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mVisa: Penetrating the Electronic Payments Market in Sub-Saharan Africa

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ABSTRACT

This manuscript follows Visa's attempts to expand financial inclusion in Sub-Saharan Africa. We begin by analyzing Africa's potential for electronic payments after extensive research of the banking infrastructure. We came to the conclusion that mobile payments are the solution for extending financial inclusion in African countries. Visa reached a similar conclusion and launched a product called mVisa, which is catered to cash dependent countries. Visa introduced this product to Kenya, Rwanda, Nigeria, and Egypt. We address the social, economic, cultural, and political impacts mVisa has in these countries, while also taking note of barriers Visa may face in the future. The majority of cash dependent economies are a result of a lack of trust and education; through advertising and partnerships Visa can combat this issue. Although Visa is a prominent company they face mobile payment competitors, such as M-PESA, Mastercard, and PayPal. We provide recommendations for Visa based off other mobile payment options that are already established in these countries.

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Assignment

According to the World Bank, a majority of the people of Africa remain unbanked and do not have credit cards. Visa is working with the government and merchants in the continent to bring electronic payments, i.e. making payments over an electronic network such as paying online or via a mobile device, to the African consumers. What are the challenges that Visa is facing and do you think they will be successful?

Visa, Inc Background

Visa, Inc describes themselves as a "global payments technology company working to enable consumers, businesses, banks and governments to use digital currency."[1] Visa's core products are debit, credit, prepaid, and commercial cards as well as the technology for merchant acceptance of these cards. For all of these products, Visa provides security protection in order to prevent, detect, and resolve fraud.[2] After the reunion of Visa Inc. and Visa Europe in 2016, Visa Inc. was able to provide their products and services in 200 countries and territories. At the forefront of their corporate responsibility is the advancement of financial inclusion, helping to provide everyone with access to basic financial services. Visa's expansion of financial inclusion is not limited to the United States. "In 2015, Visa made a public commitment to provide payments accounts to another 500 million unbanked people as part of the World Bank's call for Universal Financial Access by 2020."[3]

Visa's 2017 Investor Presentation displayed locations where they saw potential to expand their financial services, including Africa. This insight on Africa's potential allows Visa to create strategic approaches to the target countries based on the status of their market. Visa categorizes markets into developed, developing, and emerging. In their Investor Presentation they placed

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[1] "About Visa" *About Visa | Visa*, n.d. Web 22 Apr. 2018.
[2] "Visa Inc (V.N) Company Profile." *Reuters*, Thomson Reuters, n.d. Web 22 Apr. 2018.
[3] "Financial Inclusion" *Financial Inclusion | Finance & Foundations | Visa*, n.d. Web 22 Apr. 2018.

Kenya and Egypt under the emerging market title. Their approach for emerging markets consists of building an acceptance in core categories with an emphasis on mobile/digital. Also included in the approach is government partnerships to drive electronification. Visa expressed hopes to accelerate their business in Africa. "Africa has been a major market for Visa- as of June 2016, the firm counted just 321 million payment cards in its Central Europe, Middle East, and Africa (CEMEA) region. For context, that number is under half of Visa's 826 million US cards."[4]

Potential for Electronic Payments in Africa

Today, Africa remains a step behind the rest of the world in its integration of a formal payment systems as a method of payment for goods and services. Part of the reason for this delay in transaction technology is due to the fact that the majority of African countries operate mostly with cash, and as of 2014, 66% of Sub-Saharan Africans did not have a bank account.[5] With such a staggering population of Africans unbanked, financial institutions like Visa have recognized that there is a massive untapped market. In order to enter the market in 2012, Visa began introducing electronic payment systems to countries in Africa. It is estimated that from 2011 to 2015, Visa's global introduction of electronic payments has contributed to 0.4% of growth in consumption and has created an average of 2.6 million jobs.[6] However, with so many Africans still unbanked, Visa has struggled to penetrate and capture the full potential of the African market. If these circumstances stay the same and cash continues to dominant the African economy, KPMG approximates that the market share growth in card transactions (primarily debit cards) will only grow a mere 1.7% by 2023.[7]

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[4]"Visa Continues Its Push into Africa." *Business Insider*. Business Insider, 15 Sept. 2016. Web 22 Apr. 2018.
[5] "Africa: The Unbanked Continent." *Elixirr*, 3 Jan. 2018. Web 22 Apr. 2018.
[6] "Powering Financial Inclusion." *Financial Inclusion | Finance & Foundations | Visa*, n.d. Web 22 Apr. 2018.
[7] Lamikanra, Bisi, and Joleen Young. "Payment Developments in Africa 2015, Vol. 1." *KPMG,* July 2015.

Currently, people in Africa prefer using cash over debit or credit cards because the current payment system, or lack thereof, makes these types of payments difficult. Many African countries, especially those with lower GDP's, lack the actual infrastructure required for a payments network to work securely. However, the current cash-based system involving informal cash payments leaves millions of people from Sub-Saharan African countries vulnerable to unstable mechanisms and fraud.[8] A 2014 World Bank report described the high cost consequences of frequent cash payments in Africa including, "costs associated with manual acceptance, record keeping, counting, storage, security, and transportation."[9] Therefore, as the demand for an alternative to cash payments increase, Africa holds an untapped market for electronic payments that financial institutions could penetrate.

Why Mobile Payments are the Solution

Mobile phone usage in Africa is becoming increasingly popular year over year. In the 1990s, Africans were virtually unconnected from the rest of the world. According to the African Governance and Development Institute, "In 1999, only 11% of the African population had mobile phone coverage…by 2008, 60% of the population (477 million) could get a signal and an area of 11.2 million square kilometers had mobile phone coverage: equivalent to the United States and Argentina combined."[10] The growth in mobile phone usage shows no signs of stopping. As of 2016, it appears that the number of active mobile phone subscriptions has jumped to 1 billion, accounting for nearly 85% of the population.[11]

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[8] Gallup, Inc. "Many Transactions in Sub-Saharan Africa Still in Cash." *Gallup News*, 11 June 2012.
[9] "The Opportunities of Digitizing Payments," *A report by the World Bank Development Research Group, the Better Than Cash Alliance, and the Bill & Melinda Gates Foundation to the G20 Global Partnership for Financial Inclusion*, August 28, 2014.
[10]Asongu, Simplice A. "The impact of mobile phone penetration on African inequality," *AGDI Working Paper*, May 2013.
[11] "Mobile Phones Are Transforming Africa." *The Economist*, The Economist Newspaper, 10 Dec. 2016.

Africa benefits from the fact that much of their population is young. Unlike many countries today facing difficulties regarding an aging population, the majority of the 1.2 billion Africans are young, ambitious, entrepreneurial, and under the age of 20.[12] In general, younger generations not only use technology more frequently than older generations, but also use technology to a much further extent. A Pew Research Center survey explains the correlation between age and cell phone activity in African countries. The survey conducted in South Africa, Nigeria, Senegal, Kenya, Ghana, Tanzania, and Uganda, revealed that in every case individuals between the ages of 18-34 are significantly more likely to own a smartphone than individuals 35 or older.[13] In Nigeria, for example, 34% of 18- to 34-year-olds own smartphones while only 17% of those 35 and older do.[14] In addition, a separate Pew survey revealed the most common of cell phones activities to be sending text messages, taking pictures/videos, and making or receiving payments.[15] Therefore, Africa, with a growing younger population acquainted with mobile technology, holds a lot of untapped potential for further mobile payment penetration.

Significant increase in mobile-data usage could have an incredible impact on African GDP. An international trade body known as the GSMA estimates that only a 10% increase in phone penetration in countries with low GDPs results in improved productivity over four percentage points and further that a doubling mobile-data usage increases annual growth in GDP per person by half a percentage point.[16] Therefore advancing mobile phone usage in Africa would not only facilitate transactions among people, but also dramatically improve overall GDP.

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[12] Jackson, Tom. "'Now Is the Time to Invest in Africa.'" *Disrupt Africa*, 26 Jan. 2018. Web 22 Apr. 2018.
[13] "Cell Phones in Africa: Communication Lifeline." *Pew Research Center's Global Attitudes Project*, Pew Research Center, 15 Apr. 2015. Web 22 Apr. 2018.
[14] Ibid.
[15] Ibid.
[16] "Mobile Phones Are Transforming Africa." *The Economist*, The Economist Newspaper, 10 Dec. 2016.

Electronic financial transactions can be performed on both personal computers and mobile devices. However the presence of personal computers in Africa is far less than mobile devices. For example, as of June 2017, Nigeria had approximately 91.6 million internet users. Of the total web traffic in Nigeria, 81% is generated by smartphones and only 16% percent is through personal computers.[17] Similarly, in 2016, South Africa reported only 28% of households with at least one personal computer, while Liberia reported 2.2%.[18] Smartphones are the more popular option in terms of accessing the internet because they are cheaper and do not require the infrastructure needed for a fixed-line internet connection for personal computers.

Mobile payments may be the answer to Africa's problem of inefficient cash transactions. According to The Global Findex Database released from the World Bank in 2014, "Mobile money accounts, by providing more convenient and affordable financial services, offer promise for reaching unbanked adults traditionally excluded from the formal financial system- such as women, poor people, young people, and those living in rural areas."[19] In addition, mobile financial services encompass more than just payments. They include everything from savings and loans to insurance and investments.[20] Although, the majority of people in African countries continue to rely heavily on cash only transactions there is not a lack of mobile phone users that could access mobile payments. Rwanda has seen an increase in cell phone usage in the past few years. At the end of June 2017, the Rwanda Utilities Regulatory Authority's Active Mobile Telephone Subscription displayed 8,368,432 active mobile phones.[21] This statistic accounts for

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[17] "Africa number of internet users by country 2017 | Statistic." *Statista. September 2017.* Web 22 Apr. 2018.
[18] "Households w/ personal computer, %." *TCdata360.* 2016. Web 22 Apr. 2018.
[19] Demirguc-Kunt, Asli; Klapper, Leora; Singer, Dorothe; Van Oudheusden, Peter. "*The Global Findex Database 2014 : measuring financial inclusion around the world"*. Policy Research working paper; no. WPS 7255. Washington, D.C. : World Bank Group. 2015.
[20] Chironga, Mutsa, et al. "Mobile Financial Services in Africa: Winning the Battle for the Customer." *McKinsey & Company,* Sept. 2017.
[21] "Rwanda: Mobile Phone Penetration Rate Rises Marginally in June." *AllAfrica.com,* 5 Sept. 2017. Web. 22 Apr. 2018.

approximately 67% of the population.[22] In 2017, Nigeria reported 142.6 million active mobile phone lines, approximately 74% of the population. Of these active mobile phone lines, 47% or 91.5 million were mobile internet users.[23] In terms of this data, the mobile phone infrastructure is readily available for financial institutions such as Visa to expand on the mobile payment option. The security provided by mobile payments can provide the solution to consumer's fear and distrust in financial systems. "Most apps generate a unique barcode for each transaction instead of sending card digits in the ether… At the register, the phone sends a one-time-use security code, or "token," to the merchant that would be meaningless to hackers; you authorize the purchase via fingerprint, which provides the extra protection."[24]

After exploring the history of cash transactions in Africa as well as the growing trend of mobile payments, it is evident that emerging regions would greatly benefit from electronic payment technology. Specifically, Visa has identified vast mobile payment opportunities in African nations, as well as in other developing economies, which helped the organization craft their mission statement to read "to connect the world through the most innovative, reliable and secure digital payment network that enables individuals, businesses and economies to thrive."[25]Despite Visa's current test initiatives in select African countries, there are still several challenges that they may face. Will mobile-payment products such as mVisa work in other African countries? Will the African people have enough trust in Visa to actually use this kind of product? How will merchants play a role in these e-payment transactions? Will enough merchants take payments, beyond cash, in countries beyond Rwanda and Nigeria?

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[22] "Rwanda Population (LIVE)." *Rwanda Population (2018) - Worldometers*. Web. 22 Apr. 2018.
[23]"2017 Nigeria Mobile Trends Report." *twinpine: A Terragon Company*, 2017.
[24]Weisser, Cybele. "Mobile Payments: Pros and Cons of Digital Payment Apps | Money." *Time*, Time, 11 May 2015. Web. 22 Apr. 2018.
[25] Okwakol, Samson "Visa gets new Regional President for Africa." *East African Business Week*, 22 Jan. 2018.

mVisa

Visa introduced mVisa in a pilot with Indian banks in 2015. MVisa is a "new transformative way to pay with your mobile phone. There's no need to carry cash. Just scan the QR code to make your payments."[26] This payment option uses QR codes. The customer scans the code using their mobile phone and is then linked to the merchant's account. For customers using feature phones they are able to complete the transaction through USSD codes or "quick codes," which allow feature phones to communicate with the mobile network operator's computers.[27] MVisa is compatible with any phone that supports the bank's USSD [unstructured supplementary service data] platform. MVisa provides real-time confirmation of the payment and an automatic transfer of the payment from the customer's preferred mobile payments account, such as mobile wallet or a mobile money transfer, to the merchant's account. The goal of the product is to combat bank branch scarcity by helping the African people send and receive money on any mobile carrier, as well as facilitate transactions with any merchant with a Visa logo.[28] MVisa also "offers interoperability between a host of account providers and mobile networks."[29] Therefore, the customer and the merchant's accounts do not have to be linked to the same provider. In 2017, Visa announced the expansion of its QR-based payment system, mVisa, now live in Kenya, India, and Rwanda, to 10 other African countries, including Egypt.

Visa's Initiatives in Rwanda

Visa has already started smaller initiatives in an effort to bring e-payments to Africa. In a partnership with The Clinton Development Initiative (CDI), an initiative of the Clinton

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[26] "What is mVisa." *MVisa | Visa*. n.d. Web. 22 Apr. 2018.
[27] Adeleke, David. "Visa Launches Its Mobile Payment Platform, MVisa in Nigeria." *Ventures Africa*, 28 July 2017. Web. 22 Apr. 2018.
[28] "Powering Financial Inclusion." *Financial Inclusion | Finance & Foundations | Visa*, n.d. Web 22 Apr. 2018.
[29] Feinstein, Eran. "The Development of the MVisa Payment Option." *Africa's Online & Mobile Payments Hub*, 22 Nov. 2017. Web. 22 Apr. 2018.

Foundation, Visa is working to create an electronic payment system for smallholder farmers in Rwanda. “This effort will connect individual farmers and cooperatives with banks, agrodealers, retailers, commodity processors, crop buyers, and other producers, creating a digital payments ecosystem.”[30] This new way of payment is much more efficient than a large cash-based system, which is what Rwanda and many other Sub-Saharan African countries currently use. Visa’s new system will make buying and selling processes more efficient and safer. Seed and fertilizer transactions, for example, will run much smoother. Visa’s initiative also allows for thousands of Rwanda’s local farmers to connect with each other through a more formalized system of financial services. CDI is aiding Visa by setting up training and market access programs for the smallholder farmers which will not only help them transition from cash payments to e-payments, but also further improve their management and investment skills.

In order to measure the success of their initiative, Visa plans to first test the new system with one farmers’ cooperative. Stephen Kehoe, Senior Vice President for Global Financial Inclusion at Visa cites some boundaries that could prohibit Visa from successfully implementing the mobile payment initiative. He explains, “The main barrier to increasing the yield of individual farmers is lack of access to working capital. A second concern is making sure they get paid more quickly for their harvests.”[31]The Visa mobile-network product, mVisa, along with the assistance of a local bank, will help the co-op send and receive payments electronically.

Egypt

Visa has also found a market for electronic payments in Egypt. Most recently, Visa agreed to partner with Egyptian bank QNB ALAHI in an effort to bring seamless mobile

[30] “Clinton Development Initiative and Visa Announce Partnership to Link Farmers in Rwanda to Digital Payments.” *Clinton Foundation*, 15 Dec. 2015. Web. 22 Apr. 2018.
[31]“Rwandan Farmers to Reap Digital Payment Rewards.” *Visa Everywhere | Visa.* n.d. Web. 22 Apr. 2018.

payment services to Egypt.[32] The partnership will allow customers to download a QNBAA mVisa app on their mobile phones to use to link their Visa cards. The app will greatly improve the frequency of instant cashless payments to merchants and various service providers. Visa is optimistic of its new relationship with QNB ALAHI as mVisa merges well with the bank's mission to reduce dependency on cash in order to take advantage of current smartphone penetration in Egypt. Visa has already seen positive results in a trial of mVisa in Egypt. QNB ALAHI's commercial and marketing director, Bassem Nour, explained that in a pilot phase, the mVisa service worked successfully amongst staff and Cairo-based merchants around the bank's headquarters.[33]

mVISA in Kenya and Nigeria

In 2010, Kenya held the lowest e-payment rate worldwide with 0.2 non-cash retail payments per capita and cash was the predominant retail payment method, accounting for 98 percent of transactions. Financial services are needed in poorer populations because of the high cost and risk of cash transactions. Therefore, the introduction of mobile payments would help to lower the cost of transactions and minimize, or eliminate, the risk.[34]

Visa has made significant strides in bringing electronic payments to Kenya. Recently, the credit card company introduced mVisa in Kenya after testing it first in India in 2015 before a full global roll out. In using mVisa, customers in Kenya receive free person-to-person (P2P) transactions through nine Kenyan banks. Further, the service gives customers several payment options. Customers can make transactions in-store or online, pay bills, and operate using P2P

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[32] Koigi, Bob. "[Egypt] QNB ALAHLI in Partnership with Visa to Unveil MVisa." *Africa Business Communities*, 27 Mar. 2017. Web. 22 Apr. 2018.
[33] Ibid.
[34] "Digitizing Government Payments, Kenya Study April 2013." *Accenture*, 2013.

transactions.[35] Visa has partnered with the following banks in Kenya: Barclays Bank, Cooperative Bank, Ecobank, Family Bank, KCB Bank, National Bank of Kenya, NIC Bank, Prime Bank, and Standard Chartered Bank. In addition, Visa has partnered with various Kenyan retailers for the allowance of mVisa. A few of these companies include: IMAX theaters, EatOut, Zucchini, and Kenya Airways.[36] Unlike their competitor in Kenya, M-PESA, mVisa offers interoperability between a host of account providers and mobile networks.[37] This allows for customers to send payments via their mVisa account to a merchant with a different provider.

In an attempt to further promote financial inclusivity, Visa also launched mVISA in Nigeria in July of 2017. The lack of trust and misunderstanding of electronic payment systems in Nigeria has created a major barrier for mobile payments. However, Visa created mVisa in an effort to give consumers more control over the electronic transactions and their money.[38] At the announcement of the introduction of mVisa in Nigeria, the President for Visa Sub-Saharan Africa, Andrew Torre, described the campaigns as a way to further expand Visa's support to their merchants and expand their customer usage of mVisa. "mVisa is already accepted at hundreds of locations across the country with many more merchants joining the ecosystem over the next few months."[39]

Kenya - Social, Cultural, Political, Economic Analysis

The social climate in Kenya shows promise for mVisa. As one of the more developed countries of East Africa, it arguably holds the best opportunity for success. Visa's East Africa

[35] "Visa Rolls Out P2P Digital Payments In Kenya." *PYMNTS,* 17 July 2017. Web. 22 Apr. 2018.
[36] Ibid.
[37] Feinstein, Eran. "The Development of the MVisa Payment Option." *Africa's Online & Mobile Payments Hub*, 22 Nov. 2017. Web. 22 Apr. 2018.
[38] Adeleke, David. "Visa Launches Its Mobile Payment Platform, MVisa in Nigeria." *Ventures Africa*, 28 July 2017. Web. 22 Apr. 2018.
[39] Visa, et al. "Visa and Leading Banks Bring Mobile Payments to Nigeria." *TechCabal,* 20 July 2017. Web. 22 Apr. 2018.

General Manager, Sunny Walia explains, "the Visa ecosystem [in Kenya] has more than 10.5 million cards in the market, but only a million are active at the point of sale [i.e. in the physical store]. The Kenyan customer is mobile savvy and prefers mobile transactions."[40] Visa has proven that they understand the Kenyan market by taking into account the wealth gap that the country faces. Currently, less than 0.1% (8,300 people) of the total population own more wealth than the bottom 99.9% (44 million people).[41] Therefore, Visa has designed mVisa in a way that fits the needs of customers from all economic backgrounds. For example, the company has included Kenya's low end market by allowing for customers to make mobile payments inside local taxis, neighborhood kiosks, and local grocery stores.[42] Visa not only acknowledges the need for Kenyans to use their phones as a replacement for cards, but also provides financial benefits to customers who use mVisa. Currently, Kenyans suffer from spending a significant amount on transaction fees for mobile money transfers. For example, if an individual in Kenya used M-Pesa for a $1 transaction, the transaction fee would be $0.12 - a 12% rate.[43] Part of the problem is that M-Pesa and other mobile money use flat rates for transaction fees. For example, any transaction between $1.25 and $437 carries a flat fee of $0.37. In theory, this is not a problem if the transaction is over $20. However, the typical low-income Kenyan makes 6-7 relatively small transactions per day, averaging around $1.[44] Therefore, the fee becomes extremely high relative to each transaction. The solution of mVisa serves as a cheaper alternative for transferring money because mVisa does not have any transaction fees. By reducing the cost of using mobile

[40] Kamau, Macharia. "Visa's Payment Service Stirs Competition in Mobile Money." *The Standard*, The Standard, 18 July 2017. Web. 22 Apr. 2018.
[41] "Kenya: Extreme Inequality in Numbers." *Oxfam* , Oxfam International, n.d. Web 22 Apr. 2018..
[42] Ibid.
[43] "Cost of Mobile Money Transactions: Penalizing the Poor." *Mobile Money Exchange*, 16 May 2011. Web. 22 Apr. 2018.
[44] Ibid.

payments, there is a social benefit of improved security and an economic benefit for individuals and their communities in Kenya.[45]

Culturally, Kenya shows great potential for Visa. Andrew Torre, Visa's Sub-Saharan African Group Country Leader, notes "There is a strong sense of community here with people often sending funds to family, friends, and even strangers in times of need, celebration or crisis. We hope to enhance this by eliminating barriers such an transaction costs."[46]

Digital payments allow for automated record keeping, which in turn provides political benefits. Included in these benefits are an increase in transparency and accountability, as well as an improved consistency in collecting payments from citizens. Kenya's political landscape is organized so that the local service provision and services funded by taxes are based off the capacity to collect taxation for that area. Therefore, the government's increased efficiency in collecting payments from citizens allows for more equitably distributed services in the country.[47]

Despite the strong initial launch that mVisa has experienced in Kenya, the platform still faces significant barriers in its future. Firstly, though Visa has done much to tailor mVisa to the average Kenyan customer, there still remains a large percentage of the population that thinks the service is for "expats, rich people, and holders of sophisticated credit cards" and therefore not for those with basic debit and credit cards.[48] In addition, mVisa will have to continue to compete with M-PESA as a prominent force in Kenya. Over the past decade, M-PESA has continued a campaign of how simple their service is. To overcompensate for their late entry to the market,

[45] "Digitizing Government Payments, Kenya Study April 2013." *Accenture*, 2013.
[46] Ibid.
[47] Ibid.
[48] "MVisa Partners Banks & Merchants ." *TechMoran*, TechMoran, 14 July 2017. Web. 22 Apr. 2018.

mVisa will need to accelerate their efforts in education and brand awareness both online and offline.

Nigeria - Social, Cultural, Political, Economic Analysis

According to the International Monetary Fund, Nigeria has the largest economy in all of Africa, yet it continues to have an extraordinary large unbanked population.[49] Similarly to Kenya, in recent years, Nigeria has experienced a large influx of telecommunications companies attempting to penetrate the mobile pay market and repair the needed payment system. However, the implementation and popularity of mobile payment in Nigeria continues to lag behind the success of Kenya. There is a cultural divide between how Kenyans and Nigerians prefer to spend their money. For example, Visa considers their Kenyan client base as "savvy and prefers to use mobile transactions."[50] Nigerians, on the other hand, generally do not trust or understand an electronic payment system. In fact, the majority of Nigerians only use their debit cards to withdraw cash from an ATM and not for much else.[51] The giant lack of trust has been a major barrier for Visa to successfully expand into Nigeria's mobile payment market. According to Ope Adeoye, as of January 2016 there were only 200,000 active cards in Nigeria "as opposed to 97 million internet users."[52]

Additionally, in early 2018 Nigeria was experiencing increasing unemployment and rising inflation rates, which has led Nigerian politicians to decide to step up and attempt to revive the nation's economy via financial inclusion. One of the biggest methods of expanding financial literacy in developing economies is experimenting with and implementing mobile payment

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[49] International Monetary Fund. "World Economic Outlook: Subdued Demand: Symptoms and Remedies." *World Economic and Financial Surveys*, October 2016.

[50] Kamau, Macharia. "Visa's Payment Service Stirs Competition in Mobile Money." *The Standard*, The Standard, 18 July 2017. Web. 22 Apr. 2018.

[51] "Light from Maize: Meet the Innovator Who Seeks to Revolutionize Power Generation in Malawi." *Ventures Africa*, 9 Apr. 2018. Web. 22 Apr. 2018.

[52] Ibid.

technologies on smartphones and feature phones. According to the McKinsey Global Institute's projections, “by utilizing digital financial services and reducing cash transactions, Nigeria’s GDP could rise by an estimated 12.4 percent by 2025. While becoming fully digitized and cashless is still a far leap, Nigeria, and Visa, have made strides toward improving financial inclusion and digital finance.”[53] Currently, the electronic payment system in Nigeria is in its infancy stage, but will experience drastic growth if the nation can politically, culturally and socially trust the system.

Lack of Trust and Education

Visa is acutely aware of their biggest barrier in Nigeria and other developing markets: a lack of trust and knowledge about financial systems, including mobile payments. In several ways, Visa has shown their understanding of this issue. Firstly, the company designed their website in a way that makes it accessible and easily comprehensible to the all the countries in which it does business. Further, the website promotes financial inclusion and the prevalence of Visa in countries we have been discussing such as Egypt, Nigeria, Kenya, and Rwanda, creating initiatives directed at awareness and education. The site is easy-to-use, and informative, explaining in significant detail the instructions on how to download mobile apps and, in some cases, how to use mVisa.

Next, in order to combat trust issues and enter into African markets, Visa has begun partnering with governments and other companies designed to help accelerate the transition from cash to digital payments and in turn reduce poverty and drive growth. Some examples of these alliances is the Alliance for Financial Inclusion (Egypt, Nigeria, Kenya and Rwanda have at least one member in this Alliance)[54] and the Better Than Cash Alliance[55] which is based at the UN.

[53]“Nigeria-Investing in a Cashless Future”, *Proshare Intelligent Investing*, 11 Apr. 2018. Web. 22 Apr. 2018.
[54]“Members.” *Alliance for Financial Inclusion*, n.d. Web. 22 Apr. 2018.

These partnerships will help to build trust at the highest levels, with individual governments and companies that hopefully will extend to employees and their friends and families – the users of products like mVisa.

Competitors

Visa does not stand alone in its efforts to penetrate the electronic payment market of Africa. Mastercard, one of Visa's most direct competitors globally, uses a two-pronged strategy as an influential driver of digital growth. Mastercard's approach is to develop alliances with third-party companies would hold digital wallets such as Apple and Samsung, while at the same time also creating its own API-based wallet.[56] In 2016, for example, Mastercard created a strategic alliance agreement with a Senegal-based digital payment platform known as Wari. The partnership between Mastercard and Wari aims to strengthen the Wari offering in 35 different markets. The two companies work to replace cash in Africa by providing citizens with easy financial solutions. Part of the agreement involves added Mastercard services on the MyWari mobile app such as: the ability to use a virtual card and access to Masterpass QR, "a mobile payment solution that gives Micro, Small and Medium Enterprises (MSMEs) access to a low cost way to accept payments for their goods and services."[57]

Another one of Visa's competitors is M-PESA in Kenya. This mobile payment was launched in 2007 by Safaricom, a telecommunication company. M-PESA allows people to have the opportunity to deposit, send, save, and withdraw money via their mobile phones whether or not they have a bank account. Kenya's environment, with a majority of people working as farmers and living in remote locations far from banking institutions, allows for M-PESA to serve

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[55]"About The Better Than Cash Alliance." *Better Than Cash Alliance*. Web. 22 Apr. 2018.
[56] Letsebe, Kgaogelo. "MasterCard, Visa to Dominate Digital Payments Market." *ITWeb*, 4 Sept. 2017. Web. 22 Apr. 2018.
[57] "Wari and Mastercard Dedicated to Fighting Cash in 35 African Markets." *MasterCard Social Newsroom*, 19 Dec. 2016. Web. 22 Apr. 2018.

as a safer and faster storage and transfer of money option. With the introduction of M-PESA, households are able to increase their savings as well as send members to high-paying jobs without worrying about the distance from the home. Security has also seen an increase because of the lack of need to carry cash. M-PESA has proven to provide safety and ease of operation to the consumer and merchants.[58] As of 2016, M-Pesa has proven their presence in Kenya by producing statistics that approximately 70% of the Kenyan population uses the mobile payment.

In early 2018, a collaboration effort was announced between Safaricom and PayPal, which allows for an quicker and easier transfer of funds between M-PESA wallets and PayPal accounts, thus connecting qualifying Kenyans with 18 million PayPal accepting merchants around the globe.[59] This service will not only allow Kenyans to purchase goods throughout the world's various marketplaces, but will also allow local Kenyan businesses to sell their goods and services to more than 210 million active PayPal users across the globe in up to 25 international currencies.[60] Through expanding the global digital economy, developing countries can be even more connected to every corner of the world. According to Efi Dahan, PayPal's General Manager for the Middle East, Africa, and Russia, the collaboration efforts "with M-PESA is part of the company's long-term strategy to enable e-commerce and democratise financial services on the African continent."[61]

Summary and Recommendations

Financial inclusion is needed to stimulate a nation's economic growth. Financial services companies, such as Visa, recognize the lack of a formalized payment system in many developing

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[58] Chigada, J. M., & Hirschfelder, B. "Mobile banking in south africa: A review and directions for future research." *South African Journal of Information Management,* 26 July 2017.

[59] "East Africa: Safaricom, Paypal Collaborate for International Ecommerce Through M-Pesa." *AllAfrica.com,* 9 Apr. 2018. Web. 22 Apr. 2018.

[60] Ibid.

[61] Ibid.

economies, such as many sub-Saharan African nations. Traditionally, brick-and-mortar branches and ATMs have been the banking channels of choice by financial institutions; however, this is no longer the case, especially in emerging markets. Specifically, Visa has penetrated the mobile payment market with their mVisa financial service, which is available in Nigeria, Rwanda, Kenya and Egypt. Visa understands that financial services are handled very differently all around the world, and financial inclusion is the common denominator. In order to sustain economic growth and grow closer to a cashless society, electronic payment systems must be implemented and utilized in every corner of the world.

Visa's current strategy is to align with in-country banks in order to give customers access to electronic payment methods, such as mVisa. However, this strategy does not reach the unbanked population. A non-bank alliance would prove effective in creating a larger customer base, including both those not served by a bank. A merger and/or collaboration effort similar to that of PayPal's would most likely be most successful. PayPal is one of the world's leading online payment systems and M-PESA is an already established and respected mobile wallet service. If the collaboration between the two of these financial institutions is successful, it is suggested that Visa follows suit. Visa is a powerful payment network that could be even more influential if expanded. An alliance with M-PESA would allow for a faster expansion, due to M-PESA's already established dominance in Kenya. M-PESA is looking to expand into Nigeria, similarly to mVisa. Therefore, as an effort to provide the largest amount of customers with an electronic payment, Visa should look to partner their expansion in Nigeria with M-PESA.

A lack of trust in financial services is widely seen across these African countries Visa is attempting to penetrate and as a result this is preventing an immediate expansion of mVisa. In order to combat this mistrust, consumers must be educated on the security and benefits provided by Visa. Visa is an established and respected brand in the United States due to their extensive advertising and partnerships with large corporations, such as the NFL, FIFA, NHL, and the Olympics. Looking to make similar partnerships in Kenya, Nigeria, and Egypt would build Visa's brand. Through advertisements tailored to the specific populations, Visa can educate consumers on the security and low risk included in mVisa's features.

Bibliography & References

"2017 Nigeria Mobile Trends Report." *twinpine: A Terragon Company*, 2017.

"About The Better Than Cash Alliance." *Better Than Cash Alliance*. Web. 22 Apr. 2018. www.betterthancash.org/about.

"About Visa" *About Visa | Visa*, n.d. Web 22 Apr. 2018. www.visa.com.ng/about-visa.html.

Adeleke, David. "Visa Launches Its Mobile Payment Platform, MVisa in Nigeria." *Ventures Africa*, 28 July 2017. Web. 22 Apr. 2018. www.venturesafrica.com/visa-launches-mvisa-its-mobile-payment-platform-in-nigeria/.

"Africa: The Unbanked Continent." *Elixirr*, 3 Jan. 2018. Web 22 Apr. 2018. www.elixirr.com/2017/06/africa-the-unbanked-continent/.

"Africa number of internet users by country 2017 | Statistic." *Statista. September 2017.* Web 22 Apr. 2018. https://www.statista.com/statistics/505883/number-of-internet-users-in-african-countries/

Asongu, Simplice A. "The impact of mobile phone penetration on African inequality," *AGDI Working Paper*, May 2013.

"Cell Phones in Africa: Communication Lifeline." *Pew Research Center's Global Attitudes Project*, Pew Research Center, 15 Apr. 2015. Web 22 Apr. 2018.

http://www.pewglobal.org/2015/04/15/cell-phones-in-africa-communication-lifeline/.

Chigada, J. M., & Hirschfelder, B. “Mobile banking in south africa: A review and directions for future research.” *South African Journal of Information Management*, 26 July 2017.

Chironga, Mutsa, et al. “Mobile Financial Services in Africa: Winning the Battle for the Customer.” *McKinsey & Company*, Sept. 2017.

“Clinton Development Initiative and Visa Announce Partnership to Link Farmers in Rwanda to Digital Payments.” *Clinton Foundation*, 15 Dec. 2015. Web. 22 Apr. 2018. https://www.clintonfoundation.org/press-releases/clinton-development-initiative-and-visa-announce-partnership-link-farmers-rwanda

“Cost of Mobile Money Transactions: Penalizing the Poor.” *Mobile Money Exchange*, 16 May 2011. Web. 22 Apr. 2018. https://mobilemoneyexchange.wordpress.com/2011/05/16/cost-of-mobile-money-transactions-penalizing-the-poor/.

Demirguc-Kunt, Asli; Klapper, Leora; Singer, Dorothe; Van Oudheusden, Peter. “*The Global Findex Database 2014 : measuring financial inclusion around the world”*. Policy Research working paper; no. WPS 7255. Washington, D.C. : World Bank Group. 2015.

“Digitizing Government Payments, Kenya Study April 2013.” *Accenture*, 2013.

“East Africa: Safaricom, Paypal Collaborate for International Ecommerce Through M-Pesa.” *AllAfrica.com*, 9 Apr. 2018. Web. 22 Apr. 2018. www.allafrica.com/stories/201804090915.html.

Feinstein, Eran. “The Development of the MVisa Payment Option.” *Africa's Online & Mobile Payments Hub*, 22 Nov. 2017. Web. 22 Apr. 2018. www.blog.directpay.online/the-development-of-mvisa-payment-option.

“Financial Inclusion” *Financial Inclusion | Finance & Foundations | Visa*, n.d. Web 22 Apr. 2018. www.usa.visa.com/about-visa/financial-inclusion.html.

Gallup, Inc. “Many Transactions in Sub-Saharan Africa Still in Cash.” *Gallup News*, 11 June 2012.

“Households w/ personal computer, %.” *TCdata360.* 2016. Web 22 Apr. 2018. *https://tcdata360.worldbank.org/indicators/entrp.household.computer?country=ZAF&indicator=3427&countries=LBR&viz=line_chart&years=2012,2016*.

International Monetary Fund. “World Economic Outlook: Subdued Demand: Symptoms and Remedies.” *World Economic and Financial Surveys*, October 2016.

Jackson, Tom. “‘Now Is the Time to Invest in Africa.’” *Disrupt Africa*, 26 Jan. 2018. Web 22

Apr. 2018. http://disrupt-africa.com/2018/01/now-is-the-time-to-invest-in-africa/.

Kamau, Macharia. “Visa's Payment Service Stirs Competition in Mobile Money.” *The Standard*, The Standard, 18 July 2017. Web. 22 Apr. 2018. https://www.standardmedia.co.ke/business/article/2001248085/visa-s-payment-service-stirs-competition-in-mobile-money.

“Kenya: Extreme Inequality in Numbers.” *Oxfam* , Oxfam International, n.d. Web 22 Apr. 2018. https://www.oxfam.org/en/even-it/kenya-extreme-inequality-numbers

Koigi, Bob. “[Egypt] QNB ALAHLI in Partnership with Visa to Unveil MVisa.” *Africa Business Communities*, 27 Mar. 2017. Web. 22 Apr. 2018. https://africabusinesscommunities.com/news/egypt-qnb-alahli-in-partnership-with-visa-to-unveil-mvisa/.

Lamikanra, Bisi, and Joleen Young. “Payment Developments in Africa 2015, Vol. 1.” *KPMG*, July 2015.

Letsebe, Kgaogelo. “MasterCard, Visa to Dominate Digital Payments Market.” *ITWeb*, 4 Sept. 2017. Web. 22 Apr. 2018. https://www.itweb.co.za/content/mraYAyMoBGL7J38N.

“Light from Maize: Meet the Innovator Who Seeks to Revolutionize Power Generation in Malawi.” *Ventures Africa*, 9 Apr. 2018. Web. 22 Apr. 2018. www.venturesafrica.com/meet-the-innovator-who-seeks-to-revolutionize-power-generation-in-malawi/.

“Members.” *Alliance for Financial Inclusion*, n.d. Web. 22 Apr. 2018. www.afi-global.org/members/.

“Mobile Phones Are Transforming Africa.” *The Economist*, The Economist Newspaper, 10 Dec. 2016.

“Mobile Phones Are Transforming Africa.” *The Economist*, The Economist Newspaper, 10 Dec. 2016.

“MVisa Partners Banks & Merchants .” *TechMoran*, TechMoran, 14 July 2017. Web. 22 Apr. 2018. https://techmoran.com/mvisa-partners-banks-merchants-to-break-the-burden-of-m-pesa-peer-to-peer-transfer-fees/

“Nigeria-Investing in a Cashless Future”, *Proshare Intelligent Investing*, 11 Apr. 2018. Web. 22 Apr. 2018. www.proshareng.com/news/Fintech/Nigeria-Investing-in-a-Cashless-Future/39415.

Okwakol, Samson “Visa gets new Regional President for Africa.” *East African Business Week*, 22 Jan. 2018.

"Powering Financial Inclusion." *Financial Inclusion | Finance & Foundations | Visa,* n.d. Web 22 Apr. 2018. https://usa.visa.com/about-visa/financial-inclusion.html.

"Rwandan Farmers to Reap Digital Payment Rewards." ***Visa Everywhere | Visa.*** n.d. Web. 22 Apr. 2018. www.usa.visa.com/visa-everywhere/global-impact/rwandan-farmers-to-reap-digital-payment-rewards.html.

"Rwanda: Mobile Phone Penetration Rate Rises Marginally in June." *AllAfrica.com*, 5 Sept. 2017. Web. 22 Apr. 2018. www.allafrica.com/stories/201709050141.html.

"Rwanda Population (LIVE)." *Rwanda Population (2018) - Worldometers*. Web. 22 Apr. 2018. www.worldometers.info/world-population/rwanda-population/.

"The Opportunities of Digitizing Payments," *A report by the World Bank Development Research Group, the Better Than Cash Alliance, and the Bill & Melinda Gates Foundation to the G20 Global Partnership for Financial Inclusion*, August 28, 2014.

"Visa Continues Its Push into Africa." *Business Insider*. Business Insider, 15 Sept. 2016. Web 22 Apr. 2018. www.businessinsider.com/visa-continues-its-push-into-africa-2016-9.

Visa, et al. "Visa and Leading Banks Bring Mobile Payments to Nigeria." *TechCabal*, 20 July 2017. Web. 22 Apr. 2018. www.techcabal.com/2017/07/20/visa-and-leading-banks-bring-mobile-payments-to-nigeria/.

"Visa Inc (V.N) Company Profile." *Reuters*, Thomson Reuters, n.d. Web 22 Apr. 2018. www.reuters.com/finance/stocks/company-profile/V.N.

"Visa Rolls Out P2P Digital Payments In Kenya." *PYMNTS*, 17 July 2017. Web. 22 Apr. 2018. https://www.pymnts.com/news/mobile-commerce/2017/visa-rolls-out-free-person-to-person-digital-payments-in-kenya.

"Wari and Mastercard Dedicated to Fighting Cash in 35 African Markets." *MasterCard Social Newsroom*, 19 Dec. 2016. Web. 22 Apr. 2018. https://newsroom.mastercard.com/mea/press-releases/wari-and-mastercard-dedicated-to-fighting-cash-in-35-african-markets/.

Weisser, Cybele. "Mobile Payments: Pros and Cons of Digital Payment Apps | Money." *Time*, Time, 11 May 2015. Web. 22 Apr. 2018. www.time.com/money/3852295/mobile-payment-apple-pay/.

"What is mVisa." *MVisa | Visa*. n.d. Web. 22 Apr. 2018. www.visa.com.ng/pay-with-visa/featured-technologies/mvisa.html.