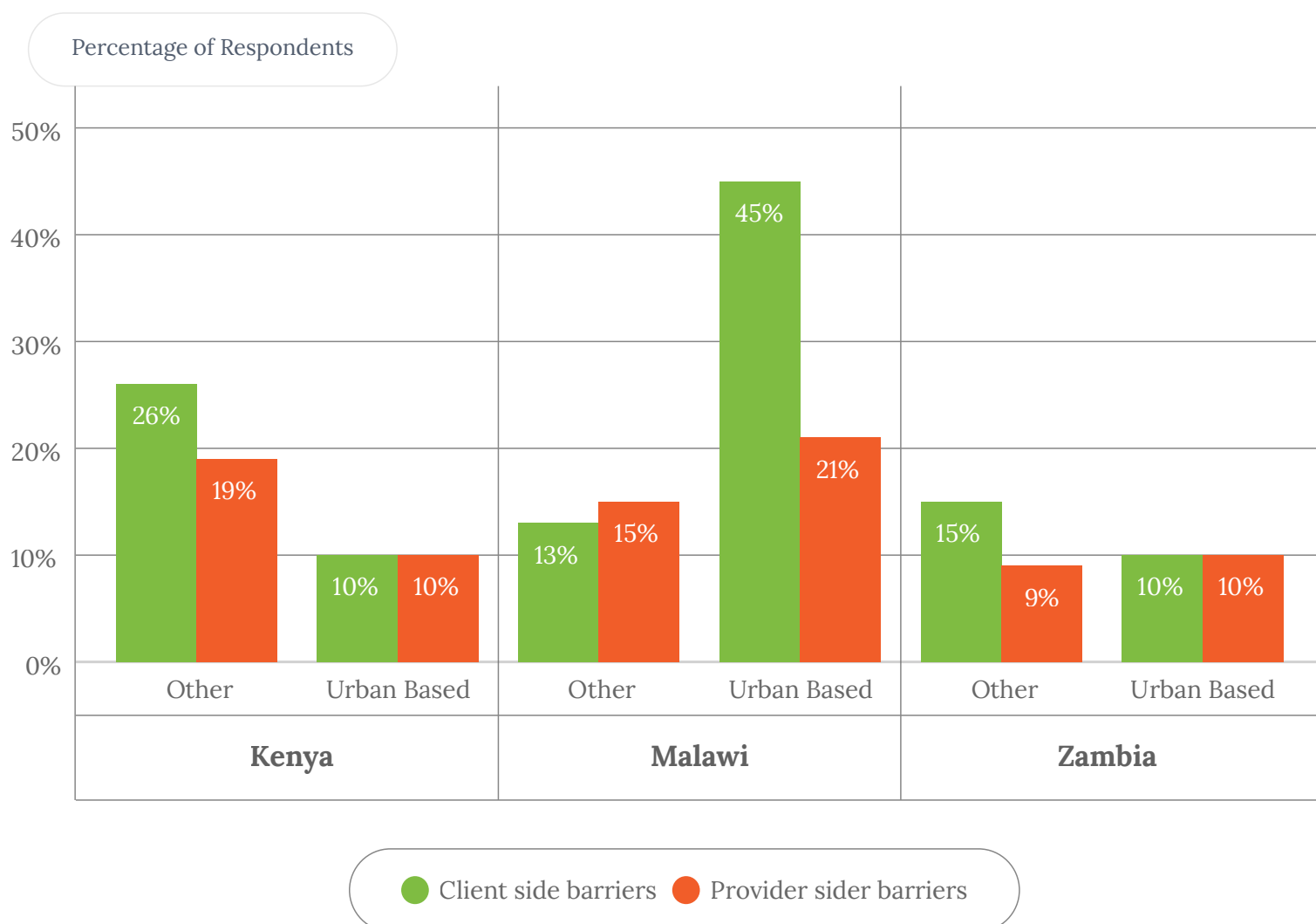


Figure 32: Barriers Experience by MSMEs in Different Locations

MSMEs in urban centres in Kenya, Malawi and Zambia are more likely to comply compared with the MSMEs in other areas in these countries. For example, in Kenya, 64% of urban MSMEs are fully compliant compared to 63% of MSMEs in other locations. In Zambia, 72% of MSMEs in urban areas are fully compliant compared to only 34% in other areas. There are high levels of non-compliance (63%) among MSMEs who are not urban based in Zambia.

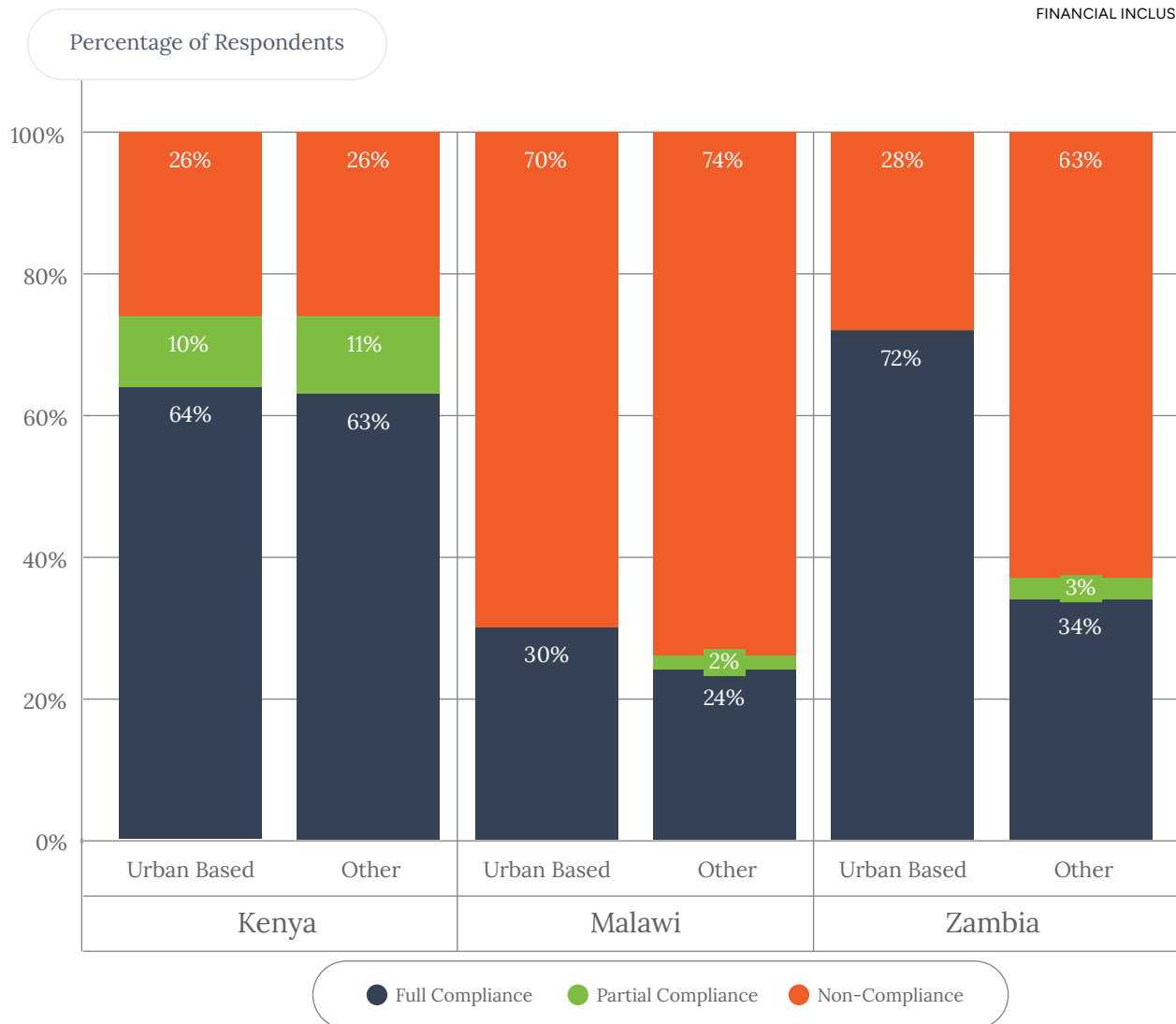


Figure 33: Changes In Compliance Based on Location

Figure 34 shows that MSMEs in other areas of Kenya use tools that promote digital products and services more than those in urban areas. MSMEs in other areas are more likely to have a smartphone as shown by 81% compared to 75% in urban areas. In Kenya, 69% have computers compared to 50% in urban centres and 63% have access to the internet compared to 59% in urban areas.

In Malawi, urban-based MSMEs have more access as seen by 53% who have access to a smartphone compared to 42% in other areas. Fifty per cent (50%) of urban-based MSMEs also have access to the internet compared to only 20% in other areas.

In Zambia, MSMEs in other areas seem to have more access than those in urban centres as demonstrated by 90% with smartphone access, compared to 84% of MSMEs in urban areas. However, access to the internet and website use is higher amongst urban-based enterprises than those in other areas.

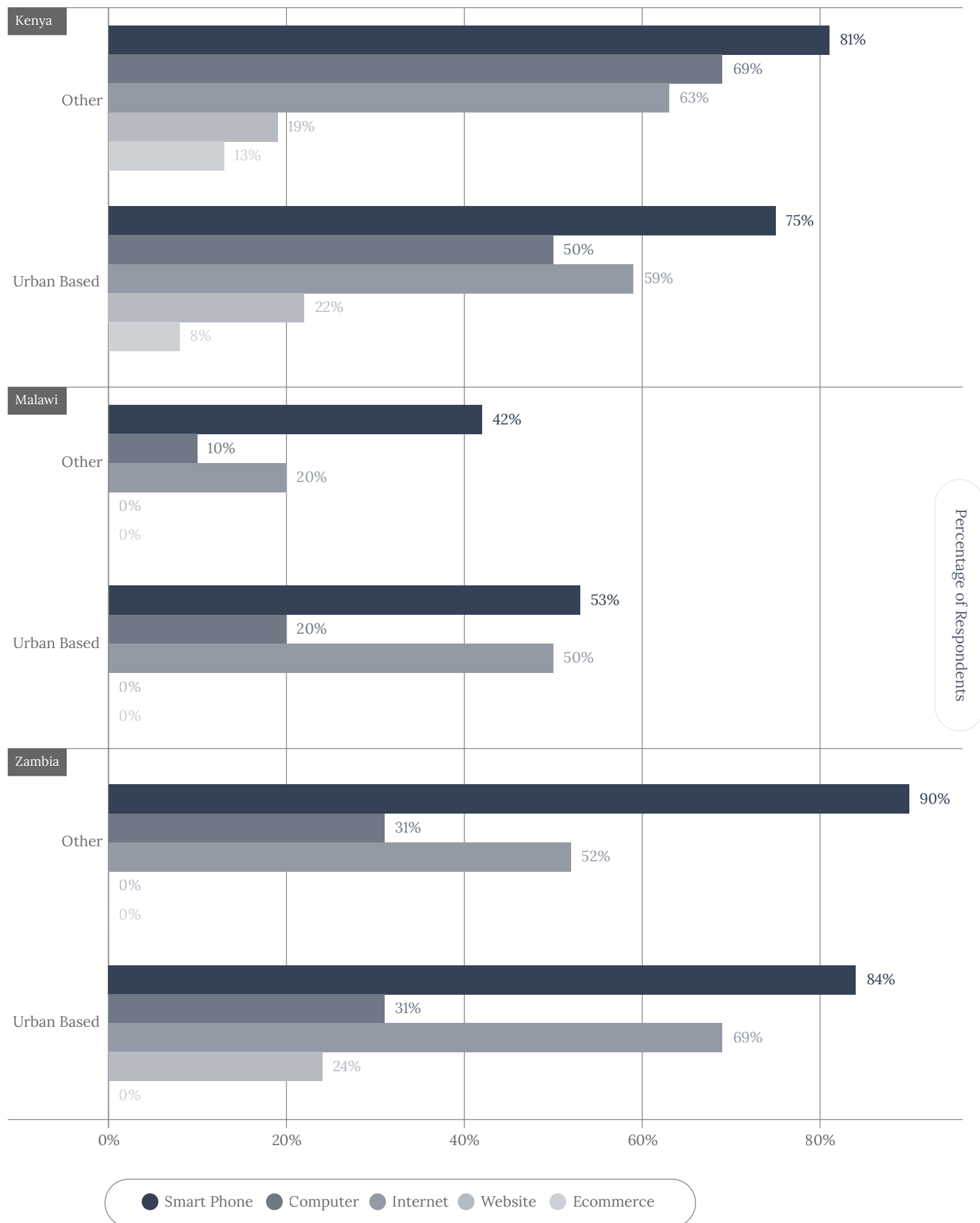


Figure 34: Changes In Digital Tool Use Based on Location

Overall Financial Inclusion Index Scores

Percentage of Respondents

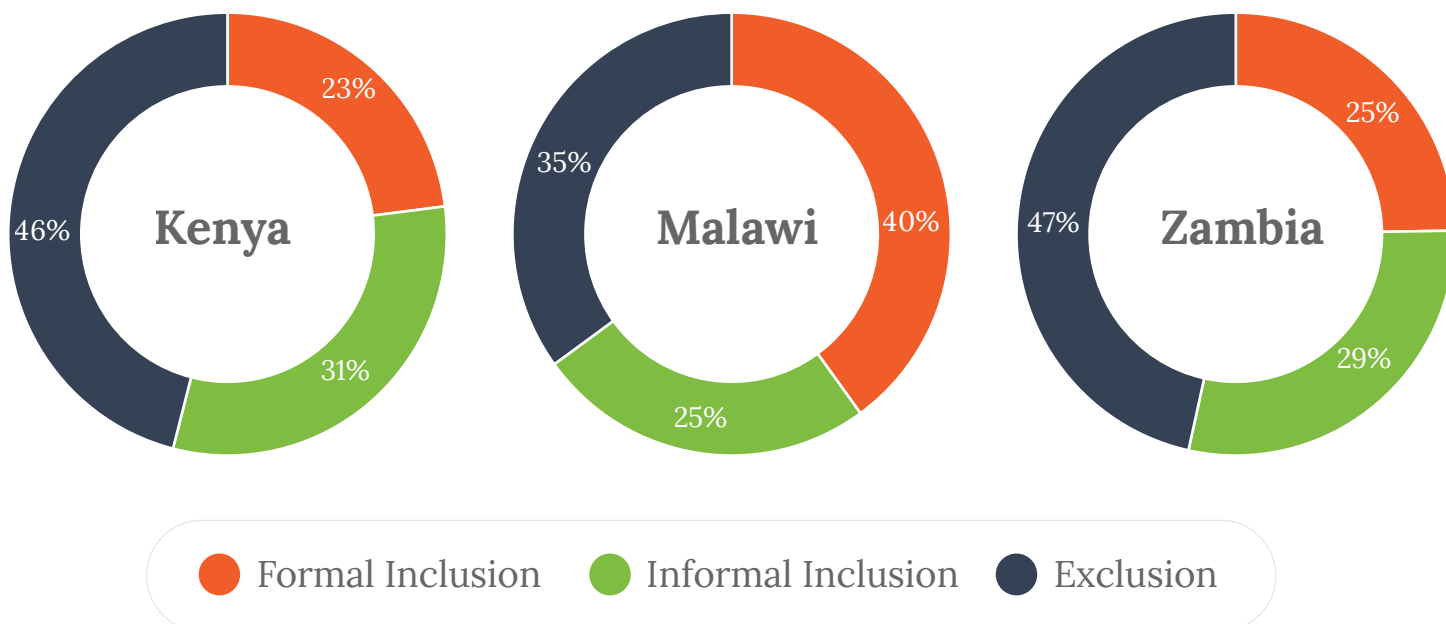


Figure 35: Overall Financial Inclusion Index Scores

According to the SIVIO Financial Inclusion Index, as a summation of all the above findings Zambia and Kenya are close in terms of levels of formal inclusion of MSMEs with 47% and 46% respectively. Formal inclusion refers to the level of access and utility of both digital and non-digital financial products and services from regulated sources. Malawi has the lowest levels of formal inclusion at 35%. Subsequently Malawi has the highest rate of overall exclusion (40%) i.e. exclusion from formal and informal financial products and services from digital and traditional sources. Zambia has 25% exclusion and Kenya has 23% exclusion.

DISCUSSION

The results generated from the study demonstrate that for MSMEs, the rate of access to traditional and digital financial products and services is moderate with an average of 59% inclusion across all three countries. The findings suggest that although digital tools can be available and present which give access to the internet and its numerous possibilities, the level of exposure and understanding of how these products should be used is limited.

We also noted that the use of social media for trade, promotion and marketing of businesses is advanced. However, the use of more advanced systems such as e-commerce platforms, the use of websites for visibility, use of new forms of technology such as cryptocurrency and payment gateways are not common in all countries. There is early stage use in Kenya and some small and medium enterprises in Zambia. This shows that small businesses are only just starting to explore the advances available on the internet to understand how these can be used to advance MSMEs.

Younger enterprise owners have more access than older enterprise owners who are 35 years and above. However, younger enterprise owners are also less likely to comply and may have less knowledge to back up their high access scores. This means for inclusion to be promoted within these groups, simple steps to improve their compliance and their knowledge would go a long way.

The study noted that in Zambia and Malawi, female-led enterprises are less likely to be included in formal structures, whilst male owners demonstrate higher levels of inclusion. In Kenya, the differences are minimal between the genders of the enterprise owners.

We note in this study that access to informal services is high as compared to formal financial products and services in all the countries as well. This suggests that more needs to be done to reduce the barriers created by compliance which are a deterrent for MSMEs.

The key barriers to inclusion across all three countries are affordability, lack of knowledge and poor compatibility with financial products and services. This applies to both formal and informal financial products and services as well as traditional and digital financial products and services. We note that MSMEs repeatedly indicate these three as barriers which points to the possibility that

fintech companies, banks, mobile network operators and other entities responsible for developing digital products and services are missing an important component regarding the needs of MSMEs in Africa. There is a need to reconsider how digital products and services can be tailor-made for better compatibility with MSMEs in Africa. There is also a need to consider methods of financing these products and services that do not impose a high upfront cost on MSMEs where affordability has been raised as a concern.

Chief among these barriers is the lack of knowledge which is demonstrated by the high levels of access to digital tools but low level of usage of digital products and services. This means for financial access in the digital space to be improved, knowledge levels should be improved as one of the low-hanging fruits to promote inclusion.

In addition, compliance stands out as a significant factor for promoting inclusion in both digital and traditional spaces. Heavy-handed compulsion using top-down demands, and high tax rates place a burden on start-up founders amongst numerous other challenges being faced during the set-up of an enterprise. Lower tax rates and bottom-up measures should be employed to ensure start-up founders find value in compliance.



RECOMMENDATIONS

Recommendations will be made for governments and their regulating authorities, fintech companies, mobile network operators, associations of MSME enterprises on the continent as well as trade organisations that are working to facilitate trade between and amongst the MSMEs on the African continent.

Recommendations for Government

Governments on the African continent are encouraged to reconsider specific policies that inhibit the use of new forms of technology that are already successfully in use in other countries. For example, technologies that involve the use of blockchain and artificial intelligence have been frowned upon by African governments resulting in the banning of cryptocurrency and non-refundable tokens as a form of trade. Yet these technologies promote safety in online transactions.

MSMEs in these countries are missing out on whole ecosystems and potential for trade, and growth. Instead of African governments banning the use of these products and services, they should conduct robust research on how policies can be created that would benefit most African governments as well as the MSMEs they represent.

It is also important for African governments to reconsider policies around compliance and taxation of MSMEs. It is clear from this study and other previous studies that forced compliance has resulted in more enmity between governments and MSMEs. Many MSMEs would rather not comply and choose to continue to have access to informal products and services even at their own disadvantage. There is a need for governments to consider other forms of taxation that do not place a heavy burden of documentation, reporting and financial input on already struggling entities. Many MSMEs work in informal markets where they face the risk of loss, theft and violence. If their daily challenges in the environment could be solved, it would demonstrate the value proposition of payments of taxes. There is a need for stronger collaboration between and amongst government structures and MSMEs.

Recommendations for Financial Service Providers

Fintech companies seem to be failing to align with the high percentages claiming the non-compatibility of digital products and services. Significant aspects to consider include removing language barriers, making products that fit into the cultural context, and creating differentiation based on the age of users. There is a strong need to consider the costs associated with financial products and services to create models that have lower upfront costs for MSMEs in Africa.

Recommendations for Trade Organisations and MSME Associations

For trade organisations and associations of MSMEs, the improvement of knowledge needs to be a top priority, especially knowledge around the digital ecosystem in Africa. This includes teaching MSMEs what products and services are available to them and how these products can be used to enhance their businesses. This is an essential component to improve digital financial inclusion.

CONCLUSION

The level of digital financial inclusion amongst African MSMEs is low. It is noted that the closest that MSMEs in Africa are getting to a digital footprint is their presence on social media. Knowledge of digital financial products and services and the full expanse of the Internet and how it can be used to promote inclusion is missing in African ecosystems of business knowledge. It is also notable that there seems to be little emphasis on the use of digital financial products and services in financial inclusion policies by African governments despite that the world has begun to transition and advance into a fourth industrial revolution underpinned by digital technologies.

This suggests that African MSMEs who themselves are the powerhouse of African economies are already falling behind the development trajectory of the rest of the world. African governments need to do more to educate MSMEs and regional enterprises to catch up with the developments that are taking place in other parts of the world. The governments themselves would do well to integrate knowledge provision on digital products into some of the services they offer to small firms. It would be important for governments to adopt products and services that promote digital use and behaviours as well.

The low-hanging fruit to make this digital inclusion possible is to improve the knowledge of MSMEs on the possibilities within the digital space and their value to small businesses. Secondly, it would be a great benefit to improve the compatibility of new digital products and services to emphasise the creation of products and services which are more intuitive to the needs of African MSMEs and are therefore more likely to fit into the cultural and language contexts of MSMEs in Africa.

Our data suggest a strong bond between financial inclusion and compliance. However, understanding that digital products can be accessed without full compliance, demonstrates that informal MSMEs are presented with a solution to the complicated compliance requirements in their countries and more options in the digital ecosystem. These options however are not being fully exploited because MSMEs are unaware of their value and potential.

REFERENCES

- Alliance for Financial Inclusion. (2010). *State of Financial Inclusion Policy In Developing Countries*. Alliance for Financial Inclusion. <https://www.afi-global.org/sites/default/files/publications/afi%20survey%20report%202010-en.pdf>
- Asia Pacific Economic Cooperation. (2022). *Strategies And Initiatives on Digital Financial Inclusion: Lessons from Experiences of APEC Economies*. Manila, Philippines: APEC.
- Babatunde, G. (2021, January 6). *Only 10 Africa Countries Are Actively Trading Cryptocurrency, Why Are 44 Left Out?* <https://technext24.com/2021/01/06/only-10-african-countries-are-actively-trading-cryptocurrency-whats-happening-with-the-other-44/>
- Bank of Zambia. (2017). *National Financial Inclusion Strategy (2017 to 2022)*. Lusaka, Zambia: Bank of Zambia.
- Bernards, N. (2022). *A Critical History of Poverty Finance: Colonial Roots and Neoliberal Failures*. London: Pluto Press.
- Central Bank of Kenya. (2021). *FinAccess Household Survey*. <https://www.knbs.or.ke/wp-content/uploads/2021/12/2021-Finaccess-Household-Survey-Report.pdf>
- Chaora, B. R. (2022). *Financial Inclusion Of Micro, Small and Medium Enterprises in Zimbabwe*. Harare: SIVIO Institute.
- Chironga , M., Cunha , L., De Grandis, H., & Kuyoro, M. (2018). *Roaring to Life: Growth and Innovation in African Retail Banking* . McKinsey & Company.
- Cross, R. J., & Chaora, B. R. (2022a). *Financial Inclusion Index Methodology*. Sivio Institute. https://backend.sivioinstitute.org/uploads/SI_F_Index_Methodology_e73daf71bf.pdf
- Cross, R. J., & Chaora, B. R. (2022b). *Financial Inclusion Index: Equality Measures* SIVIO Institute. https://backend.sivioinstitute.org/uploads/SI_F_Index_Equality_Measures_b93029c5c9.pdf

Daroll, C. (2012) Micro, Small and Medium Enterprises (MSME) Policy Strategy for the Republic of Malawi- *Enabling Enterprise Growth in Malawi* (2012-2017), Business Environment Specialists and The United Nations. <https://info.undp.org/docs/pdc/Documents/MWI/MALAWI%20MSME%20POLICY%20AND%20STRATEGY%20FINAL%20DRAFT%20AUGUST%202012.pdf>

FinMark Trust. (2019). *FinScope Malawi 2019: Micro, Small and Medium Enterprise (MSME) Survey*. https://finmark.org.za/system/documents/files/000/000/498/original/FinScope_MSME_Survey_Malawi_2019_Report.pdf?1615982038

Finmark Trust. (2020). *Finscope 2020 Top Line Findings*. Lusaka: Bank Of Zambia.

Global Partnerships for Financial Inclusion. (2023). *G20 Financial Inclusion Indicators- Kenya Database*.

International Labour Organisation. (2022). *Informal Economy in Africa: Which Way Forward? Making Policy Responsive, Inclusive and Sustainable*. https://www.ilo.org/africa/events-and-meetings/WCMS_842674/lang--en/index.htm#:~:text=Nearly%2083%25%20of%20employment%20in,the%20continent%27s%20young%20employment%20seekers.

International Telecommunications Union. (2016). *The Digital Financial Services Ecosystem*. Focus Group Technical Report. https://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/09_2016/FINAL%20ENDORSED%20ITU%20DFS%20Introduction%20Ecosystem%2028%20April%202016_formatted%20AM.pdf

Kenya Ministry of Industrialisation, Trade and Enterprise Development. (2020, September). *Promoting Micro and Small Enterprises (MSEs) for Wealth and Employment Creation*. <https://msea.go.ke/wp-content/uploads/2021/07/MSEs-Policy.pdf>

Lopokoiyit, S., & Mitha, A. (2022). *Digital Finance Platforms to Empower All: Accelerating the SDG Impact of Digital Financial Inclusion in Sub-Saharan Africa*. <https://www.vodafone.com/sites/default/files/2022-10/digital-finance-platforms-to-empower-all.pdf>

Mader, P. (2019). *Contesting Financial Inclusion. Development and Change*. The Hague.

Manyika, J., Lund, S., Singer, M., White, O., & Berry, C. (2016). *Digital Finance For All: Powering Inclusive Growth In Emerging Economies*. McKinsey Global Institute.

Monkey Pesa. (2022). *Step By Step Guide to Registering Your Business in Zambia*. <https://www.monkeypessa.com/post/step-by-step-guide-to-registering-your-business-in-zambia>

Muthiora, B. (2015). *Enabling Mobile Money Policies In Kenya: Fostering a Digital Financial Revolution*. https://comesabusinesscouncil.org/wp-content/uploads/2020/04/16-2015_MMU_Enabling-Mobile-Money-Policies-in-Kenya.pdf

National Assembly of Zambia. (2017). *Committee on National, Economy, Trade and Labour Matters For The Second Session of the Twelfth National Assembly*. https://www.parliament.gov.zm/sites/default/files/documents/committee_reports/MAIN%20REPORT-2018.pdf

Payment Genes. (2023). *Top Reasons Why Africa Represents a Big Opportunity for Fintech*. <https://www.paymentgenes.com/all-about-payments-videos/top-reasons-why-africa-represents-a-big-opportunity-for-fintech>

Rekha, G., Rajamani, K., & Resmi, G. (2021). *Digital Financial Inclusion, Economic Freedom, Financial Development, And Growth: Implications From A Panel Data Analysis*. Tokyo: Asia Development Bank Institute.

Republic of Zambia. (2008). *Micro, Small and Medium Enterprise Development Policy*. Ministry of Commerce. <https://www.boz.zm/Micro-Small-and-Medium-Enterprise-Development-Policy-2008.pdf>

Republic of Zambia. (2023). *Revised National Micro, Small and Medium Enterprise Development Policy*. <https://www.msme.gov.zm/wp-content/uploads/2023/12/2023-MSME-POLICY-FOR-MSMED.pdf>

Runde, D., Savoy, C., & Staguhn, J. (2021). *Supporting Small And Medium Enterprises In Sub-Saharan Africa Through Blended Finance*. <https://www.csis.org/analysis/supporting-small-and-medium-enterprises-sub-saharan-africa-through-blended-finance#:~:text=Sub%2DSaharan%20Africa%20alone%20has,they%20need%20access%20to%20capital.>

Sahay , R., Von Allmen , U., Lahreche, A., Khera, P., Ogawa, S., Bazarbash, M., & Beaton , K. (2020). *The Promise of Fintech: Financial Inclusion in The Post COVID-19 Era*. International Monetary Fund.

SIVIO Institute. (2022, July 6). *Financial Inclusion Index*. (S. Institute, Producer) <https://www.sivioinstitute.org/interactive/financial-inclusion-study>

Soederberg, S. (2013). Universalising Financial Inclusion And Securitisation of Development. *Third World Quarterly* Volume 34, No 4, 593-612.

Southern African Development Community. (2016). *SADC Financial Inclusion Strategy (2016 to 2021)*. <https://finmark.org.za/system/documents/files/000/000/207/original/FI-strategy-SADC.pdf?1601978334>

Statista. (2024) Market Insights – Digital. <https://www.statista.com/outlook/dmo/fintech/neobanking/zambia>

United Nations. (2021). *Malawi Financial Inclusion Roadmap*. <https://www.unCDF.org/article/2936/malawi-financial-inclusion-roadmap>

World Bank. (2023). *Financial Inclusion is a Key Enabler to Reducing Poverty and Boosting Prosperity*. <https://www.worldbank.org/en/topic/financialinclusion/overview#:~:text=Financial%20inclusion%20means%20that%20individuals,a%20responsible%20and%20sustainable%20way>

World Bank. (2024). The Global Findex Database: Financial Inclusion, Digital Inclusion, Digital Payments and Resilience In the Age of COVID-19. <https://www.worldbank.org/en/publication/globalindex>

Zambia Development Agency. (2023). Starting a Business in Zambia. <https://www.zda.org.zm/starting-a-business/>



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ABOUT SIVIO INSTITUTE

SIVIO Institute (SI) is an independent organisation focused on ensuring that citizens are at the centre of processes of socio-economic and policy change. It aims to contribute towards Africa's inclusive socio-economic transformation. It is borne out of a desire to enhance agency as a stimulus/catalyst for inclusive political and socio-economic transformation. SIVIO's work entails multi-disciplinary, cutting edge policy research, nurturing citizens' agency to be part of the change that they want to see and working with communities to mobilize their assets to resolve some of the immediate problems they face.

SIVIO institute has three centres/programs of work focused on; (i) civic engagement (ii) philanthropy and communities (ii) economic development and livelihoods. In the process SI addresses the following problems:

- Inadequate performance of existing political and economic system
- Increasing poverty and inequality
- Limited coherence of policies across sectors
- Ineffectual participation in public processes by non-state actors
- Increased dependence on external resources and limited leveraging of local resources