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GSMA Digital Identity

The GSMA Digital Identity programme has partnered with the World Bank's ID4D programme and Caribou Digital, to demonstrate the opportunities, address the barriers and highlight the value of mobile as an enabler of digital identification specifically for women and girls in the Commonwealth. GSMA's work will include research on the unique barriers that women and girls face when accessing or using identity systems, delivering projects that test new approaches to overcoming these barriers, and providing policy recommendations to promote inclusive digital identity systems. The initiative aims to contribute towards helping to meet the Commonwealth target of reducing the identity gap and providing access to a digitally enabled identity for every woman and girl in the Commonwealth by 2030.

The Commonwealth Digital Identity Initiative is supported by the UK Department for International Development and Australia's Department of Foreign Affairs and Trade.

For more information, please visit website www.gsma.com/commonwealthinitiative

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Introduction

Official proof of identity is fundamental to an individual's ability to enforce their rights and secure access to a wide range of vital services such as healthcare, education, mobile connectivity, social protections and financial services. For this reason, the United Nations Sustainable Development Goals (SDGs) has set a specific target to provide every person with a legal identity, including birth registration, by 2030.1

Of the one billion people in the world who are unable to prove their identity, more than 230 million are women and girls who live across the Commonwealth. The absence of identity documents can be both the cause and effect of prevailing gender inequalities; therefore, widening access to identity will also help the international community effectively address Sustainable Development Goal 5, which aims to achieve gender equality and empower all women and girls.



SDG 5

Achieve gender equality and empower all women and girls.



SDG 16.9

By 2030, provide legal identity for all, including birth registration.

Zambia has recognised the importance of identity in supporting its ambitions to become a middle-income, economically stable country by 2030. In particular, there is a clear interest in overhauling the national identity model and infrastructure, and developing identity databases that allow the government and other public and private sector stakeholders to better determine and meet the needs of citizens.

While Zambia has achieved positive economic growth over the last decade, women continue to lag behind men in most spheres of national development. Discrimination against women, embodied in traditional rules and practices, often constrains women's and girls' access to and use of identity, as well as their socioeconomic and political empowerment. This inequality limits their participation in important household decisions such as resource planning and use, family planning and access to services such as health and education.²

This case study explores the current identity and mobile landscape in Zambia, and highlights where women and girls are known to face unique challenges compared to men when accessing or using identity documents, mobile services, and a wide range of other public and private sector services that are linked to their identity. The case study also identifies a potential use case that would allow mobile network operators (MNOs) to leverage digital identity services to deliver relevant social and economic impact to women and girls.

^{2.} Republic Of Zambia Ministry Of Gender And Child Development (2014), National Gender Policy 2014, Available at: http://extworlegsl.fao.org/docs/odf/zaml52916.pdf

Overview of the research findings



Identity landscape

Birth registration and certification is a persistent issue in Zambia, largely due to a lack of perceived utility and less-developed infrastructure for registration and certification. Zambia's registration laws stipulate that a birth certificate is required to eventually register for a National Registration Card (NRC). However, in practice this is rarely enforced and identity is verified by a signed document from an official source. Despite this, the government understands the importance of Civil Registration and Vital Statistics (CRVS) and is exploring efforts to improve these processes.

Zambia has also been overhauling its NRC model and infrastructure, and is focusing on developing an electronic-NRC (eNRC). There has been some initial investment, and a pilot programme has been outlined. However, reports of progress have been scarce. Women and girls face a number of challenges with accessing and using their NRCs due to the different gender roles in Zambian society, with a gap in NRC coverage between men and women.³ Rates of school dropout and early marriage⁴ contribute to a trend of women remaining outside of mainstream economic life. Due to these challenges, the perceived need to own an NRC to open bank accounts, to travel, and to take part in wider public life is lower for women.

Zambia's functional identity landscape is also developing, with investment in digitising enrolment processes and databases. Three important functional identity registers in Zambia are the voter's registry, also an incredibly effective vehicle for NRC registration; a collection of social support databases, the effectiveness of which is sometimes impaired by a complex process of beneficiary identification and service provision; and the recent introduction of a smart identity card to allow citizens to access the SmartCare health system - potentially improving Zambia's healthcare provision and ability to monitor vital statistics. These trends are very promising, however efforts to ensure the usefulness and relevance of functional identity solutions to all Zambians are needed. In particular, SmartCare infrastructure is growing but is not universal, with women lacking access to a range of healthcare services including sexual and reproductive health.

^{4.} http://www.fsdzambia.org/wp-content/uploads/2018/06/Age-and-Financial-Inclusion-in-Zambia-01-06-2018.pdf





Mobile landscape

Zambia is a major mobile market in East Africa, with eight million unique mobile subscribers. With a market previously dominated by three MNOs, the recent entry of 4G operator Vodafone (Afrimax) is likely to further increase 3G and 4G subscriptions, which are already growing steadily. This competitive landscape, and an increasing provision of dataenabled services, could play an important role in driving digital identity products and services.

Although mobile penetration in Zambia is improving, there are a range of individuals who are less well-served by mobile services. In particular, women and those living in rural areas. Men are more likely to be active mobile users than women (55 per cent compared to 48 per cent respectively),⁵ due to several factors such as women's lack of disposable income and lower rates of NRC ownership. These segments are also of key importance for digital identity solutions.

With regard to SIM registration and Know Your Customer (KYC) regulations, in Zambia all SIM cards must be registered. Women therefore face particular impasse: they are less likely to own an NRC, a document that is required for SIM registration, and unable to purchase their own SIM cards. Registration requires MNOs to collect a range of customer data, including, crucially an identity card number from either an NRC or a passport. MNOs must also maintain databases of registered, cloned, and inactive SIM cards. As a passport can only be claimed through the NRC as a breeder document, the NRC is an integral document for SIM card registration.



Potential opportunity for mobile operators

Zambia has made good progress toward building a strong national identity foundation, including recognising the importance of CRVS for decision-making and service delivery, and the strength of digitising and integrating key identity components.

Building on the importance of CRVS, MNOs — through the provision of products and services - could directly support NGOs and other institutions that are undertaking individual enrolment and data collection in order to deliver services. This work has particular relevance for women and girls, and other marginalised groups, who - if they are not counted - are less likely to benefit from policy decisions and service delivery. The multipliers of this work, through empowering women and girls, could be significant.

^{5.} Zambia Information and Communications Technology Authority (ZICTA) (2015) ICT Survey Report - Households and Individuals - Survey on Access and Usage of Information and Communication Technology by Households and Individuals in Zambia,



Foundational identity



Birth registration and certification

Chapter 51 of the Birth and Death Registration Act (1973) has made birth registration compulsory within the first three months of a child's life (illustrated in Figure 1). However, Demographic and Health Survey (DHS) data⁶ notes that birth registration is not widely adhered to in Zambia despite these legal and administrative structures, or the existence of punitive measures such as fines for late registration. Male and female birth registration is 12 per cent and 11 per cent respectively, with a major disparity between urban and rural regions (20 per cent and seven per cent). Reasons for these differences include the fact that other signed documents can be used in place of birth certificates for key processes such as school registration, and the prohibitive distance from parents' villages to places of registration.⁷

Recent policy initiatives have sought to provide a better equipped, digital civil system for improved monitoring of CRVS — including simpler birth registration processes. The 'National Strategic Action Plan for Reforming and Improving Civil Registration and Vital Statistics', implemented from 2014 to 2019, aims to enable health clinics to register new-borns, upload records to a centralised system, and provide birth certificates without requiring the involvement of central authorities. This policy follows a broad ambition to ensure that all infants are registered and certified, aided by the commissioning of two birth certificate printing centres outside of the capital city, Lusaka.8

Although Zambians in urban and semi-urban areas have moderate access to health services including maternal health, those in rural areas find local services limited: only 51 per cent of women in rural areas give birth in public health facilities, compared with 84 per cent in urban areas. The majority of women (75 per cent) who deliver outside health facilities report receiving no form of postnatal check-up, further limiting the opportunities for registration to be recommended by healthcare professionals. Further efforts have aimed to localise birth registration by leveraging traditional village headmen, with mixed results:



"[This process] can be open to abuse. Because of economic conditions you end up with village heads and chiefs asking for all manner of payments [from parents] for those letters, and especially for single women that really increases their vulnerability".

Donor and Humanitarian Agency

DHS (2015) Zambia Demographic and Health Survey 2013-2014

The World Bank Group (2017) The State of Identification Systems in Africa: Country Briefs, accessed at: https://openknowledge.worldbank.org/bitstream/handle/10986/28310/119065-WP-ID4D-country-profiles-report-final-PUBLIC.pdf?sequence=1&isAllowed=y

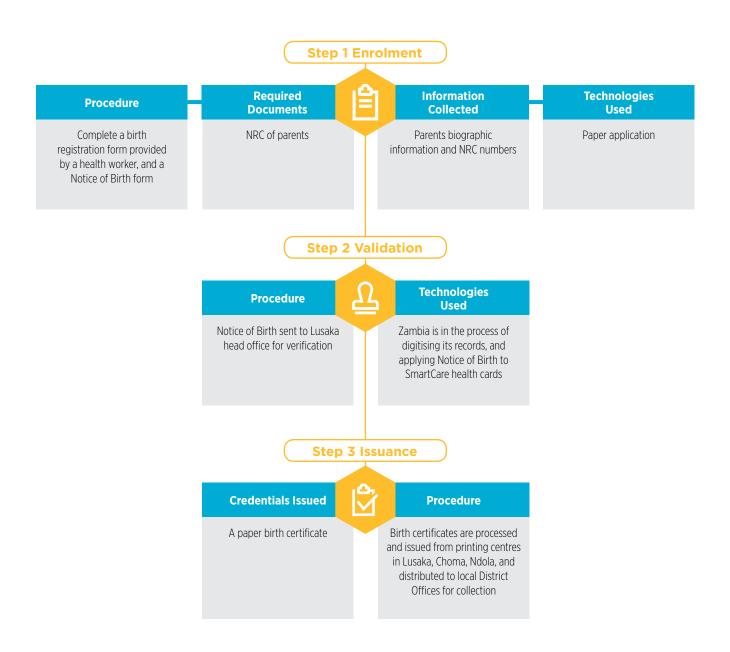
Lusaka Times (2018) ECZ exploring ways of establishing an online voter registration system, accessed at https://www.lusakatimes.com/2018/11/30/ecz-exploring-ways-of-establishing-an-online-voter-registration-system/

DHS (2015) Zambia Demographic and Health Survey 2013-2014117

Patriarchal norms affecting birth registration persist in Zambia. In order for a child to claim their father's name, the father must cooperate with the registration process by declaring the child as their own. Furthermore, the mother must provide the father's NRC at registration. As one humanitarian agency in Zambia explained, there are significant repercussions for patriarchal lineage and inheritance rights for children in instances where the father doesn't cooperate, especially in cases where children are born outside of a marriage.

Figure 1

Journey to birth certification





National identity

The government of Zambia has recognised the importance of identity in achieving its longterm development strategy: Vision 2030. The government's National Development Plan (NDP), the seventh phase of which launched in 2017 and is due to complete in 2021, is designed to accelerate the country's development and achieve its 2030 goal, a key component of which is to have 'an inclusive, democratic system of governance'.10 Furthermore, the government has proposed a strategy of strengthening its electoral processes and systems, which includes ensuring the national implementation of a digitised National Registration Card (NRC) for all citizens aged 16 and over.¹¹

Zambian citizens have been well served by national identity schemes since the country's independence in 1964, the same year as the formation of the National Registration Act. The Act established the position and office of Chief Registrar as responsible for the civil registration of Zambians. Furthermore, this act established the paper-based NRC as the key document in proving identity and subsequently accessing services. Each NRC is associated with a national identity number (NIN) which is used to apply for further forms of identity and other credentials.

Zambian citizens must register for an NRC at one of 105 District Offices within 14 days of the applicant turning 16.12 Although identity records are currently being digitised, registration for the card remains an analogue process (Figure 2) and all validating documents are filed in paper form. The proposed Integrated National Registration Information System (INRIS) will eventually allow fingerprints to be collected in order to avoid issuing duplicate NRCs.

In contrast to the very low birth registration rate in Zambia, there has been historically high uptake of the NRC. However, women and girls are likely to face a number of unique challenges when accessing and using their NRCs. Data from the World Bank's 2017 Findex Report shows that 85 per cent of women have access to an NRC compared to 88 per cent of men, and that women are 13 per cent less likely than men to use their NRC to access financial services or apply for a mobile SIM card. Traditional gender roles and prevailing gender inequalities — including higher rates of school drop-outs, illiteracy and early marriage — contribute to a trend of women locked outside of mainstream economic life. Due to these challenges, the perceived need for an NRC to access mobile services, open bank accounts, travel, or to take part in wider public life may be lower for many women.



"You see, the ease of getting the identity is not there. When I lost my NRC, and it was about election time, and I wanted to go and vote, then I went to a place where I would get a replacement. The queues, the hassle. And women are in charge of providing food, looking after children and everything. They may not have that time to go and hassle that much for an identity."

Policymaker

^{10.} Ministry of National Development Planning (MNDP) (2018) NDP Implementation Plan 2017-2021 7, Vol. 2.

^{12.} Identification for Development (2016) Zambia: Identification Systems Analysis

https://globalfindex.worldbank.org

Furthermore, women must also re-register for identity documents after marriage or a change of name. The nature of Zambia's patrilineal society, where rights are derived through the father's lineage, has a significant impact on women's ability to self-identify. According to one expert:



"This is a serious gender issue, and I think issues of self-determination become very, very important, and the right to choose how somebody wants to be identified. Women don't have that choice, and I think if you choose to marry you are choosing to lose your identity. That's what it effectively means, and that is something that is quite important to address."

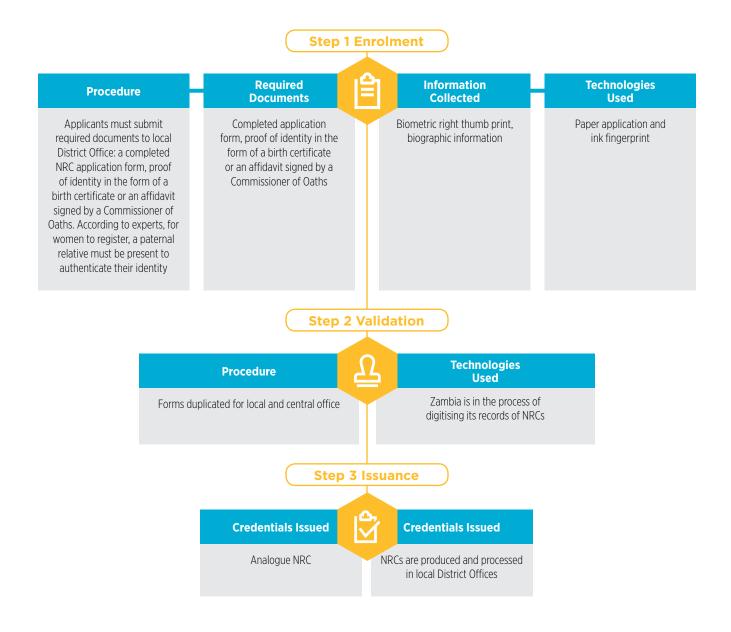
Donor and Humanitarian Agency

In 2017, the Zambian government announced the intention to begin providing Zambian citizens with an electronic-NRC (eNRC), replacing the previous paper version of the document. Veridos, a German firm, was selected as the government's partner for the production of cards, with the intention of piloting the provision of eNRCs in the first quarter of 2018. The current progress of the eNRC project in Zambia is unclear; with one policymaker interviewed noting that the eNRC project was piloted in Lusaka with the assistance of global partners, but the provision of eNRCs beyond this pilot has been delayed.



Figure 2

Journey to a national registration card



Functional identities

Zambia's functional identity landscape is also developing, with investment in digitising enrolment processes and databases. These trends are promising, however efforts to ensure the usefulness and relevance of functional identity solutions to all Zambians — especially women and girls — are needed.



Voter's registry

The Electoral Commission of Zambia (ECZ) is responsible for the voter's registry, and data from the Central Statistical Office of Zambia notes that 89 per cent of the eligible Zambian population has been registered to vote. 15 To prove their eligibility to be registered and claim a voting card, individuals must present their NRC to confirm that they are a resident of Zambia and of voting age (18 years old). To reach as many potential voters as possible and stimulate a drive for identity registration, the Department of National Registration, Passports and Citizenship (DNPRC) partnered with the ECZ to conduct mobile registration drives. Voter registration kits offered a complete voter registration service, from the creation and provision of a digital voter register, to biometric enrolment.

The ECZ is currently exploring opportunities to create an online voter registration system in preparation for the 2021 general election. Digitising voter registration could build a more efficient and modern platform to register Zambians who are digitally-enabled, and could ensure registration services reach those who find attending voter registration centres difficult, including women. Furthermore, the development of a biometrically enabled eNRC is seen as an opportunity to reduce electoral fraud. Previous political candidates have been accused of gaining votes from ineligible voters, including foreign citizens from neighbouring states.



Social support

The Ministry of Community Development, Mother, and Child Health (MCDMCH) provides social assistance to a variety of underserved demographics in Zambia. The Ministry manages several separate databases,¹⁷ including impoverished households served through the Public Welfare Assistance Scheme, smallholder farmers served through the Food Security Pack, Orphans and Vulnerable Children, and beneficiaries of a Social Cash Transfer Scheme.

Registration and authentication for social support services appears to be heavily reliant on poorly maintained community registers, and not national databases. Moreover, the requirement to present particular forms of identity documentation, for example an 'under-five' card when registering for child grants, has been noted as an important source of exclusion to certain groups - in this case, women who do not give birth in a health facility.18 The process of identifying beneficiaries in need of welfare and social assistance is complex and cumbersome, and government documents detailing the approach of the National Social Protection Policy between 2014 and 2018 state that social assistance programmes were not reaching enough people, and did not have 'enough money to help people as much as they should'. 19

^{15.} Central Statistical Office of Zambia (2016) The Monthly

Lusaka Times (2018) ECZ exploring ways of establishing an online voter registration system
 The World Bank Group (2013) Using Social Safety Nets to Accelerate Poverty Reduction and Share Prosperity in Zambia

^{18.} Beazley, R. & Carraro, L. (2013) Assessment of the Zambia Social Protection Expansion Programme Targeting Mechanisms
19. Zambian Ministry of Community Development and Social Services (2017) 2014-2018 National Social Protection Policy



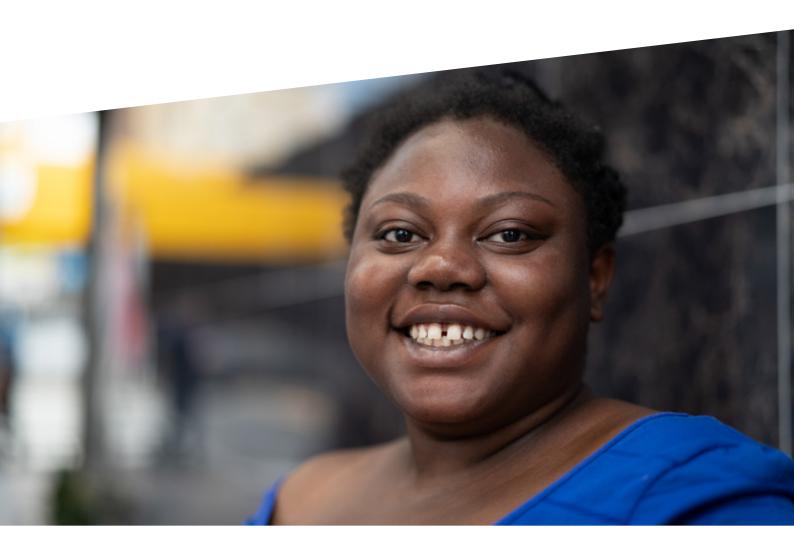
Accessing health services

The Ministry of Health is responsible for providing equitable access to healthcare, and plays a major role in identity management. In 2005, the Ministry of Health introduced the SmartCare electronic health system — a fully-integrated electronic health record solution that aims to establish an electronic health record system in Zambia and provide continuity of care at the district, provincial and national level. In order for a health facility to use SmartCare, they must be equipped with a wireless network, card reader, mobile device (or tablet), and SmartCare software. This capacity is lacking in rural areas. 20 Patients receive a SmartCare card when they register at a health facility and present their NRC. Women, due to lower NRC ownership levels and persistent cultural barriers, are less likely than men to be able to access SmartCare cards and associated health services:



"If it's a sensitive need like something around sexual and reproductive health, which it quite often would be, then there are cultural taboos that might prevent someone from even seeking health care, never mind whether it's available or not."

NGO



20. All Africa (2018) Zambia: ICT Boosts Smart Health Care Delivery





Accessing financial services

Zambia's commercial banks²¹ note that an NRC, passport or driving licence can be used to open a savings account. However, according to a World Bank study the NRC is not uniformly treated by banks as a 'credible enough' form of identification, 22 and therefore a proof of address is often required to open an account. This presents a significant barrier to account ownership among the large number of Zambians with no formal address. MNOs are reportedly more relaxed in opening mobile money accounts — typically only requiring an NRC, driving licence or voter's card.²³

For many young women access to a bank account, and therefore an opportunity to take an active part in financial development, is severely restricted. Among Zambians aged 16-25, approximately 28 per cent of women have access to formal financial services compared to 38 per cent of men.²⁴ As mentioned by one expert, traditional motherly gender roles begin early in Zambia:



"In the urban area, some families are really in the poverty margin, so they have to sell little things that they put on their head and sell, and it's the girls who will sell because the mother roles start at a very early age. And they end up going into marriage or becoming a single parent and drop out of school."

Policymaker

Interestingly, women's uptake of informal financial services is greater than men's.²⁵ This suggests that there is an appetite for financial services among women that is currently served by the informal financial sector. Women's groups and other collectives are playing a strong role in enabling greater financial independence. As one interviewed policymaker noted, the government is increasingly recognising the importance of supporting the creation and development of community savings groups, such as Village Savings and Loans Associations, where many women prefer to save.



Paying tax

In order to pay tax, all Zambian business owners and sole traders must register for a Taxpayer Identity Number (TPIN). This is a unique number, linked to a tax profile and payment band. The TPIN was introduced after a reorganisation of the Zambia Revenue Authority (ZRA) into two divisions: Domestic Tax, and Customs. This shift has helped to simply tax administration, including reducing the costs associated with collecting tax.

TPIN applications are submitted via forms obtained either from the ZRA website, or from a ZRA office or Client Services Centre. The completed form must be accompanied with a range of documents, including one stating that the business has been incorporated. More recently, Zambia has begun to move tax services online - including introducing eRegistration and eReturns services.

Finca bank is just one bank that states the regulations, found at http://www.finca.co.zm/who-we-are/faq/

^{22.} The World Bank Group (2016). ID4D Country Diagnostic: Zambia
23. The World Bank Group (2014). Zambia Economic Brief: Financial Services: Reaching Every Zambian
24. Financial Sector Deepening Zambia (2018) Age, Gender and Financial Inclusion in Zambia: Technical Report, accessed at http://www.fsdzambia.org/wp-content/uploads/2018/06/Age-and-Financial-Inclusion-in-Zambia-01-06-2018.pdf

Table 1

Functional identity – Process of enrolment and validation

	Required Documents	Registration - Enrolment			Registration Validation	
		Procedure	Information Collected	Technological Development	Procedure	Technologies Used
Voter ID	NRC	Zambians can apply to enrol onto the electoral register at mobile registration centres, usually open in the run up to elections	Thumbprint (only collected upon registration)	Pen and paper registration	Individuals must prove they are of voting age (18 years old), and that they are eligible, by providing their NRC	Voter roll has been digitised
Taxpayer Identification Number	Individuals must upload different documents based on tax band. An NRC is required for to register for a TPIN	Enrolment can take place online, or in a ZRA office or Client Services Centre	Individuals' employment status and validation of their identity	Application form both in office and through an online submission	Documents submitted are validated by the ZRA	Unknown
Driving License	An NRC, passport, refugee card	Apply in a Road Transport and Safety Agency (RTSA) office to both take oral exams and submit an application	NRC number / ID number (in case of refugee)	Pen and paper registration	Documents checked by clerk	None
Social Security Number	Individuals must first register with the authority to claim a social security number and card. These, in combination with an NRC, are used to verify eligibility for payment. Any beneficiaries of the pension scheme must also provide an authenticated identity, either an NRC or a birth certificate	An individual who wishes to receive a pension must register for a pension account	Biographic details, details of employer and details or beneficiaries	Submission is through an online portal	The social security card comprises the key identity document for claiming pension services	Currently, the social security card is non-digital, however NAPSA has considered upgrading its documents to a digital version including biometrics
SIM Registration	Individuals must register their SIM card with an NRC or international passport. However, research suggests that a driving licence can also be used	To register a SIM card, an individual must present a valid identity document to the SIM vendor to verify their identity	NRC number	Analogue registration	Research suggests that paper applications are collected	Zambia is currently in the process of developing a centralised, digital KYC database



With a large and competitive mobile market, and increasing numbers of 3G and 4G subscriptions, Zambia offers significant potential to explore the role of mobile technology in delivering digital identity solutions.

Mobile penetration

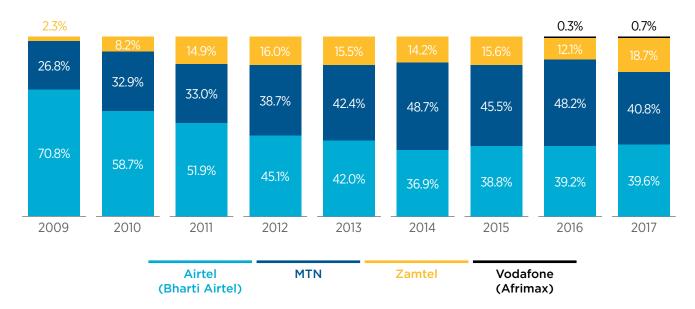
Zambia is one of the largest mobile markets in East Africa, with 8 million unique mobile subscribers and 4 million unique mobile internet subscribers. Pre-paid subscriptions are by far the most prevalent (96 per cent),²⁶ likely due to customers' lack of regular income, and an inability to satisfy strict credit requirements for mobile phone contracts. Regardless of subscription type, there are still important segments of the population who have

lower ownership or usage of mobile devices and services.

The Zambian mobile market has historically been dominated by three MNOs: Airtel, MTN, and Zamtel (Figure 3). In 2016, the 4G operator Vodafone (Afrimax) launched in Zambia and has gained a sizeable segment of this small, but growing, market - particularly in comparison to the company's wider market share (Figure 4).

Figure 3

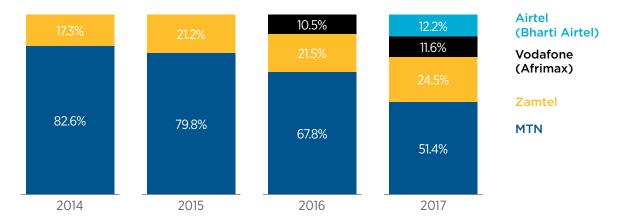
Evolution of market landscape



26. https://data.worldbank.org/indicator/IT.CEL.SETS.P2

Figure 4

4G market share by network

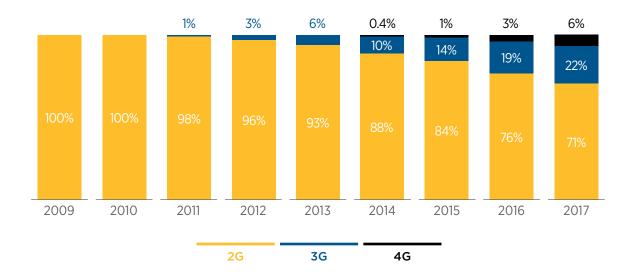


Despite a lower level of 3G and 4G subscriptions in comparison to other markets in East Africa, these connections are growing (Figure 5). This growth is a useful foundation for digital identity solutions, as

well as wider mobile usage, and these opportunities may become even more relevant as infrastructure is rolled-out across the country.

Figure 5

Market size, by connectivity



Although mobile penetration in Zambia is improving, there are many individuals who are less well-served by mobile services. These segments are also of particular relevance for digital identity solutions. For example, the Zambian Information and Communications Technology Authority's (ZICTA) 2015 ICT survey highlighted a much lower rate of mobile ownership among rural households

(50 per cent) compared to urban households (85 per cent).²⁷ The survey also noted that men are more likely to be active mobile users than women (55 per cent compared to 48 per cent).²⁸ Several factors limit women and girls' ownership of mobile phones in Zambia. This includes lack of disposable income, and lower rates of NRC ownership.

^{27.} Zambia Information and Communications Technology Authority (ZICTA) (2015) ICT Survey Report - Households and Individuals - Survey on Access and Usage of Information and Communication Technology by Households and Individuals in Zambia

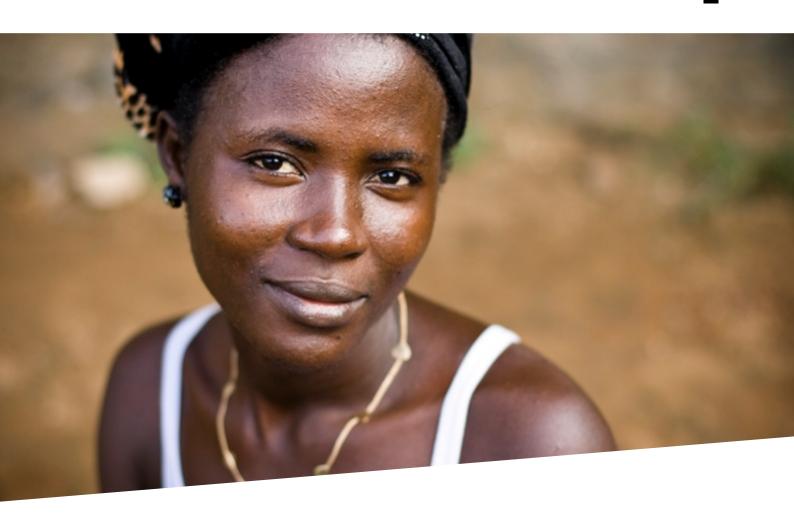
^{28.} Zambia Information and Communications Technology Authority (ZICTA) (2015) ICT Survey Report - Households and Individuals - Survey on Access and Usage of Information and Communication Technology by Households and Individuals in Zambia,

'Know Your Customer' landscape

ZICTA is responsible for overseeing KYC regulations and related legislation in Zambia. This process requires MNOs to collect a range of customer data, including names and physical addresses of subscribers, serial numbers of SIM cards, and mobile phone numbers. Customers are also required to provide an identity card number from either an NRC or a passport. Crucially, as a passport can only be claimed through the NRC as a breeder document, the NRC is an integral document to SIM card registration.

The regulatory legislation also stipulates that MNOs must maintain three lists in order to facilitate management of subscriber identification module and international mobile equipment identity numbers. These lists are a 'white' list containing subscriber identification numbers; a 'grey' list containing identification numbers that are suspected to be cloned, have changed electronic identity or are in operation without authorisation; and a 'black' list containing SIM and IMEI numbers of devices that have been disabled as result of theft, cloning, unauthorised operation or the identity has changed.





Potential opportunity for mobile operators

Improving NGO beneficiary enrolment

Many young women and girls lack access to official proof of identity, with birth registration and certificates rarely recorded or applied, and national identity cards not available until the age of 16. Although identity documents are often claimed later in life, the country's CRVS databases are relatively underdeveloped and lack integration.

There are a range of existing projects and Memorandums of Understanding between government ministries, notably the Ministry of Home Affairs and the Ministry of Health, to develop integrated identity databases. However, a lack of infrastructure and uptake means that many groups, including young women, remain unidentified.

Discrimination against women, embodied in traditional rules and practices, often constrains women's and girls' access to and use of identity, as well as their socio-economic and political empowerment. This limits their participation in important household decisions, and prevents them accessing services such as health and education.

Within this context, a range of NGOs in Zambia are working to support girls' education and leadership development, whilst facing challenges uniquely identifying their beneficiaries and assessing their needs. One particularly large NGO supports over 300,000 girls in primary and secondary school, and a community of nearly 30,000 registrars is utilised to collect and upload beneficiary data (on a routine basis) using mobile devices. When registering the personal details of beneficiaries, or conducting structured interviews and surveys, many non-profit organisations have found that collecting data on mobile devices, rather than on paper, reduces errors and allows the registration process to be more structured.²⁹

Opportunity

There is an opportunity, initially socially-focused but with the potential to achieve long-term commercial impact, for MNOs to partner with NGOs to provide mobile-enabled services and mobile connectivity to facilitate beneficiary enrolment. Mobile operators may choose to support these registration projects through the donation of funds and other goods (such as handsets, SIM cards, data, etc.), but their most vital contribution would be the provision of technical expertise for the development of innovative mobile solutions, and leveraging their unique assets and infrastructure to help increase reach and take applications to scale. With MNOs leading this work, there is also scope to empower beneficiaries by providing them with access to mobile money and other value-added services, and to equip them with the mobile assets and skills necessary for economic sustainability.

MNO Impact

A public-private partnership could align a multitude of local stakeholders' strategic objectives: contributing to the government's national development strategy, NGOs' wider goals to protect and empower young women, and operators' ambitions to use mobile technology to improve the quality of life in marginalised communities and contribute to a more connected society.

Aside from the short-term revenue stream generated by the purchase of SIM cards and data packages by NGOs and their beneficiaries, MNOs would stand to achieve long-term commercial impact by providing beneficiaries with access to value-added services and expand their customer base by providing SIM cards and data packages to an NGO's network of registrars and beneficiary alumnae. By proving that the enhanced registration system can achieve greater impact, efficiency and efficacy, MNO partners can maintain close working relationships with key stakeholders and build a strong, evidence-based case for ongoing support and scale-up of the new system; due to the international focus of many NGOs, there would be scope to scale this partnership across multiple markets.

More broadly, this partnership could achieve transformational impact; a project that empowers women educationally and economically could lead to greater chances for economic independence, and greater representation of women in leadership positions. One NGO interviewed notes that over 50 per cent of girls supported through their work go on to use mobile money services, 17 per cent have gone on to start their own businesses, and 44 per cent now hold local, national and international leadership positions.



Looking forward

The government of Zambia, and partners, have taken positive steps toward building a strong identity foundation across the country. This includes recognising the importance of CRVS in resource allocation and service delivery; but also the usefulness of digitising, integrating, and streamlining databases and other key identity assets. In particular, the role of identity in enabling the Vision 2030 strategic plan is acting as an important, mobilising tool for government and other stakeholders to improve registration rates. including among women and girls.

However, in order to deliver nationwide and robust identity solutions, the government faces a number of challenges. The enrolment of Zambian citizens across the country is a considerable undertaking, and in some locations, logistical challenges (principally network and power coverage) significantly impair these efforts. Through the creation of public-private partnerships, governments could look for new ways to leverage mobile networks and technology to improve the efficiency and reach of their national identity

and civil registration programmes. MNOs, with their network of agents, extensive experience of rolling-out infrastructure and considerable digital and telecommunications assets, could partner with government to support this work.

As noted above there are a number of other key areas where MNOs and public-private partnerships could support the identity ecosystem: digitising existing identity records collected via the previous analogue system; upgrading the current system to an electronic solution; and increasing coverage of both foundational and functional identities among women and girls. In the coming year, the GSMA Digital Identity Programme will be working with mobile operators across the Commonwealth to identify how opportunities such as these can create both short and longterm value for citizens, local governments, and other development partners, while also ensuring that the platform can be financed sustainably and quickly move from 'pilot' to 'scale'.

Appendix: Methodology

Through conducting a thorough review of the identity and mobile landscapes in each country, the research aimed to provide MNOs and other stakeholders with a detailed overview of the identity and digital identity context — and related opportunities — in Zambia. This work was seen to be particularly important in enabling the development of accessible, impactful, relevant, and sustainable digital identity solutions and initiatives; particularly those that could improve the lives of women and girls.

The approach, led and undertaken by M&C Saatchi Worldwide Services, had two main components: extensive desk research, and a series of key informant interviews to validate, contextualise, and interrogate the literature. Two interactive and structured workshops were convened to present initial and final findings.

Desk research

This component aimed to provide an overview of the identity ecosystem, including key identity stakeholders; establish a detailed overview of the mobile landscape; provide insight regarding gender disparities; and explore the prior appetite of MNOs with regard to wider social development products, services, and initiatives. The desk research featured an in-depth exploration and analysis of academic, grey and industry literature on political and policy development in the above countries, mobile phone adoption and gender norms, and a comprehensive compilation of statistics to develop a holistic picture of each market. Sample resources included

the World Economic Forum's Global Gender Gap Report, the World Bank's State of Identity Systems in Africa, UNDP's Human Development Reports, and leveraging data from sources such as GSMA Intelligence and the World Bank's Gender Data Portal.

Key informant interviews

Across the four markets, 40 semi-structured key informant interviews were conducted with representatives from government, civil society, and the private sector — including MNOs, and experts in identity and digital identity. The interviews particularly aimed to investigate identity ecosystems, mobile landscapes, and gender disparities; and to explore the interest of MNOs — and other stakeholders — in developing digital identity solutions. The discussions used a filter interview sequence strategy and modular structure — with questions tailored to each group of stakeholders. Each interviewee was asked questions regarding their experience and understanding of the identity ecosystem, mobile landscape, and gender context in each country; whilst each group were asked specific questions relating to the validity and reliability of publicly-available data relevant to their field of expertise. The desk research and initial discussions in each country generated a range of potential identity-related business opportunities or use-cases in each country. These were then discussed in more detail with experts from MNOs, in order to identify the feasibility and usefulness of each product or service.

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