



Technology Program Country Note

GHANA



June 2011

Overview¹



Population	24.3 million
# Adults (over 15)	15.3 million
% Urban	51
GDP/capita (PPP)	\$1,600
% Living under \$2 a day	54
Financial Inclusion	
% of adults formally included	41 (5.5m)
% of adults banked	34 (4.5m)
# Bank branches per 1,000 adults	5.1
Mobile Phone Penetration (%)	74
% Market share by largest MNO	50

Introduction

With 15 million adults and just 4.5 million bank accounts, a majority of people in Ghana do not have access to formal financial services—although the ratio of banked-to-unbanked adults is higher than average for sub-Saharan Africa. The country is divided between a wealthier, urban South and a much poorer, rural North. Mobile phone penetration has grown by almost 50 percent in the past few years, and now stands at 74 percent of the population. This is divided among five mobile network operators (MNOs); MTN is the dominant player, with just over 50 percent market share.

Ghana has an active NP branchless banking market. Three MNOs lead mobile money deployments, with a total of 12 partnering banks and almost 3 million registered customers. Two smaller organizations operate MNO-agnostic services. Unfortunately, despite the number of players, the results to date have not met initial expectations. The percentage of registered customers who are actively using a branchless banking service is very low, and MNOs are not seeing a return on the high initial investments they have made.

There are a few possible explanations for this. The government's overriding focus is to create an interoperable system. It has introduced its own branchless banking service called eZwich and is trying to mandate reluctant banks to issue cards and deploy eZwich-compliant point-of-sale (POS) devices and automatic teller machines (ATMs). In addition, the government's Branchless Banking Guidelines require a many-to-many model and do not allow for exclusive partnerships. The result of the guidelines is multiple partnerships between one MNO and multiple banks. The partnerships seem to lack clarity around roles, responsibilities, and remuneration. Most banks are unwilling to invest substantially in any one implementation, perhaps since their direct competitors are also involved and would benefit from their efforts.

In addition, MNOs (as in many countries around the world) have struggled to develop a widespread mobile money service with a critical mass of customers. They have invested significantly in above-the-

¹ Sources for data are Central Intelligence Agency, The World Fact Book, retrieved 10 March 2011, <https://www.cia.gov/library/publications/the-world-factbook/geos/gh.html>, and CGAP/World Bank's *Financial Access 2010*, <http://www.cgap.org/p/site/c/template.rc/1.26.14234/>.

fold marketing campaigns but have limited networks of active agents and have not hit on the critical marketing messages and product features that appeal to the mass market in Ghana.

Ghana is a promising market that should be ripe for branchless banking, but it has not grown as expected. CGAP believes there is potential for branchless banking to grow in Ghana and looks forward to engaging the market and helping its progression.

Customer Demand for Financial Services²

Although Ghana technically reached middle income status in 2010, more than half the population live on less than \$2 a day. There is a large gap in the standard of living between those living in urban areas (mostly in the South) and those living in rural areas (mostly in the North). For instance, just 3 percent of those living in rural areas have a flush toilet, compared with 36 percent of those living in urban areas. This contrast also applies to access to financial services. The access strand in Figure 1 shows that 41 percent of Ghanaians above the age of 15 have or use formal financial products (either bank or other formal product).

Figure 1. GHANA FINANCIAL ACCESS STRAND 2010

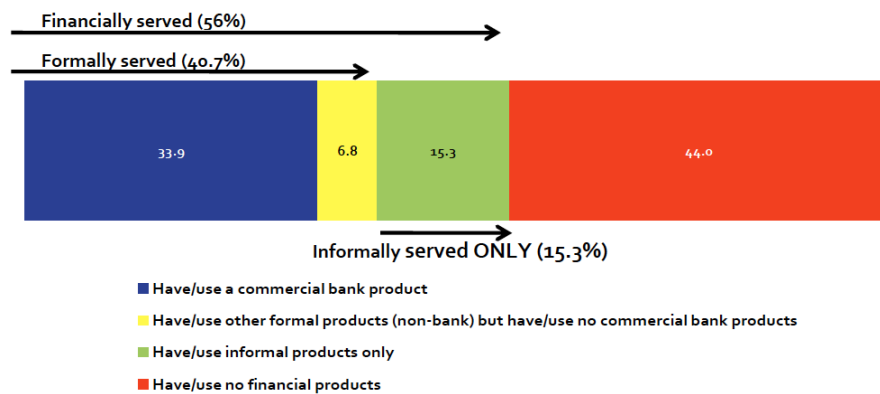
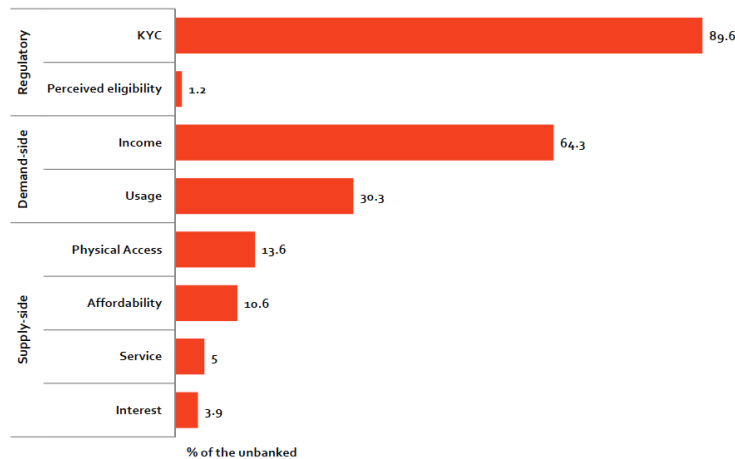


Figure 2. Barriers to Banking



In urban areas, 61 percent of adults have formal products, while in rural areas just 26 percent do. In addition, although 83 percent of the banked population has a transactional product, just 31 percent carried out transactions using these products. Therefore, a sizeable percentage of the banked population is probably underbanked, lacking appropriate products to meet their needs.

Interestingly, physical access to banks does not appear to be a significant barrier to banking, with just 14 percent

² The data in this section come from Finscope Ghana 2010 unless otherwise noted.

of unbanked people citing access (distance, convenience of operating hours, etc.) as a barrier. The primary barrier is know-your-customer (KYC) requirements, which are much lower for the mobile banking services being offered. Ninety percent of unbanked adults would not be able to meet basic KYC requirements for a bank account. In addition, 64 percent of people cite inadequacy of income as a reason not to have a bank account. CGAP could not find information on average bank prices, but, anecdotally, these are very high, and branchless banking prices would be lower.

Ghana may differ from Kenya and other countries in Africa in terms of the types of products that are in highest demand, and branchless banking could be successful there. More research needs to be done to help providers develop and market products that truly meet customer needs.

Domestic Remittances

Domestic remittances gave M-PESA the momentum to build a critical mass of customers. Although some of the providers in Ghana are heavily marketing this aspect of their products, it may not meet a strong need in this market. The Ghanaian market is already far more urban than Kenya (51 percent versus 22 percent³), suggesting that the key shift to urbanization happened long ago. Perhaps more importantly, anecdotal evidence suggests that wives usually accompany their husbands to cities, and the phenomenon of “split families” is not common in Ghana. Further research is needed to understand the prevalence of domestic remittances.

International Remittances

About \$1.8 billion⁴ came into Ghana in 2009 in the form of foreign remittances for individuals. On average, it costs about 6.6 percent of the transfer amount to send funds from the United States or the United Kingdom.⁵ Fifty percent of formal nonbank product users are using remittance products. This is an important product for many Ghanaians and a product where these funds land in a wallet where they can be stored and accessed when necessary or transferred may be attractive.

Savings

According to the FinScope survey, the savings culture in Ghana is strong relative to that in other sub-Saharan African countries. Sixty-four percent of adult Ghanaians claim to save. Eighty-four percent of people believe that saving regularly, even small amounts, will secure their future, and 41 percent go without basic things to be able to save. There are thousands of Susu collectors, who visit clients in their homes and workplaces to collect small amounts daily. At the end of the month, the amount saved is returned, minus one day of savings, to pay for the service. This means that Ghanaians are willing to save, even with high negative interest rates. Of those using informal products, just 16 percent use these for informal remittances, while 72 percent use them for savings.

Credit

The FinScope survey revealed a relatively low demand for credit in Ghana compared with that in other sub-Saharan African countries. Just 19 percent of adult Ghanaians claim to have borrowed in the past 12 months. Seventy-nine percent say they hate owing money, and 48 percent will go out of their way to repay debt. However, demand is undoubtedly high among certain segments. There is an overheated market for small business loans in urban areas. ProCredit has raised its minimum loan size in key urban

³ CIA World Factbook, 2009 estimates.

⁴ Report prepared for DFID by Developing Market Associates, “Constraints in the UK to Ghana Remittance Market” (2011).

⁵ Global remittance prices can be found at <http://remittanceprices.worldbank.org/>.

markets to \$5,000 to avoid lending to microentrepreneurs who may be multi-borrowing. In addition, there is a gap in small and medium-size enterprise (SME) financing.

Further research is needed to understand which products are most needed and which will meet customer needs and ‘pain points.’

Situation Analysis

1. Government Actors and the Regulatory Environment

The Bank of Ghana’s (BOG’s) flexible and adaptive regulatory structure⁶ for financial inclusion has resulted in the existence of a wide variety of providers of financial services and a banked rate of 33 percent of the population—this is more than double the average for sub-Saharan Africa.⁷ The government is committed to financial inclusion and sees branchless banking as an important way to accomplish this. It has identified interoperable systems as the best way to achieve maximum outreach. By introducing its own payment system, which it is mandating that banks adopt, and prohibiting exclusive partnerships, it may be creating confusion in the market.

eZwich

BOG has invested a lot of money to develop eZwich, a retail payment system, and remains committed to its expansion and adoption by all banks and MNOs. The system was introduced with lofty goals of making the economy cashless, increasing branchless banking, and reducing costs. The origins of eZwich lie in the 2003 Payment System Act, which gave BOG the authority not only to oversee, but also to operate, payment systems. In 2007, BOG formed the Ghana Interbank Payment and Settlement System (GhIPSS) with the mandate to “partner with the banking sector in providing and managing infrastructure for electronic payment systems in ways that supported affordable and convenient access to safe, secure banking services.”⁸ Finally, in 2008, GhIPSS launched eZwich, which is designed to not only act as a back-end electronic clearing house but also to be a separate banking product for customers. The eZwich smartcard (which allows biometric authentication of transactions) would be used for transactions, and the technology could operate offline as well as online. South African-based Net 1 Applied Technology provides the proprietary technology.

GhIPSS invested about \$14 million⁹ to develop the eZwich system. In preparation for its launch, BOG mandated that all deposit-taking institutions should issue eZwich cards to all their existing customers and deploy eZwich POS devices in all branches and outlets. All existing ATMs and POS devices had to be upgraded or replaced to be eZwich compatible.¹⁰

The results to date have been limited. Of the 2 million cards GhIPSS originally purchased, only 600,000 have been issued to customers and far fewer are actively used. eZwich has seen some success on university campuses, where students use eZwich cards to access student loans, and merchants on

⁶ For example, Ghana introduced the first African credit union in 1955 and the first rural bank in 1975. Its regulatory structure allows for a variety of savings-oriented institutions (rural and community banks, savings and loans, etc.) that serve different market niches. For more information, see Steel, William, “Ghana’s Microfinance Industry: Evolution and Prospects,” ISSER, University of Ghana, August 2010.

⁷ CGAP (2010).

⁸ BFA/CGAP eZwich Case Study, April 2010.

⁹ BFA/CGAP eZwich Case Study April 2010.

¹⁰ Bank of Ghana, Notice to Banks, Savings and Loans Companies and the General Public, Notice No. Bg/Gov/Sec/2008/2, National Payment System Reform.

campuses are equipped with POS devices. Aside from this, there is little eZwich presence in Ghana. Of the 605 ATMs in the country, only five accept eZwich.

Although there are several reasons for this failure, one of the most obvious is the lack of buy-in from most of the banks. Most banks complied with the bare minimum of the requirements or chose to ignore them altogether and pay a fine. It is unlikely that their commitment will grow unless they see a business case for themselves. It is difficult to know what impact the government's introduction of eZwich has had on the development of the branchless banking industry. The government conceivably has a conflict of interest as both a regulator and provider of payment services. It should carefully analyze the current challenges of eZwich and make further investments only if there is a clear business case and buy-in from the private sector.

Regulations for Branchless Banking

BOG issued Branchless Banking Guidelines in August 2008. There is no explicit mobile money or electronic money (e-money) regulation yet. In summary, the guidelines stipulate the following:

- *Bank-based.* Only the bank-based model is permissible in Ghana. "Activities outlined in these guidelines as branchless banking cannot be offered by any person or institution other than deposit-taking financial institutions (FIs).... In each case the customer account relationship must reside with some FI and each transaction must hit the actual customer account."
- *Flexibility on types of agents and transactions they can conduct.* The guidelines allow wide scope for who can be an agent, including "telcos, fuel distribution companies, merchants, post office, etc." In addition, agents are allowed to open and maintain branchless banking accounts, do cash-in/out transactions, bill payments, loan disbursements, and repayments and funds transfers.
- *Many-to-many model.* Ghana is the only country in the world that permits only many-to-many models in terms of the relationship between MNOs and banks (and explicitly prohibits one-to-one and one-to-many models). Exclusive partnerships are not allowed. The guidelines say that "this model offers the maximum connectivity and hence maximum outreach and is closer to the desired situation where all FIs and all telcos should be able to entertain each other's customers."
- *GhIPSS.* All transactions are to be centrally processed, cleared, and settled through GhIPSS. All new switches, ATMs, POS devices, and card or mobile phone payments products issued or deployed by banks must be eZwich compliant or interfaced with the eZwich platform.

The first two points about the bank-based model and role of agents are clear and can lead to a well-functioning branchless banking environment. The last point on GhIPSS has already been discussed. However, Ghana is the only country that we are aware of that has prohibited exclusive partnerships and will allow only the many-to-many model. A series of MNO-led implementations with three to nine partner banks each are emerging in Ghana. Many of the banks are not motivated to invest significantly in these partnerships; this may be due to a reluctance to invest in a system from which their direct competitors will also benefit. It will be interesting to learn about the dynamics that develop in a market with many-to-many partnerships.

2. Financial Institutions

Commercial Banks

There are a wide variety of financial institutions in Ghana, and collectively, they have expanded access to financial inclusion to low-income households substantially. Even commercial banks that don't

explicitly try to reach the mass market have reached a greater percentage of the population with deposit accounts than their counterparts across sub-Saharan Africa. Across the region, there are, on average, 163 accounts in commercial banks for every 1,000 adults. In Ghana, this number is almost double, with 333 accounts for every 1,000 adults.¹¹ Commercial banks dominate the banking sector and have 93 percent of banking assets. There are about 4.5 million accounts total in Ghana. Table 1 lists Ghana's 25 banks, by share of deposits, and also indicates which are involved in a mobile banking deployment.

TABLE 1: BANKS IN GHANA BY SHARE OF INDUSTRY DEPOSITS

BANK	SHARE OF INDUSTRY DEPOSITS	
Barclays	15.7%	
Ghana Commercial	14.8%	
Standard Chartered	9.9%	Partnered with 1 Mobile Money Deployment
Ecobank	8.8%	
Stanbic	4.9%	
Zenith	4.4%	Partnered with 2 deployments
First Atlantic Merchant	4.4%	
Agriculture Development	4.2%	
Merchant	4.2%	
SG-SSB	3.9%	
Intercontinental	3.5%	Partnered with 3 deployments
Amalgamated	3.4%	
Prudential	2.6%	
United Bank of Africa	2.5%	
The Trust	2.3%	
CAL	2.3%	
Fidelity	2.1%	
GT (Guaranty Trust)	2.1%	
HFC	1.4%	
UniBank	1.2%	
Others (all with less than 1%): International Commercial, UT, Baroda, National Investment, Sahel-Sahara	1.3%	

The table shows that almost half of Ghana's 25 banks are involved in at least one mobile money deployment, and two of them are involved in three. The table depicts the current partnerships in the market; 5–10 additional bank–MNO partnerships will most likely be formed by the end of 2011. As described earlier, the model in Ghana, where several banks are tied up with each MNO, seems to decrease banks' motivation to invest significant resources or commit to one partner. Instead, they are hedging their bets, signing up partnerships across the board, and seeing what happens. Some of the most active banks in this space are the following:

- *Ecobank*. Ecobank has 60 branches, 130 ATMs, and 250,000 customers in Ghana. It has a strong brand and has reached down market more than most. It has received a \$6 million grant from the Bill & Melinda Gates Foundation to roll out low-cost savings accounts to BOG customers in Ghana and Liberia through a variety of channels. It has signed up with all three live mobile money deployments.

¹¹ CGAP (2010).

- *Fidelity*. Fidelity Bank has nine branches and 140,000 account holders. It is working with MTN Mobile Money and seems to be much more involved in customer education, raising awareness, and agent motivation than are other banks.
- *United Bank of Africa (UBA)*. UBA has also signed up with all three mobile money deployments and is active in branchless banking throughout West Africa.
- *Zenith*. Zenith Bank has 12 branches and is a relatively small player in Ghana. It has made partnerships across the board with MTN Mobile Money, Airtel Money, and AfricXpress.

Other Financial Institutions

Ghana has several types of financial institutions aside from commercial banks. The legal status of these institutions varies from formal (savings and loans) to semi-formal (MFIs), to informal and unregulated (microfinance companies). For example, many Susu collectors operate independently and informally. Others are members of a cooperative, and still others operate through savings and loans. Although, collectively, these financial institutions have less than 10 percent of the financial system assets, they serve over 4 million poor—often rural—people. Table 2 describes these institutions. Only savings and loans and rural and community banks are legally able to intermediate deposits.

Table 2: Financial Institutions (excluding banks) in Ghana¹²

TYPE OF INSTITUTION	DEFINITION	OUTREACH IN GHANA
Savings & Loans (S&L)	Mostly focused on consumer, micro and SME finance and make loans under \$15,000. These are fastest growing FIs. The minimum capital required is between \$3-5 million.	18 S&Ls with 140 branches mostly in urban/peri-urban areas
Rural and Community Banks (RCB)	Small banks owned by individual shareholders in a given locale. Have historically played an important role in Ghana's financial system. Their operations are limited to within 25 mile radius of the bank.	131 RCBs with 600 branches in rural areas. 3 million depositors, 740,000 borrowers.
Credit Unions	Credit unions in Ghana are workplace-based, church-based or community-based. Their assets have declined in the past few years.	More than 400 credit unions with 293,000 member depositors
Susu Collectors	Collect daily savings from customers at their doorstep and return accumulated amount at the end of the month minus one day's deposit. Some susu collectors have started illegally providing loans based on these deposits.	Estimated 3,000-5,000 in Ghana
Microfinance Companies ('Corporate Susus')	There are hundreds of small companies in Ghana intermediating deposits without oversight. Problems with over indebtedness in this category are serious yet the BoG does not want to squelch innovation. They are considering a path to licensing such intermediaries.	About 600 each with 500-1,000 clients
Financial NGOs	Mission-driven organizations lending external, donated funds.	About 50-100

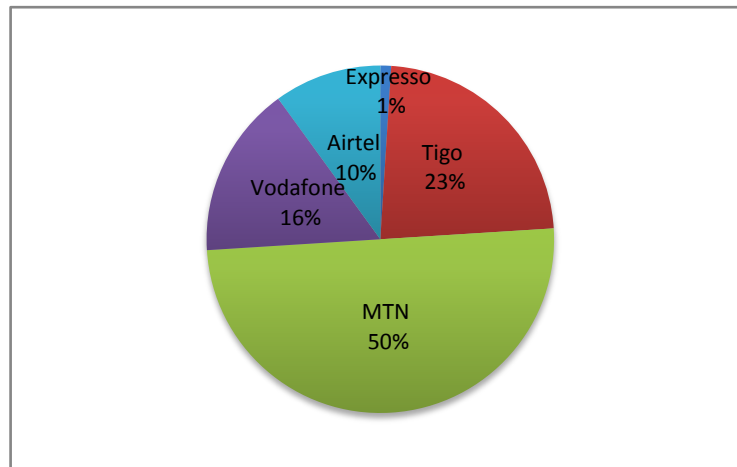
Most of these institutions are not directly relevant to the branchless banking story in Ghana in the short term. However, savings and loans and rural banks, together, have just over half of the branches in Ghana (740 out of 1,447). These institutions have deep roots in lower income areas of both the urban and rural parts of Ghana. In addition, savings and loans have been growing much faster than commercial banks in recent years. Some savings and loans companies (including Procredit and Opportunity) use ATMs and POS devices to reach beyond their branch infrastructure. Rural and community banks (RCBs) are individually limited by their geographic restrictions. However, cumulatively, they are by far the dominant bank infrastructure in rural markets today. Several industry experts mentioned their potential importance in branchless banking.

3. Mobile Network Operator Mobile Money Deployments

Five MNOs operate in Ghana; a sixth (Glo, part of Nigeria's Globacom) received a license more than two years ago but has not yet started operating. The current mobile penetration is 74 percent. MTN is the dominant player, with just over half the market share and 8.7 million subscribers.

¹² CGAP analysis, including Steel, William, "Ghana's Microfinance Industry: Evolution and Prospects," prepared for IFC Advisory Access to Finance, August 2010.

Figure 3. MNO MARKET SHARE IN GHANA¹³

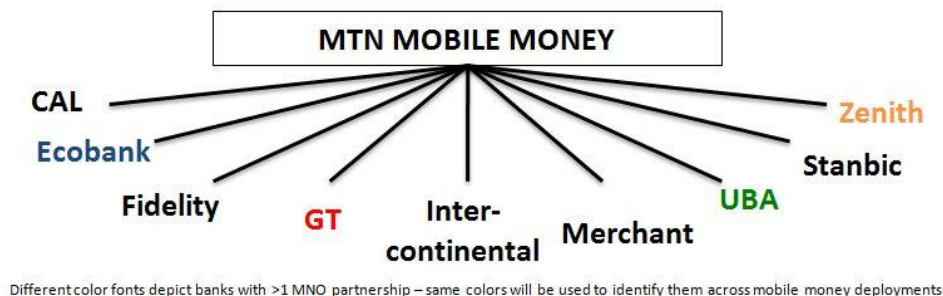


Two MNOs have not launched mobile money deployments. Vodafone purchased Ghana Telecom almost two years ago, and it is still undergoing extensive internal restructuring and investing in upgrading infrastructure. Espresso Telecom (the only CDMA provider in Ghana) has just taken over Kasapa Telecom. All MNOs suffer from inadequate infrastructure to meet the demand of the extreme growth in the sector over the past few years. Several are actively trying to upgrade their infrastructure and are marketing their “congestion-free coverage.”

MTN Mobile Money

With 50 percent market share, a first-mover advantage, and significant investment in the service, MTN Mobile Money has the right foundation to be the most successful mobile money deployment in Ghana. Although MTN Mobile Money has 1.8 million registered customers, the percentage of active customers is much smaller. MTN Mobile Money launched in July 2009 with nine partner banks. All funds are held with the different banks on the back end. In addition, MTN is partnering with MicroEnsure to offer a life insurance account and with Belgacom International Carrier Services (BICS) for international remittances.

Figure 4. MTN Mobile Money



¹³ Ghana Telephony Industry, as of December 2010, Ghana National Communications Authority (NCA).

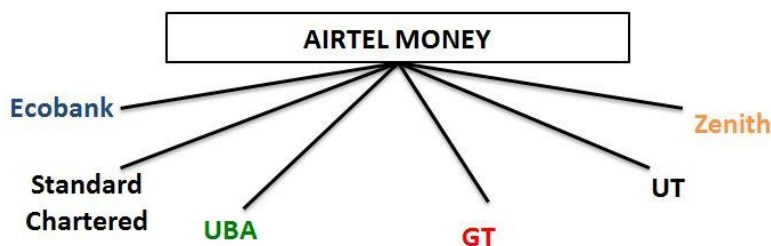
MTN has trained 4,000 agents in Accra and 2,000 in other parts of the country, but not all of these agents are active. MTN has invested heavily in above-the-line marketing, including television and billboards. Its primary marketing message is focused on domestic remittances. Its current advertisement depicts a young office worker sending money home to his mother in the village.



Airtel Money

Airtel recently entered the Ghana market after its acquisition of Zain, which launched its mobile money service, Zap, in Ghana in April 2010. At a global level, Zain separated Zap from its core voice business before the Airtel acquisition so that it had separate financial statements. Airtel decided to buy both entities, and it is now driving the deployment of Zap, which has been rebranded Airtel Money. To date, Airtel Money has 1 million registered customers and 320,000 “full KYC” customers, although it is again likely that the number of active users may be lower. It is officially partnered with or about to be partnered with six banks.

Figure 5. Airtel Money

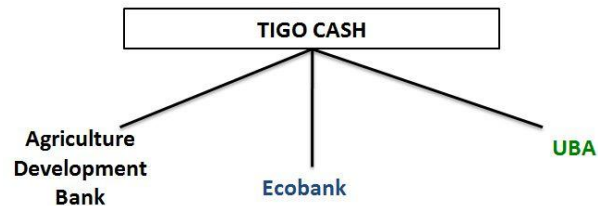


Zap took a different approach than that of M-PESA (person-to-person money transfers) and focused on developing a cashless ecosystem by pursuing bulk payments (especially salaries and bill payments) and business-to-business payments. So far, it seems that Airtel Money in Ghana will pursue a similar path. It is working to integrate Airtel Money directly with several banks so that customers can easily transfer money in and out of bank accounts.

Tigo Cash

Tigo Cash is the newest mobile money service; it launched in October 2010. It is the second mobile money deployment for Tigo, following a launch in Tanzania. With 23 percent market share and strong management commitment to the product, it is well placed to give MTN a run for its money. Tigo Cash has partnered with three banks.

Figure 6. Tigo Cash



4. MNO-agnostic Mobile Money Deployments

There are two smaller operators offering MNO-agnostic mobile money services.

AfricXpress (txtNpay)

AfricXpress is an electronic payment solutions provider and a start-up company. Its main brand is Txt’N’pay, which allows users to interface with a variety of organizations, such as MNOs (for airtime top-up), banks (like Zenith Bank) for transfers in and out of accounts, and utility service providers (bill payments, e.g., for DSTV). It also provides payment solutions for hotel management, retail, and event tickets. Customers interface with the service via the Internet and mobile phones. AfricXpress, which applied for a license in 2006, received its license in 2008 and launched in the same year.

eTranzact

Much like AfricXpress, eTranzact is a payment system provider that allows account holders to pay for goods and services purchased from merchants, transfer funds, pay bills, and order products. Unlike AfricXpress, eTranzact has a parent company in Nigeria, which runs a similar business there. This means eTranzact has more resources with which to build a niche in the Ghana market. It has partnerships with five banks, so customers can transfer money into and out of accounts and with several major providers of services for bill payments (e.g., DSTV, Zenith College). It also markets its services to businesses with options to pay salaries and suppliers and manage stocks.

5. Other Industry Actors and Stakeholders

MicroEnsure

One industry actor that may play a role in driving transaction volumes through branchless banking channels is MicroEnsure. MicroEnsure helps efficient and pro-poor insurance services come to market. It is not an insurance provider itself, but it fills the gap between insurance companies (which have very little experience in the mass market) and banks, MFIs, and other institutions that want to provide these products to their clients. MicroEnsure opened an office in Ghana in February 2010. It is bringing two products to market that clients access via mobile phones.¹⁴ The first is a “free” life insurance product that Tigo customers receive based on the amount of airtime they purchase. The second is funeral insurance that MTN Mobile Money customers can purchase with automatic deductions from mobile money accounts. With appropriate marketing, these and similar products may help drive transaction volumes.

¹⁴ See CGAP blog post, <http://technology.cgap.org/2011/04/25/branchless-banking-and-micro-insurance-a-perfect-marriage/>.

Donors

Although most of the major bilateral and multilateral donors are present in Ghana, there has been very little donor subsidy in the development of the branchless banking sector so far. The Bill & Melinda Gates Foundation is active in the microfinance sector and has given grants to savings and loans companies as well as Ecobank (in a partnership with ACCION) to roll-out POS devices and other infrastructure related to branchless banking for BOG. However, these grants focus on expanding microfinance activities through technology, not on entirely new products and services leveraging new technologies. GSMA's Mobile Money for the Unbanked unit has given a grant to Tigo Cash. DFID has a significant presence in Ghana and has supported the government's Financial Sector Strategic Plan. This was focused on banking supervision, regulations, and insurance, with a substantial focus on capacity building.

LEAP—Conditional Cash Transfer Program

DFID, UNICEF, and the World Bank help support the government's conditional cash transfer program called LEAP (Livelihoods Empowerment Against Poverty). Currently, cash transfers are distributed through the post office. In February 2010, CGAP funded a study to determine the feasibility of alternative payment mechanisms, including mobile money (through MTN), eZwich, electronic vouchers, and magnetic swipe cards. The study found high potential for some of these alternative payment systems and recommended a pilot project. However, at the moment, LEAP's priority is on improving the targeting and enrollment process. In addition, the current size of the program (40,000 people in 81 districts) may not be enough to support the development of an agent network.

Consultants

The market for consultants in Ghana with technical knowledge or previous experience in branchless banking is limited. Some global consulting firms (e.g., Dahlberg, Roland Berger) have done projects in Ghana related to financial inclusion.

Key Challenges and Opportunities

Although results to date in the branchless banking sector have been limited, there is enough activity in the market to give cause for optimism. Table 3 outlines the key strengths and opportunities as well as weaknesses and threats for each of the dimensions in the market.

TABLE 3: KEY STRENGTHS/OPPORTUNITIES AND WEAKNESSES/THREATS FOR BRANCHLESS BANKING IN GHANA

CATEGORY	STRENGTHS AND OPPORTUNITIES	WEAKNESSES AND THREATS
GOVERNMENT ACTORS (POLICY)	Guidelines are in place and are adequate to allow services to launch, as evidenced by active competition in the market.	Direct government involvement (through eZwich) and limitations on partnership models (only many-to-many) are causing confusion in the market, although the extent to which it is limiting action is unclear.
DEMAND SIDE (Customers)	Potentially attractive opportunities to explore different product mix, including savings.	Low active user rate indicates need for more effective marketing and product focus.
SUPPLY SIDE	3 MNOs, 12 banks (to some extent), and 2 small operators are in the market and actively competing.	Limited results so far.

CATEGORY	STRENGTHS AND OPPORTUNITIES	WEAKNESSES AND THREATS
(Providers)		
<ul style="list-style-type: none"> MNOs 	The three largest of the five MNOs are in the market, actively competing and seeming to be investing significant resources.	More work needed in market research, effective marketing, and agent network.
<ul style="list-style-type: none"> Banks 	Banks are interested, and 12 have signed up with one or more deployments.	Limited commitment from banks, perhaps due to regulations that prohibit exclusive partnerships.
<ul style="list-style-type: none"> Small Operators (AfricXpress, eTranzact) 	Ambitious companies with qualified staff.	Limited resources and brand presence.

To summarize, the impact of branchless banking to date in Ghana has been limited. This is partly a result of MNOs not finding and marketing the most effective product for the Ghanaian market as well as some confusion arising from the presence of a government-led system and requirement of a many-to-many model. However, there are a number of actively competing mobile money implementations, and with rigorous market research and high-quality product development and marketing, a compelling customer value proposition should be feasible.