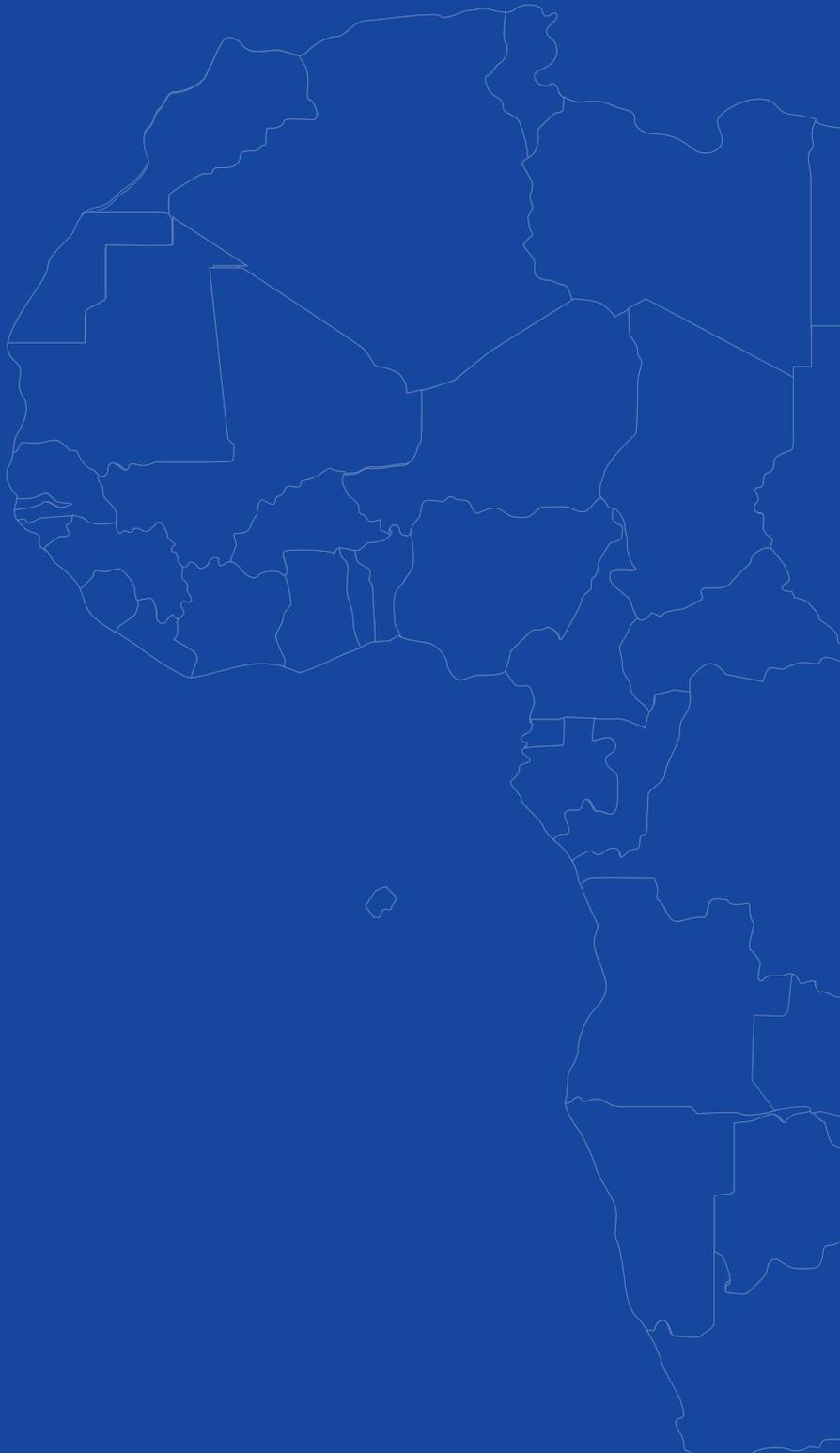


Payment Flow Diagnostic

for Government Payments in Zambia



This payment diagnostic for Zambia was funded by the UNCDF MM4P programme, in partnership with



The MasterCard Foundation



Conducted by



MicroSave
Market-led solutions for financial services



Executive Summary



Introduction

The process for this diagnostic was carried out by the Mobile Money for the Poor (MM4P) programme,¹ in collaboration with the **Zambian Ministry of Finance (MoF)**, in order to map the landscape of payments by the **Government of the Republic of Zambia (GRZ)** and to identify which payments are made in cash and what proportion is digitized.² The diagnostic used a methodology designed for the **Better Than Cash Alliance** that has been used in five other countries. The key objectives of this study were these:

- Provide current examples within GRZ of payments that have been digitized
- Provide baseline data from the most important sources available that can then help track changes in the shift from cash to electronic payments over time
- Recommend ways in which MoF, Bank of Zambia (BoZ), ministries and other stakeholders, including MM4P, can promote the expansion of appropriate, affordable, accessible digital payments
- Highlight the need and importance of establishing a single repository of knowledge on the evolution of digital payment policy and products in Zambia

More than **115** interviewees from **22** organizations, comprising of:



(were consulted during the period of data collection between August and December 2016)



Key findings

As part of its mandate, MoF champions the transition from cash to digital payments and has recently made policy and infrastructure amendments to enable digital payment adoption.

These initiatives include the following:

- 1) Development of the Integrated Financial Management Information System (IFMIS)
- 2) Rollout of the Treasury Single Account (TSA)
- 3) Implementation of the BoZ National Payment Systems Vision & Strategy 2013–2017
- 4) Draft of the 2017 National Financial Inclusion Strategy

¹ In Zambia, MM4P is a partnership between the United Nations Capital Development Fund (UNCDF) and Financial Sector Deepening Zambia (FSDZ).

² **Cash payments** – Defined as all payments made using cash, money orders, cheques or vouchers including instruments that need paper-based authorization. **Digitized payments** – Defined as all payments made using a digital channel (i.e., electronic fund transfers, real-time gross settlement, mobile banking, mobile money and all e-money services).

Payments, whether cash or digital, are measured by value (the total amount, in Zambian kwacha) and volume (the **number of individual transactions**, simply in whole numbers). At the time of this study, 97% of value (81% of volume) of outgoing payments was digital; however, the **majority of government receipts (incoming payments) are still in cash**, cheques and vouchers, currently at 82% by volume and 67% by value.

Of the 3.5 million transactions made to and by GRZ every month, 35% are digital (see figure I) and represent 75% of the total value transacted (see figure II).

Estimates for payments to and by GRZ are on par with estimates for five other countries where Bankable Frontier Associates and Better Than Cash Alliance have carried out payment flow diagnostics (i.e., Colombia, Malawi, Nigeria, the Philippines and Uganda). Figures III and IV compare the percentage volume and value, respectively, in Malawi and the five other countries.

Figure I

Monthly volume (number of transactions) of government payments

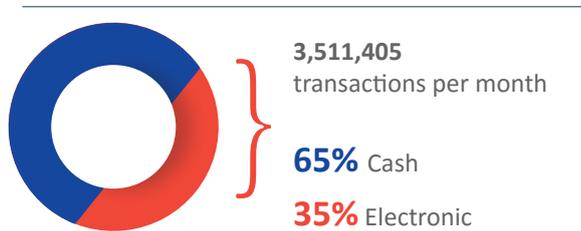


Figure II

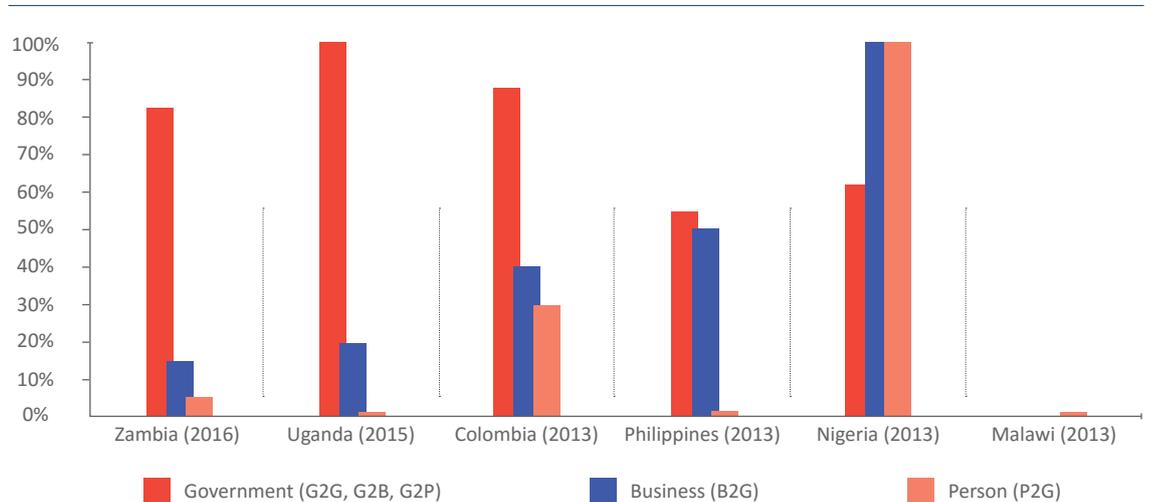
Monthly value (total amount) of government payments



By volume, school-related fees constitute about 44% (1.9 million transactions) of monthly person-to-government payments, while social cash payments constitute 21% (0.6 million transactions) of government-to-person payments. Only 4% of person-to-government and 56% of government-to-person payment transactions are made digitally by value.

Figure III

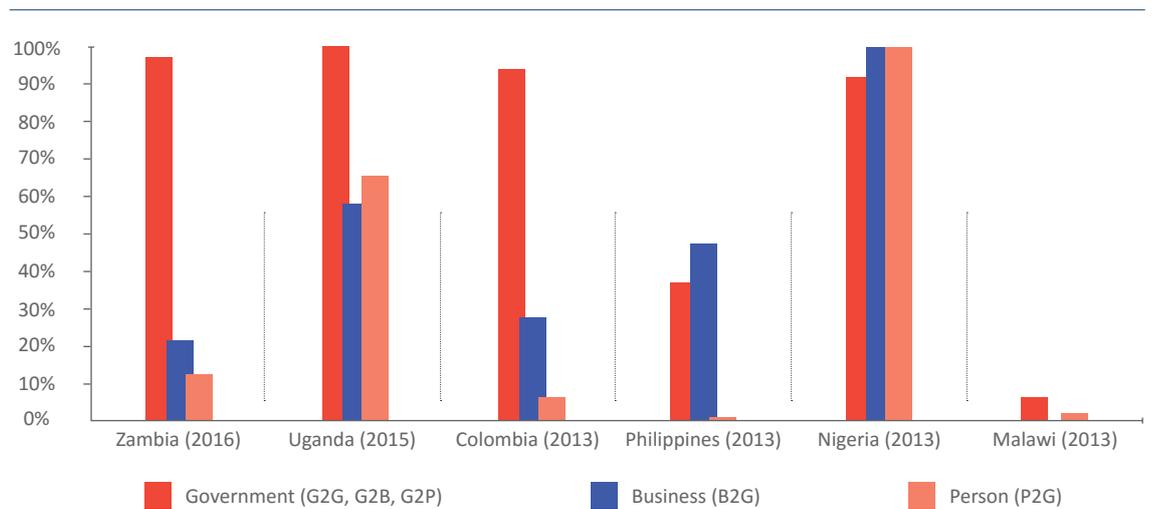
Government payments by volume compared to business- and person-to-government payments in five countries (2013, 2015 and 2016)



Acronyms: B2G, business-to-government; G2B, government-to-business; G2G, government-to-government; G2P, government-to-person; P2G, person-to-government

Figure IV

Government payments by value compared to business- and person-to-government payments in five countries (2013, 2015 and 2016)



Acronyms: B2G, business-to-government; G2B, government-to-business; G2G, government-to-government; G2P, government-to-person; P2G, person-to-government

Figures III and IV illustrate that there has been significant progress regionally and internationally in **one-to-many** (government-to-government [G2G], government-to-business [G2B] and government-to-person [G2P]) digital payments, as a result of governments adopting initiatives like IFMIS, TSA, a national payment system and payment digitization (e.g., government social cash transfers and farmer subsidy programmes).

The shift in **many-to-one** payments is yet to occur in Zambia. Individuals and businesses use cash and cheques to pay taxes, fees and fines to GRZ. GRZ has a policy framework to encourage digital payments for taxes, by authorizing the Zambia Revenue Authority to require all registered businesses to pay taxes through the e-payment system.³



Barriers to payment digitization

There are several factors that may undermine the efforts of GRZ to digitize G2P, business-to-government (B2G) and person-to-government (P2G) payments. These factors originate from the Government, private sector (providers) and/or individuals and include but are not limited to the following:

- High transaction fees
- Low levels of customer awareness and protection
- Inability of customers to meet know-your-customer requirements
- Inadequate rural reach and unstable network connections
- Absence of a National Financial Switch

Driving innovation by government leadership, in partnership with the private sector and other development partners in the ecosystem, is imperative to overcome these barriers and steer the Zambian economy towards a desired level of payment digitization and financial inclusion.

³ The Zambian Revenue Authority is making strides in allowing businesses and individuals to pay taxes electronically. It should be noted that, while the data provided was difficult to integrate into the study, the Authority suggests that currently up to 80% of business-to-government payments in value are made electronically, with a smaller percentage in volume. The opportunity for digitization lies mainly with small and medium enterprise and individual tax payments.



Incentives for payment digitization

Extensive engagement, workshops and interviews with payment ecosystem stakeholders provided a foundation upon which incentives for payment digitization were built (see table 1). These incentives would encourage support from the Government, private sector and individuals in the evolution of the current payment systems from cash to digital.

Table 1

Incentives to digitize payments

Government	Individuals	Financial service providers (mobile money operators and banks)
<ul style="list-style-type: none"> • Greater transparency and efficiency in government social safety net schemes, such as the Farmer Input Support Programme and Social Cash Transfer Programme 	<ul style="list-style-type: none"> • Improved security and reduced risk of theft and/or fraud for government beneficiaries and salaried employees (ensured by digital encryption and biometric/one-time-password authentication) 	<ul style="list-style-type: none"> • Opportunity for cross-selling other mobile network operator products and expanding new revenue streams (e.g., low-cost handset sales, short message service and data sales)
<ul style="list-style-type: none"> • Broader and more predictable tax base, in both amount and timing 	<ul style="list-style-type: none"> • Increased convenience for payments to and from the Government 	<ul style="list-style-type: none"> • Higher revenues from facilitating cash-out transactions
<ul style="list-style-type: none"> • Reduced leakages due to syphoning and ghost beneficiaries of subsidies and cash transfers 	<ul style="list-style-type: none"> • Greater confidence that the full, correct amounts are transferred, especially to individuals 	<ul style="list-style-type: none"> • Cheaper cost of customer acquisition (particularly for rural customers) given the targeted nature of these projects
<ul style="list-style-type: none"> • Increased operational efficiencies in revenue collection from real-time reconciliation, allowing for improved risk management 	<ul style="list-style-type: none"> • A low-barrier on-ramp to improving familiarity with digital payments for rural and underserved populations 	<ul style="list-style-type: none"> • Development of sustainable profit-sharing models that also reduce cost of project implementation in rural areas
<ul style="list-style-type: none"> • Improved availability of reliable data with which to make evidence-based decisions 		<ul style="list-style-type: none"> • Potential technical and/or financial support or partnership to extend agent networks in remote areas
<ul style="list-style-type: none"> • Overall reduction in social welfare programmes' administration costs as a result of digitization and better reconciliation 		<ul style="list-style-type: none"> • Maintenance of existing revenue streams through government partnerships, including float income from facilitating government payments
		<ul style="list-style-type: none"> • Continued role in facilitating cash-out in remote locations, generating income from transaction charges



Recommendations and conclusion

This report indicates that, while GRZ has made tremendous progress in the digitization of payments at a central level, payment digitization (especially P2G and G2P) is low. The report highlights **four main areas of support** that MM4P Zambia can offer to GRZ in partnership with the private sector to accelerate the shift of government payments to digital and help build an effective, inclusive and financially viable digital payment ecosystem. These initiatives should be viewed as sequenced steps on the roadmap to government payment digitization.

1. Support to review and improve the tendering process for digital payments:

Support can be provided to the Ministry of Community Development and Social Services and the Ministry of Agriculture to review their tendering processes. This review will focus on the existing tendering processes for projects related to payment digitization in a bid to better understand the key points that have affected existing projects and with an aim to make recommendations that will strengthen the proposition of digitizing government payments for all stakeholders (i.e., government agency [payer], private sector [financial service provider] and beneficiary [payee]).

2. Support to improve existing G2P and P2G digitization programmes:

Based on key findings and proposed recommendations from the research, MM4P Zambia can support these ministries:



All three ministries have ongoing digitization efforts that require some support to build from best practices in digitization of government payments. GRZ can leverage the expertise of MM4P Zambia on the local digital financial service ecosystem and global best practices around building capacity, managing agent networks and liquidity, performing high-volume digital payments and building awareness of digital finance services—expertise that has been developed in the other eight countries that MM4P has been implemented. When supporting these efforts, investment will be made in understanding the challenges of extending financial services to last-mile customers/beneficiaries.

3. Support for ministry database infrastructure:

Development of a ‘Payments Dashboard’ for the Ministry of Agriculture would provide additional visibility to the Farmer Input Support Programme on farmer-related activities:

- Inputs received (from authorized input providers) by each farmer
- All payments made to each farmer as subsidies
- Produce (output) of each farmer based on harvest sales made by each farmer
- Financial transactions (i.e., savings and expenditures made by each farmer off their accounts)

Doing so would enable the Ministry to develop data on the financial trends and behaviours of farmers that would in turn allow the farmers to gain access to additional financial solutions to expand their farms and improve their livelihoods.

4. Support for financial interoperability:

Findings of the diagnostic indicate that the absence of interoperable and shared payment system infrastructure has resulted in increased transaction costs and low usage of existing disparate digital payment solutions, such as mobile money, point-of-sale (POS) devices and card-less transactions at automated teller machines (ATMs).

Cognizant of these challenges, BoZ has been working towards implementation of a National Financial Switch (NFS), which is aimed at interconnecting various payment streams such as ATMs, POS devices and mobile payments, among others, through a shared payment system infrastructure. This level of interoperability has the potential to accelerate the transition to digital payments, with consumers having multiple choices at their disposal.

Zambia Electronic Clearing House Limited (ZECHL) has been designated to house NFS and manage the project. Implementation of NFS will facilitate interoperability between and among various financial service providers in Zambia, thereby increasing access and reducing the cost of financial services due to shared infrastructure.

ZECHL, represented by the Office of the Chief Executive Officer and his team, has expressed interest to partner with FSDZ to support implementation of NFS. Support would entail finalizing the rules and interchange fees for NFS, reviewing the testing of an ATM and POS device module, on-boarding mobile money operators and other financial service providers under the NFS project pilot, and providing information on global best practices to drive transaction volumes and interoperability for bank accounts, mobile wallets, cards, ATMs and POS devices.

March 2017
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