

COUNTRY DIAGNOSTIC
EXECUTIVE SUMMARY

SEPTEMBER
2017

Building an Inclusive Digital Payments Ecosystem: The Way Forward



BETTER THAN CASH
ALLIANCE



GHANA

This Diagnostic Report shows Ghana has taken important steps toward digitizing its economy, and has several of the building blocks of an inclusive digital ecosystem already in place. Importantly, the Ghanaian government is leading by example in digitizing many of its own payments and continuously improving the regulatory environment. Large businesses are also taking positive steps. Even so, Ghana remains at the initial stages of its digitization journey, with cash still prevalent in many parts of the economy. A number of key barriers must be overcome if the country is to drive forward its digitization agenda.

This Report assesses Ghana's progress to date, and sets out specific policy recommendations that can accelerate Ghana's journey toward a more digital economy. The report draws on a fast-growing body of knowledge about success factors in similar markets. It also examines three areas of specific focus - government fees and fines, public utility payments, and the fast-moving consumer goods sector - where digitization can have particularly powerful impacts.

Realizing the potential gains offered by digitization will help expand financial inclusion, boost government revenues, and drive new economic opportunities for Ghanaian individuals and businesses. In doing so, greater digital payments can significantly strengthen Ghana's economy and society, now and for generations to come.

EXECUTIVE SUMMARY

Ghana has begun its journey toward an economy that is less dependent on cash, with the government playing a key role in driving progress. Several important elements for a shift to digital payments are already in place, including good connectivity, growing financial infrastructure, and a continuously improving regulatory environment. Crucially, there is also a widespread recognition of the need to continue building an inclusive and responsible digital payments ecosystem. Doing so will drive financial inclusion, particularly for women, improve transparency of payments, and open up new markets for goods and services, which in turn supports economic growth.

The purpose of this report is to diagnose both the progress of digital payments and the challenges that lie ahead. In doing so, the intention of the Better Than Cash Alliance is to offer a guide – including specific recommendations – to help Ghanaian policymakers and private sector decision-makers accelerate their progress toward digitization. Specifically, to accelerate Ghana's progress in building an inclusive digital payments ecosystem, this report recommends:

- Rolling out a biometric National ID as planned and making explicit efforts to enable payments and other financial use cases
- Improving payment interoperability
- Digitizing government procurement payments to and from citizens or businesses
- Leveraging electronic fund transfer infrastructure for business-to-business payments
- Incentivizing digital payments at the point of sale

These measures can help bring Ghana to a tipping point on its digital payments journey, as individuals, businesses, and government increasingly realize the power of digital payments to deliver major savings and efficiencies, strengthen businesses, and materially improve lives.

KEY FINDINGS

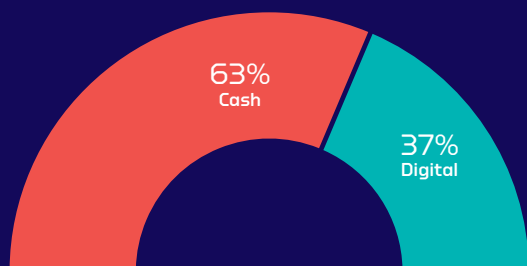
Ghana is making progress in digitizing payments, with 37% of the value of all payments now made digitally. The shift to digital payments is supported by good internet connectivity, levels of financial inclusion in Ghana above the regional average, expansive mobile money agent networks, solid payments infrastructure, and continuously improving regulation spearheaded by the Bank of Ghana (“BoG”).

The Ghanaian government is leading efforts to digitize payments. The Ghanaian government is leading by example, both in setting policy direction through ministerial statements and in digitizing its own payments, including conditional cash transfer programs such as Livelihood Empowerment Against Poverty (“LEAP”). The 86% of the value of government payments which is now digital shows the government’s leadership. In addition, the government’s implementation of a Treasury Single Account¹ (“TSA”) will help the government improve efficiency and maximize savings from its digitization efforts.

However, the vast majority of payments by volume are still being made in cash. This report estimates that, even with this progress, 98.72% of the number of payments are still currently being made in cash, as individuals continue to purchase essential goods, including food, in the informal economy which relies on cash. The strong preference for cash in Ghana is also a result of the high costs of digital payments that are often passed on to users (i.e., charging customers a fee to use credit cards), and a lack of trust in, or familiarity with, digital payments.²

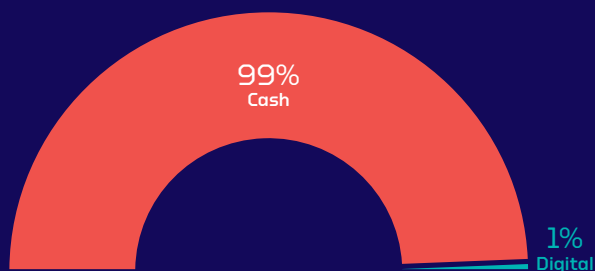
Ghana is making progress in digitizing payments, **with 37% of the value of all payments now made digitally.**

ESTIMATED ANNUAL PAYMENTS BY VALUE 2016



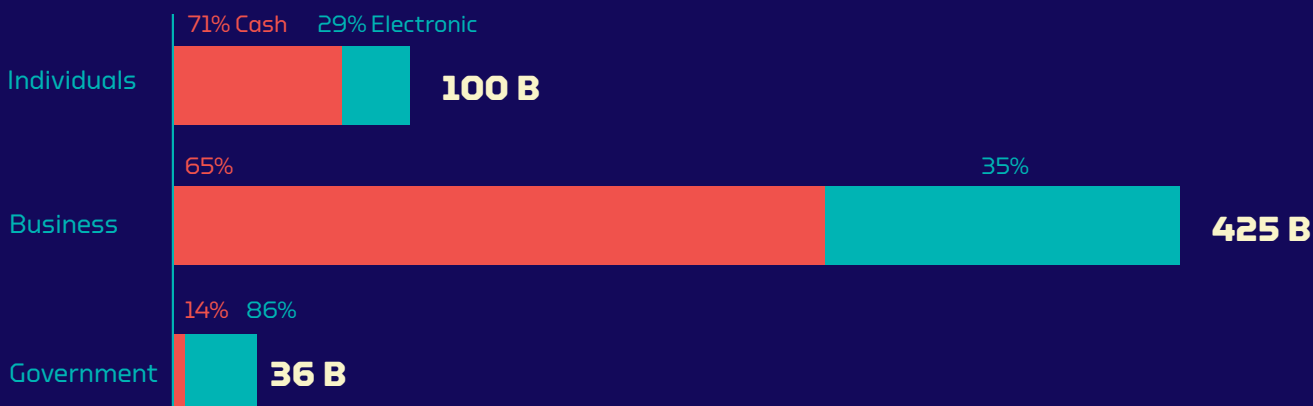
37% of GHS 561 billion payments are processed through electronic channels.

ESTIMATED ANNUAL PAYMENTS BY VOLUME 2016



99% of 6.8 billion transactions conducted in Ghana are in cash.

ESTIMATED ANNUAL VALUE OF TRANSACTIONS (GHS billions), 2016



ESTIMATED ANNUAL VOLUME OF TRANSACTIONS 2016



Government Payments

- **Digitization efforts are expected to create savings of over GHS 250 million (approx. USD 58 million) in 2017 and improved transparency.** Digital changes already implemented have delivered significant cost savings and improved transparency, such as the removal of close to 50,000 “ghost” names on the government payroll and pensions registry through the required registration of all civil servants on the Social Security and National Insurance Trust (“SSNIT”) biometric database, a specific database managed by SSNIT that is antecedent to the National ID initiative.
- **Almost 100% of all government-to-person (“G2P”) and government-to-government (“G2G”) payments are digital.** Ghana has achieved the first level of digitization of payments within these payment types. The challenge ahead is to continue building out the digital payments ecosystem so that these funds can be used for other digital transactions, rather than being cashed-out by recipients.
- **However, approximately 90% of G2B and other government payments by volume are still made via check or cash.** Although the government has made great strides with G2P and G2G, these only account for a small percentage of overall total number of government payments. By far the largest number of payments are the G2B payments, 90% of which are still made via check or cash. Eighty-six percent of all government payments by volume are procurement payments, almost all of which are made by check. The high prevalence of checks in procurement is primarily due to the lack of a centralized system for payment of suppliers by government agencies.
- **A biometric payment card is in its initial stages but needs further adoption and greater choice for consumers and businesses.** A key initiative in the government’s digitization agenda is the roll-out of the biometric e-zwich card,³ which is intended to become a universal payment instrument in Ghana. While progress has been made in terms of payments made by government using the e-zwich card, it has not yet been adopted widely by individuals or the private sector, primarily due to lack of interoperability and limited merchant acceptance. At this stage most e-zwich transfers are being immediately cashed out by recipients, meaning that government payments are not being retained in the electronic payments ecosystem. This indicates a need to continue building out Ghana’s digital payments ecosystem through greater choice and competition, in collaboration with the private sector.
- **The government is implementing measures to streamline payments.** The government is keen to implement a TSA to streamline government payments, and has already transferred accounts of nine Ministries, Departments, and Agencies (“MDAs”) (out of 24) from commercial banks to the BoG as of August 2017.

Payments by Individuals

- **Payments by individuals account for the largest volume of payments in the Ghanaian economy**, with person-to-business (“P2B”) transactions (mostly retail transactions) representing 94% by volume of all payments in the ecosystem.
- **Ninety-nine percent of all transactions by individuals are estimated to be cash-based**. This is typical in emerging-market economies, mainly due to cash purchases by individuals of consumption goods and a large informal economy.
- **The current extensive use of cash in Ghana among individuals also results from:** (i) the **high cost** of digital payments that is often passed on to users (i.e., charging customers a fee to use credit cards or mobile money); (ii) **trust issues** with using digital payments; (iii) the **low penetration of debit and credit cards and low availability of POS devices** at merchant points.
- **Over a quarter (29%) of the value of all transactions by individuals is estimated to be digital, driven largely by the rapid expansion of mobile money**. While digital payments by individuals measured by volume are low in Ghana, measured in terms of value they are much higher, primarily due to digital remittances, both international and domestic.



72% of all business payment transactions are non-digital, due mainly to the prevalence of check and cash payments.

Payments by Businesses

- **Most businesses in Ghana still use checks and cash.** Although large businesses are moving to electronic payments for high-value transactions, most businesses still largely use checks and cash. More than two-thirds (72%) of all business payment transactions are non-digital, due mainly to the prevalence of check and cash payments in business-to-business (“B2B”) payments and a lack of competitively priced alternatives. In terms of payments already being made digitally, large businesses primarily use Electronic Funds Transfer (“EFT”) for salaries and pension contributions.
- **Although small businesses predominantly use cash payments for B2B transactions, medium and large businesses favor payment by check for legal reasons.** Checks act as a cash flow management tool and are perceived to provide better legal recourse than EFT payments, as it is a criminal offense in Ghana to issue a check that is dishonored upon presentation.

Digital Payments by Payment Instrument

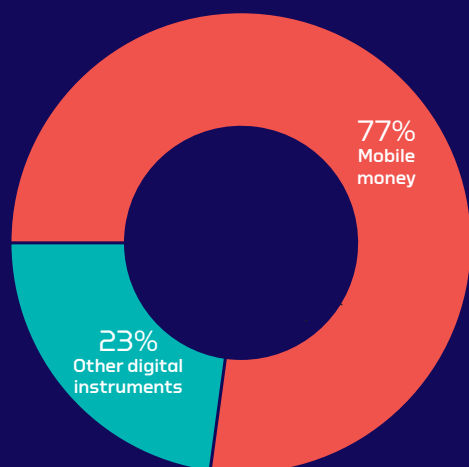
- **Transactions initiated by mobile money account for 90% of all transactions initiated by digital payment instruments in Ghana in 2016,** and over 77% of the value of all transactions initiated by digital instruments in that period. This growth in mobile money is thanks largely to significant effort and investment by several mobile network operators following the regulatory changes that came into effect in 2015 enabling electronic money to be issued by both regulated financial institutions and licensed non-bank entities.
- **Over two-thirds of the volume and value of mobile money transactions are not payments of the standard definition,** but rather customer service and internal transactions such as cash-in, cash-out, account inquiries, bank-to-wallet, and wallet-to-bank transactions.

“The QR code helps me save money, sell more and manage the cash flow better as I no longer need to offer credit to my customers. No more chasing. They can pay me instantly.”

“I would like to be able to pay for water and electricity, and for the renewal of my business license, with the QR code. It's so much more convenient, quicker, than cash.”

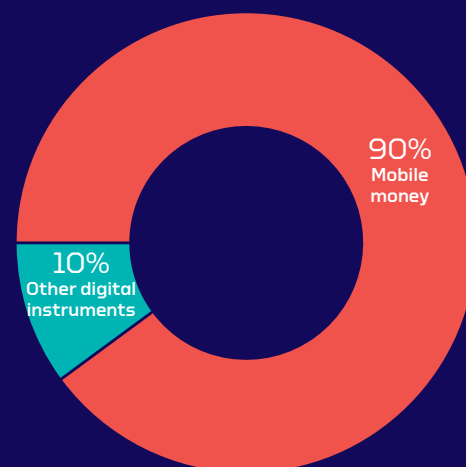
OLIVIA DEI-ALORSE, JUICE SELLER

VALUE OF DIGITAL PAYMENT INSTRUMENTS 2016



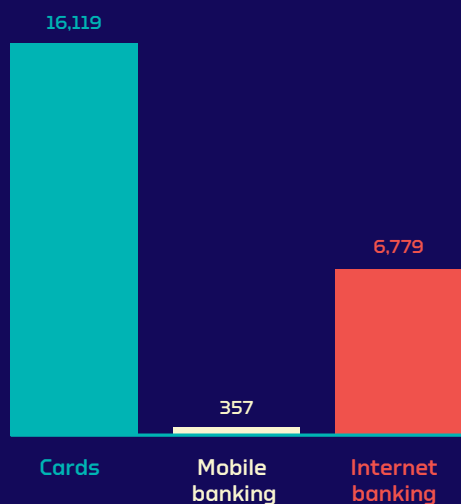
Over two-thirds of Ghanaian transactions by digital payment instruments by value and volume in 2016 are mobile money.

VOLUME OF DIGITAL PAYMENT INSTRUMENTS 2016

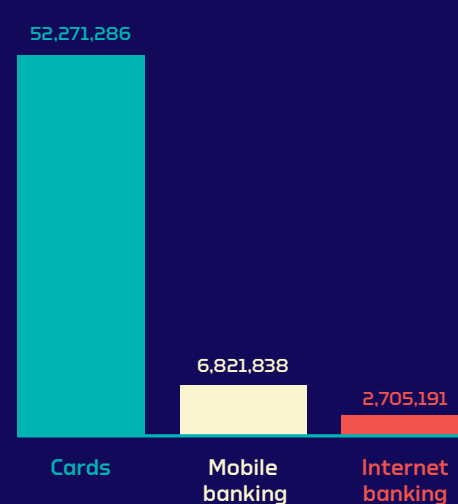


Mobile money accounts for **90%** of all transactions by digital payment instrument in Ghana in 2016.

VALUE OF DIGITAL PAYMENT INSTRUMENTS (GHS MILLION), EXCLUDING MOBILE MONEY 2016



VOLUME OF DIGITAL PAYMENT INSTRUMENTS, EXCLUDING MOBILE MONEY 2016



When mobile money-initiated transactions are excluded, cards are the most prevalent form of digital payments instruments, although internet banking is increasing in terms of the volume of payments.

"Cards" includes debit, credit, prepaid, and e-zwich cards, of which debit cards are the most prevalent.

PRIORITY AREAS FOR DIGITIZATION

This report has identified three priority areas where cash remains prevalent, and has assessed that shifting to digital payments can have a strong positive impact on the payments ecosystem:



Payment of fees & fines to government. The various fees and fines paid by individuals and businesses to Ghanaian government entities is a key area that can benefit substantially from digitization, given 97% of fees and fines paid by individuals are made in cash, and 99% of business payments are made using “non-digital means” – for example, checks.

In terms of transaction volumes, digitizing “one off” fees does not appear significant at first glance, as it accounts for only 0.03% of all payments and 1.6% of all government payments. However, in reality, doing so has the potential to streamline person-to-government (“P2G”) interactions for millions of Ghanaians, increase government revenue in the process, and help formalize the country’s growing small business sector. It also forms part of the government’s e-services strategy, with payments able to be made on the Ghana E-Payment Portal (“GEPP”).

“Handling cash is not convenient. Mobile and e-card payments are much faster and more secure for both the customers and us.”

TELLER AT DRIVER AND VEHICLE
LICENSING AUTHORITY OFFICE



Payments for public utilities, e.g., water and electricity. Another key focus area is payments received by public utility companies for the distribution of water and electricity to individuals, businesses, and government institutions. Again, cash is the main payment method for public utilities with only a small number of high-value electronic funds transfers by businesses. Eighty percent of the population is using these essential services, so if large-scale digitization of these payments can be achieved, this will help build familiarity with, and take-up of, digital payments more broadly.

The main challenge is a lack of smart distribution infrastructure, such as smart meters that allow for remote reporting of usage and credit top-up. In terms of electricity supply, around 20% of end-users currently have smart meters, providing an opportunity for a quick win by digitizing end-to-end delivery and payment, although challenges remain due to the variety of different smart meters and platforms in use. The remaining 80% of users who do not have smart meters for electricity, and the 100% of users who do not have smart meters for water present a longer-term opportunity for highly effective and efficient digitization by providing a single form of smart, prepaid meter.



Payments in the retail space and in the Fast Moving Consumer Goods (“FMCG”) value chain.

With FMCG companies in Ghana manufacturing a range of household consumer goods (sold either through a direct or an indirect distribution model via wholesalers and small retailers), there are a number of opportunities to digitize the payments process.

On an individual level, 99.9% of payments for consumption goods by volume are in cash, and these make up 94% of all payments by volume. This indicates there is much work to do in this area, but also presents a major opportunity to realize the many advantages of digitization which are now well established from experiences in other developing markets. On the one hand, this includes the consumer facing retail payments space with merchants, which is emerging as a significant priority for digitization across emerging markets. On the other, it includes the B2B wholesale space and distribution chain with wholesalers and small retailers. For FMCG companies operating in Ghana, checks are the main payment instrument for receiving distributor payments – accounting for 96% by volume and 95% by value. Similarly, it is the primary method for making vendor or employee payments, about 59% by volume and 46% by value respectively.

This report finds that digitizing only a fraction of these transactions would have a significant impact on the overall ecosystem, especially to drive adoption among small merchants and consumers. It would also open potentially transformative new pathways for access to capital for Micro Small and Medium Enterprises, the vast majority of which tend to be excluded from the traditional banking sector. Digitizing payments in and around the retail space generates transaction data on all participants in the value chain that can be used for credit assessments and the creation of new working capital products, both for consumers and small retailers.

99.9% of payments for consumption goods by volume are in cash, and these make up 93% of all payments by volume. This indicates there is much work to do in this area, but also presents a major opportunity.

This area of prioritization has particular relevance and impact for women, as a large number of businesses in the informal sector, such as market stall owners, are run by women, and often constitute the final link of the FMCG value chain. They often use daily cash collectors (known as Susu collectors) for saving and to avoid storing large amounts of cash and leaving their workplace during business hours. Digital payment methods offer these women an alternative to the Susu system for securing their funds, offer real-time processing, and expand their economic opportunities. Transaction histories created by digital payments can also help women access formal loans to expand their business. Further, the ability to accept digital payments increases revenue, as customers are no longer limited to paying in cash or on credit.

While companies can offer a variety of incentives to push the digital payments effort, its uptake will require a concerted effort on an industry-wide level, engaging small retailers, manufacturers, and distributors as well as government and financial services providers. Collaboration across the industry will help accelerate the shift to digital payments and subsequently allow usage and benefits to extend to the merchant and retailer level.



RECOMMENDATIONS OF THIS REPORT

USE CASE-SPECIFIC ACCELERATORS

Payment of fees & fines to government

This report recommends that the government:

- Clearly state its intention to move to using digital payments exclusively for government fees and fines
- Improve the technical capacity of MDAs to migrate to digital payments, possibly by seeking external technical assistance from the private sector and/or donors
- Leverages GEPP as the central payment infrastructure for all government agencies in order to address the fragmentation of payment portals while promoting greater choice and competition
- Negotiate with financial service providers to lower costs or even offer discounts for digital payments through the GEPP to incentivize citizens to pay electronically

The government may also need to:

- Re-engineer some of the internal processes that may impede offering online services and digital payment options for services
- Ensure all MDA services are brought onto the common GEPP gateway
- Increase public and government awareness about the digital payment options (anecdotal evidence suggests that many people were unaware that they could apply and pay digitally for some services)

Payments for public utilities, e.g., water and electricity

To accelerate the shift to digital payments for both water and electricity, this report recommends:

- Providing financial and technical support to public utility companies to update their internal accounting processes, including their accounting, reconciliation, and software platforms. This will enable faster and more accurate reconciliation of digital payments.
- Providing technical support to help public utilities create effective partnerships with FSPs (including banks, mobile money providers, and fintech companies) and drive acceptance of cards, mobile banking, and mobile money payments both for prepaid and postpaid utilities and, particularly, for existing smart meters. In the long term, financing and support for the purchase and installation of homogeneous smart meters for both sectors would be a powerful accelerator.



Payments in the retail space and in the Fast Moving Consumer Goods (“FMCG”) value chain

To accelerate the shift throughout the entire value chain, this report recommends:

- Further in-depth research to understand how payments flow throughout the value chain in the retail space, especially focusing on small retailer and wholesaler behavior, incentives, and challenges.
- Concerted industry coordination and action from manufacturers to distributors and FSPs, with some element of government support and engagement from all players in the value chain. For example, working in collaboration with FSPs and their main distributors, FMCG companies could run campaigns where the direct incentives offered to encourage distributors to pay electronically (which have, so far, not been effective) are passed on to retailers and consumers. The government could support this initiative by offering a small tax incentive to FMCG companies, merchants, and even consumers. Any initiative that offers direct incentives should be informed by a business case for all stakeholders – small merchants, FMCG companies, FSPs, and government – to ensure its sustainability in the short to medium term.

GENERAL ACCELERATORS

Roll out a biometric centralized National ID system and make explicit efforts to enable payments and other financial use cases

Currently, there are nine separate identity databases across various public-sector entities. This report supports current plans for a revamped biometric National ID conforming to international standards. Prioritizing this roll-out will accelerate digital payments by enabling FSPs to:

- Adopt a unified approach to identification and authentication of transactions, and
- Leverage the digital ID to develop innovative Know Your Customer (“KYC”) procedures, such as remote or e-KYC for non-face-to-face account activation by mobile network operators (“MNOs”).

Through innovative KYC measures, individuals who do not currently have the required identification to access the formal banking system are able to overcome this hurdle. Similarly, remote account activation makes it easier for rural and vulnerable populations to enjoy a higher level of financial inclusion. Benefits such as these are particularly important for women who constitute the majority of the financially excluded, and who most frequently do not have access to identification that is needed to access the drivers of financial inclusion.

Beyond account opening and KYC, a digitally enabled ID system can also unlock other payments and financial service use cases. For instance, if coupled with real time push payments (which are already available in Ghana through GhIPSS Instant Payment) and a digital payments addressing

system, it can enable real time funds transfer using ID numbers, phone numbers, email addresses, or other identifiers instead of account details—enhancing security, convenience, and consumer choice.

Improve interoperability for all payment instruments

Interoperability offers strong potential to accelerate a shift to electronic payments, as it increases the options available for payments to remain in the digital ecosystem rather than being cashed-out and is an important mechanism for greater inclusion, as noted in the BTCA's Responsible Digital Payments Guidelines.⁴ Currently there is a lack of interoperability between bank and mobile money payments in Ghana. To address this issue, Ghana Interbank Payment and Settlement Systems Ltd ("GhIPSS") has a mandate to develop a new interoperable switch by November 2017. The report strongly supports this initiative and recommends maximizing its potential for expanding financial inclusion by developing it as a neutral switch with no preferences for type of payment mechanism.

By improving interoperability, the payment ecosystem will become more competitive, offering better coverage, cheaper pricing, and more innovative products, all of which will support further financial inclusion among the bottom of the pyramid and rural populations.

Drive digitization of G2B payments through e-procurement and e-invoicing

As the Ghanaian government prepares for its e-procurement launch, the report recommends including a mandate to use electronic payments for all e-procurements. This may require process re-engineering within the Government Financial Management systems, as well as developing a payments module within the e-procurement system. Including such a mandate could spur G2B digital payments and increase private-sector trust in digital payments. These benefits could be further supported by introducing a centralized payment system for suppliers based on the TSA, coupled with a mandate to pay all government suppliers through this system and e-invoicing.

Incentivize the use of EFT/Real-Time Gross Settlement ("RTGS") in B2B payments, thereby leveraging existing infrastructure

This can be implemented by having:

- The BoG offer a price for RTGS and/or EFT payments that is cheaper than checks to incentivize businesses to use the RTGS/EFT channels;
- The government provide short-term income tax incentives for businesses to adopt digital B2B payments; and
- FSPs develop quicker, user-friendly, and more secure internet banking and mobile money platforms.

Once Ghana's current payment infrastructure is sufficiently developed, the government can then consider short-term legislation penalizing all non-digital transactions over a certain value.

Introduce government and private incentives to support digitization of merchant payments.

A combination of short-term private-sector incentives fuelled by collaborative industry efforts and public tax incentives for digital merchant payments has the power to drive adoption, both by consumers and larger players higher up the FMCG value chain.

This report recommends specifically:

- Government tax incentives targeted at payment service providers, FMCG companies or others that support the roll-out of electronic merchant payments, as well as retailers and individuals that actively adopt electronic payments;
- A publicly financed awareness campaign targeting consumers on the usage of digital payments; and
- Investment by industry to fund tangible incentives such as specific trade discounts and training of merchants, as well as supporting small retailers' access to financial services and digital payments.

As women make up a large proportion of those selling FMCG goods, digitization in this area will also directly improve their businesses and personal security as well as offer further economic opportunities.

Conclusion

Ghana has made significant progress in building the foundation of an inclusive digital payments ecosystem, and is starting to see uptake of digital payments in some areas. This process has benefitted from concerted government leadership and identification of the barriers that need to be overcome. Ghana now has an opportunity to take further actions that can drive digitization of payments and deliver significant benefits across a range of stakeholders. Seizing this opportunity can have a major impact on the living standards and economic opportunities of individuals – particularly women. It can also help strengthen businesses and the overall economy, while also improving the transparency and security of payments across the board.

The Better Than Cash Alliance Research Series

Our case study and country diagnostic series seeks to highlight specific examples of shifts from cash to digital payments by governments, companies, and international organizations. Each case study and country diagnostic aims to provide insights for a wide audience on the factors that have helped or hindered the digitization process, and also present key results and benefits of the transition away from cash. We hope that readers will be able to adapt the lessons from these cases to their own contexts and local conditions.

Acknowledgments

The Ghana Diagnostic Team would like to extend its gratitude to the following organizations for all the support given and information provided: Ministry of Finance and Economic Planning, Ministry of Gender, Children and Social Protection, Ghana Ports and Harbours Authority, Bank of Ghana, Electricity Company of Ghana, Ghana Revenue Authority, Ghana Water Company, Coca Cola, MTN, Unilever, CGAP and The World Bank.

About BFA

BFA is a global consulting firm specializing in financial services for low income people. Our approach is to seek out, create, and implement financial solutions to help people manage challenges and seize opportunities. We partner with cutting-edge organizations that touch the lives of low income consumers such as financial institutions, financial technology companies, and information providers. In creating solutions, we integrate our deep expertise in customer insights, business strategy, new technology, and growth-enabling policy and regulation.

WWW.BETTERTHANCASH.ORG

About The Better Than Cash Alliance

The Better Than Cash Alliance is a global partnership of governments, companies, and international organizations that accelerates the transition from cash to digital payments in order to reduce poverty and drive inclusive growth. Based at the United Nations Capital Development Fund (UNCDF), the Alliance has over 50 members, works closely with other global organizations, and is an implementing partner for the G20 Global Partnership for Financial Inclusion.

BILL & MELINDA
GATES foundation



ISBN 978-1-946173-29-4



9 781946 173294