CONTACTLESS PAYMENT: "THE FUTURE OF WORLD RETAIL FINANCE"

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ABSTRACT

There is no question that contactless payment is becoming the new norm pretty much everywhere, with consumers eagerly embracing the speed and convenience of "tap-to-pay" technology. Data show that the current surge in contactless payment adoption will further accelerate in the future and with good reasons.

Contactless payment offers consumers a fast, secure and convenient way to pay, providing merchants with significant opportunities to reduce queuing and improve the in-store payment experience. It also enables a significant reduction in the use of cash, as seen in several early adopting countries. Additionally, contactless payment paves the way to multi-application, as the same device (card, mobile handset, or wearable) can also be used for transit or access control.

In this paper we explore the growing value of contactless payment markets across the globe, taking a look at the latest data on international adoption and usage figures. We take a quick tap on Latsil Pay, a startup on an NFC-powered contactless payment platform. We also examine the benefits of contactless payment for consumers, merchants, and issuers, review the use cases and form factors that make it possible for merchants, brands, and financial services providers to target new cardholder segments, or boost customer acquisition and retention.

Finally, with CBN cashless policy adoption, we explore how Nigerians are in a unique position to make the jump directly from 'swipe' to 'tap' to everyone's benefit. With Nigerian consumers

embracing Digital payment options provided by the likes of Remita, Interswitch, e-Tranzact. Latsil Pay is the ideal payment platform to capture this growing appetite for convenient contactless payment by leveraging new infrastructures to enable a new generation of enticing payment opportunities for users.

Keywords: NFC, Contactless Payment, Digital Wallet, e-Wallet

INTRODUCTION

The considerable increase of mobile device users in recent years causes a strong demand for secure wireless bank services and reliable mobile commerce (M-COMMERCE) applications since mobile payment (M-PAYMENT) & banking is a critical parts of most wireless information services. Mobile commerce application has given rise to how to build a secure M-Payment system. This has become a research hotspot.

"*The convergence of payments and mobile communications is not just logical - it is inevitable.*" In March 2007, John Philip Coghlan, then CEO of Visa USA, made this announcement at the CTIA Wireless Conference (Smart Card Alliance Contactless Payments Council White Paper, 2007). Yet only a few years ago, people were still saying, "Someday, we will pay using mobile phones." The Smart Card Alliance and related industry groups representing financial institutions, merchants, and mobile operators have talked and written about "someday" for almost a decade. But now, virtually every industry group involved in the transaction chain is investigating the use of mobile payments. And mobile payment will soon be a standard transaction method for payment in many merchant locations.

What are mobile payments?

Smart Card Alliance (2007) defined Mobile payments as payments for goods or services initiated from a mobile phone or similar device (such as a personal digital assistant or smartphone). Juniper Research estimated that the total transaction value from all mobile payments has grown from just above $2 billion in 2007 to nearly $22 billion by 2011 (SCA white paper). "That was 5 years ago"

According to the Federal Reserve Bank of Boston, there are two kinds of mobile payments:

1. Remote mobile payments
2. Proximity mobile payments

1. **Remote Mobile Payments**

Remote mobile payments may use a variety of mobile phone data channels to initiate a transaction. Most mobile phones deployed over the last 5 years are equipped with functionality that can enable remote mobile payments. Practical use cases for remote mobile payments may include making purchases from a web merchant via the mobile phone, paying a merchant who does not have traditional acceptance capabilities for physical goods, or paying a merchant for a purchase of digital goods. Remote mobile payments may be implemented using the existing financial payments infrastructure (e.g., for payment at a web merchant) or using a closed-loop mobile payments system.

One example of a remote mobile payment process is as follows:

i. The consumer and merchant set up an account with a trusted third party or mobile payment service provider (MPSP).

ii. When a transaction is initiated, a short message service (SMS) message is sent to the MPSP. Authentication may take a variety of forms, including entry of secret passwords, validation of handset hardware information, or verification of other senders' personal information.

iii. After the transaction request is received and authenticated, the MPSP transfers funds from the consumer's account into the merchant’s account and notifies the merchant that the funds have been transferred.

iv. In a closed-loop system, the merchant may then move the funds into a standard bank account.

Remote mobile payments are ideal for use in markets that require person-to-person payments and for under-banked consumers and merchants who are not part of the normal POS acquirer payment process, such as flea market vendors and seasonal outside vendors.

2. **Proximity Mobile Payments**

Proximity mobile payments leverage the financial industry's payment infrastructure. An NFC-enabled phone is provisioned with a version of the payment application (i.e., credit or debit card) issued by the consumer's financial institution. The application and payment account information is encrypted and loaded into a secure area on the phone. The phone uses the built-in NFC technology to communicate with the merchant's contactless payment-capable POS system, similar to the contactless payment cards and devices in use today. The payment and settlement processes are the same processes used when the consumer pays with a traditional contactless or magnetic stripe credit or debit payment card. Proximity mobile payments can be made at both attended POS locations (such as stores) and unattended locations (such as vending machines) that use the existing merchant payments infrastructure.

To pay, the consumer simply brings the phone to within a few inches of a contactless payment-capable POS system and the transaction occurs. The process is the same as that used by the contactless credit and debit cards currently being deployed in Nigeria.

The most obvious differences between proximity and remote mobile payments are speed, convenience, and the fact that NFC payments use the existing financial payments processing infrastructure. There is no need to set up payment processes or accounts with a third party, and the proximity mobile payment data is linked directly to a payment card issued to the consumer by a trusted financial institution.

CONTACTLESS PAYMENT

What is contactless payment?

Contactless payment systems are credit cards, debit cards, smart cards, or other devices including smartphones and other mobile devices that use Radio Frequency Identification (RFID) for

making a secure payment. The embedded chip and antenna enable consumers to wave their card or handheld device over a reader at the point of sale terminal.

NFC came out of RFID and means radio-frequency identification, NFC uses the same technique. But standardized this technology for consumer smartphones. The NFC standards are defined by a group called the NFC forum. In this group big companies like Nokia, Sony and Philips collaborated to create the NFC technology. This group is dedicated to promoting the security, ease of use, and popularity of near-field communication. It aims to educate businesses about the technology and upholds standards that allow NFC to operate between different devices. (NearFieldCommunication.org, 2016).

"*One day, we'll all be paying for things with our phones, and NFC is the ticket to that future. In light of the many recent credit card data breaches, now is an especially good time to present a solution that finally shields our wallets from theft and fraud.*" *(Profis, 2014).*

How does it work?

Translated the abbreviation NFC stands for Near Field Communication and makes communication possible over a short distance maximum of 10 centimeters, the signal can be amplified by an antenna. NFC is a short-range, low-power communications protocol between two devices. It uses radiofrequency to allow small amounts of data to be transferred between two devices. One device, the initiator, uses magnetic induction to create a radio-wave field that the target can detect and access. (Popular Science, 2011)

The NFC technology is built on the radio frequency identification (RFID) technique patented in 1983. Bringing two NFC-ready devices close to each other activates a magnetic induction. The devices don't have to physically touch each other for the technique to work but have to be in close range. This technique isn't new and is widely used in access (door) cards for example in offices or schools. The big difference is that access cards use passive mode (In this mode the NFC chip behaves as a 'traditional' RFID chip containing information, using another device that information can be read). The new thing about NFC is that it has a peer-to-peer function, which makes it possible to send information back and forward. When the devices are linked, small amounts of data can be exchanged at a relatively slow data rate of up to 424 kbps. This happens

through the unlicensed 13.56 MHz radio spectrum and is also used by RFID chips and tags. (Hamblen, 2016)

Benefits of NFC Contactless payment

There are several factors influencing the growth of contactless payment. First and foremost is the sustained growth of smart payment cards that are being shipped with on-board contactless technologies; “in some territories, like North Asia, tap-and-go functionality is now present on 82% of cards shipped” (Smart Payment Association, 2016).

Similarly, the number of contactless-enabled terminals is increasing. POS schemes mandating the activation of contactless functionality for cards and other devices are proliferating around the world and paving the way for the next generation of digital and mobile payments. But just as relevant is the value and convenience that contactless enables for consumers, merchants, and issuers alike.

Convenience

By far the best benefit of near-field communication is the ease of use. With only a swipe customers can pay for their small items, send information back and forward, and enter concerts without the struggle barcodes usually have. Also, the fact that you only need to carry your phone with you makes it easy.

Security

Keeping all your cards like debit and credit cards in your wallet has its risks. When your wallet is being stolen you lose them all. Storing all this information on your smartphone sounds dangerous at first, but you can protect your smartphone with a password. Also with some simple software, you can trace your smartphone through GPS. And thieves cannot use your cards if they can’t unlock your phone first. Second of all near-field communication offers a secure channel for communication through data encryption.

Versatility

One of the most important aspects of Near Field Communication is the versatility of the technology. Customers can pay with NFC, load sports or concert tickets to their smartphone, check-in at some airport, board trains, read information from NFC-enabled posters, and send information back and forward between devices. (Benefits of Near Field Communication - NEARFIELDCOMMUNICATIONNFC.NET, 2016)

We categorize the benefits in the forms below;

I. **Benefits for consumers**

- Fast, easy, and secure payment for low-value purchases – eradicating the need to carry cash, count change, or stress about having enough cash to make a purchase
- No requirement to sign, or enter a PIN – ideal for time-pressed consumers
- 'Tap and go' convenience for public transport, tolls, parking facilities, gas stations, and pharmacies
- No need to queue when making everyday purchases – quick-service food and drink outlets, entry tickets to entertainment venues, convenience store purchases
- Can use the mobile wallet on a mobile device to make transactions

II. **Benefits for merchants**

- Faster transaction times move customers more quickly through the payment process – generating potential for increased sales volumes in busy
- Transforms the checkout experience for customers
- Reduced cash handling
- Streamlined payment processes reduce operating costs and improve operational efficiency

- Increased customer spending, increased frequency of purchases, increased loyalty – adds up to increased revenue – tappers spend more than those that pay with cash; those who tap with cards are more likely to tap with a smartphone
- No obligation to provide a receipt for transactions with no CVM (Cardholder Verification Method)

III. **Benefits for issuers**

- High levels of consumer satisfaction
- Low-value transactions below the Cardholder Verification Limit do not require signing or entering a PIN
- Capture transactions typically made using cash
- Competitive differentiation with innovative new form factors that enhance consumer loyalty and retention – leading to higher spending on the contactless card
- Branding and co-branding opportunities with payment partners – wearables, fobs, and standard cards are all highly visible; contactless EMV brings your card ‘top of wallet’, leading to higher spending on that card
- Leverage the existing payments infrastructure – relative ease of implementation

Concerns and downside of NFC

The biggest concern around NFC payments is security, but the mobile payment structure is so complex, any hacking or intercepting would be very difficult. To understand why here's how it works.

After launching the payment application on your phone, the phone is tapped on the credit card terminal and a connection is made using NFC. At this point, you may be asked to scan your finger or enter a passcode to approve the transaction. The transaction is then validated with a

separate chip called the secure element (SE), which relays that authorization back to the NFC modem. From there, the payment finishes processing the same way it would in a traditional credit card swipe transaction.

WHY NFC-BASED PAYMENTS ARE SECURE

The most important step in the mobile payment transaction is the secure element, which holds all the authorization power. Whether it's a chip in the phone or functions virtually in the cloud, the secure element is tamper-proof and protected by a unique digital signature. As explained by Michael Armentrout of Infineon (cited in Profis 2014), which manufactures secure element chips, the architecture of the secure element is designed to be hardened against attacks on the phone.

"That includes software attacks but also hardware-based attacks where someone got your phone or SIM card, it would be extremely difficult to obtain info off of that because it's a chip that is designed to have security mechanisms that go well beyond a normal processor."

Apple's approach to the secure element is a physical chip, which is only available in the iPhone 6 and 6 Plus. Each time a user initiates a transaction, the SE assists in generating a random, one-time-use code instead of transmitting the user's debit or credit card number.

Limited use

Still, a lot of companies aren't supporting NFC today. We see a lot of developments, but the technology is not yet widely supported. We are in a transition phase, this is confusing for consumers and makes the use of the technology difficult. Consumers need to check out constantly if they can or can't use NFC.

Security

When you replace your physical wallet with a digital version this also has disadvantages. One of the major risks is phone hacking, phones become more and more handheld computers and as

with computers they become prone to viruses. Being hacked with all your debit and credit card information stored on your phone can have major consequences. (Disadvantages, 2016)

CONTACTLESS PAYMENT: USAGE AROUND THE WORLD

The last 12 months proved another positive year for the EMV smart payment card standard. Data collated by the SPA(Smart Payment Association) reveals more than 2.6 billion total EMV cards were shipped in 2015, and demand for 'tap and go' contactless payment across the world continued to grow. SPA analysis of smart payment card shipments reveals that contactless technology represented 48% of total smart card shipments globally in 2015 (excluding the US).

Let's take a look at some growth statistics by country/region.

1. **Europe**

(Smart Payment Association) SPA data reveals that 53% of all cards shipped in Europe in 2015 were contactless. Meanwhile, the latest data from Visa Europe shows that across Europe, there are now more than 130 million contactless cards accepted at more than 3 million contactless terminals. More than €16.1 billion was spent on contactless Visa cards in the 12 months to June 2015, a 335% increase on the previous year – this equated to more than 1.4 billion transactions in a year. (Visa Europe, 2015)

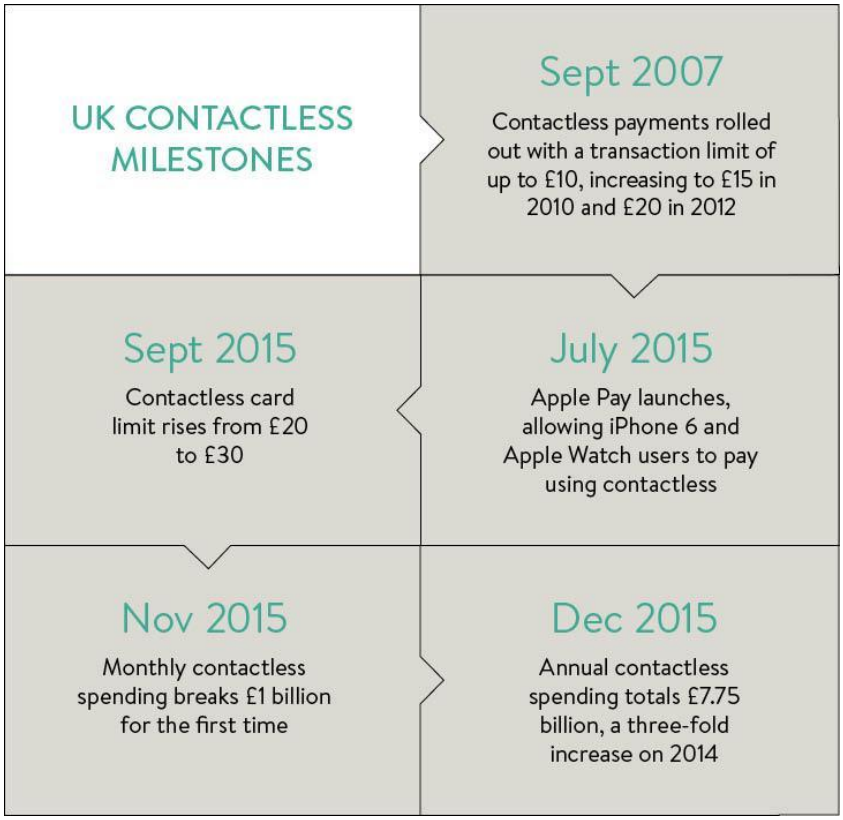
On its side, MasterCard announced recently that "contactless transactions in Europe passed the one billion milestones in 2015 – an increase of 150% on the previous year – with total spend on contactless transactions up 183%" (Finextra, 2015). There are now 10 countries with over 5 million contactless cards or devices in circulation, and contactless cards or devices can now be used at over 4 million merchant locations worldwide. Acceptance will be further stimulated by the mandate applicable from January 2016 that all newly deployed and upgraded POS terminals in Europe be contactless-enabled. By 2020, all POS terminals must be contactless-enabled. There's already a particular "appetite" to pay contactless in Eastern Europe. In the **Czech Republic**, **77%** of in-store transactions processed by MasterCard were contactless in 2015. **In Poland**, the figure was **55%**, **40%** in **Hungary,** and **38%** in **Slovakia**. **Poland** and **Spain** can be

seen as particular leaders in the mobile payment space, recording several **HCE projects** and the first Samsung Pay implementations in Europe. This can certainly be explained by the fact that in both countries more than **70% of POS terminals are already contactless-enabled**. The UK is one of the most contactless-ready countries in the world. According to the (UK Card Association, 2015), in 2015 UK shoppers using 81.5 million contactless-enabled cards made more than 1bn contactless purchases on credit and debit cards, and used the technology for almost one in eight of all card transactions in December, leading to spending up by 233% over the year, to £7.75bn. The average value of contactless payment was up too: from £6.60 in January 2015 to £8.15 in January 2016.

Those impressive figures were facilitated by a growing awareness of the technology by UK consumers, by the decision in September 2015 to increase the upper limit for contactless transactions from £20 to £30 for more convenience and due to very low fraud levels with the technology, and by huge efforts from acquirers to deploy acceptance included in London transports. According to TfL (as cited in find extra, 2015), a quarter of pay-as-you-go, customers, use contactless payment already because it is so quick and easy and there have been more than 250 million journeys made using cards from over 80 countries.

The UK is also a territory of choice for contactless payment with mobile phones and wearables. The country was the first in Europe to see Apple Pay launched, while issuers (including Barclaycard) were quick to propose contactless payments stickers, keyrings, and wristbands as convenient “companions” to the card.

Merchants’ acceptance plays a key role in the development of contactless. In Europe, Schemes have mandated that from 1st January 2016, newly deployed and upgraded POS terminals must be contactless-enabled as a standard acceptance method, contactless functionality must be activated, POS Terminals must accept Cards and Access Devices, EMV-based chip technology, and contactless magnetic stripe technology (Starting 1st Jan 2017 for Sweden, Lithuania, Estonia, and Latvia). From 1st January 2020, all existing POS terminals must be contactless-enabled.



(*Source: raconteur.net*)

2. **Canada**

In Canada, where the government's commitment to a cashless society is gaining traction, almost all payment cards are contactless-enabled. This is also the case for 75% of major retailers now accepting contactless payments. Visa says contactless transactions represented 12.1 % of all store purchases made by cardholders in June 2014. That number was approaching nearly a quarter of purchases on Visa cards in June 2015. At MasterCard, which has been quicker to roll out tap-enabled cards, 27% of in-store purchases were contactless as of September 2015. Since 17 October 2014, Schemes have mandated that newly deployed and upgraded POS terminals must be contactless-enabled as a standard acceptance method.

3. **Asia Pacific**

Historically, Asia Pacific has been a powerhouse for contactless payment. Indeed, the SPA's figures confirm that 70% of all smart payment cards shipped in 2015 in the Asia Pacific Region featured contactless technology.

Contactless POS terminals have been mandated in Australia since October 2014 and contactless transactions can be made without PIN up to AU$100 ($74 / €67). The RFi Group's recent NFC Payments Evaluation Study found Australia, Singapore, and Taiwan led the world in adoption – with 53%, 45% and 41% of citizens respectively having made a contactless payment.

According to a recent MasterCard survey, 66% of Australians say contactless payment is now their preferred payment method. And, according to Visa Australia's figures, over 95 million Visa payWave transactions are now made each month with 65% of face-to-face Visa transactions being contactless. Indeed, the 16% decline in cash usage in Australia is being credited to the contactless payment phenomenon. Several Australian banks have launched mobile payment offers based on HCE technology, and Australia will see the first Android Pay launch soon.

4. **China**

In 2015 China continued its steep EMV issuance path to achieve record shipments near the 850 million mark; **90%** of all newly issued cards are contactless. According to the SIM alliance, in 2014 China emerged for the first time as a key NFC SIM market, with reported shipment volumes reaching 25 million units. The ramp-up in NFC phone shipments resulted in Chinese consumers conducting $8 billion worth of contactless-mobile payments in 2014.

THE PACE OF CHANGE IN THE RETAIL PAYMENT MARKET

In the past decade and a half, the banking industry has invested heavily to make sure its customers and businesses benefit from technological advances. Consequently, we've seen a steady stream of change with the introduction of chip and PIN which has made card use safer and more widely available, contactless technology on cards which has made it faster than ever to

pay by plastic, Faster Payments which allows internet and phone payments to be made at the touch of a button at any time of day or night and the introduction of Payments which has enabled customers to make secure payments via their mobile phone.

In the UK, they are in the early days of another period of significant change in how they pay. ***The UK's financial technology (fintech) sector is leading the world in innovation, and this is being backed up by pressure from the regulators to increase competition and to ensure that access to the country's payments infrastructure is made available on equal terms for everyone, whilst at the same time improving the service to consumers***. And the established banks and payments companies are not standing still; there has been significant innovation in recent years, through the launch of Faster Payments to speed up internet and phone transfers, plastic cards being upgraded with contactless technology, and services such as Barclays' Pingit and the cross-industry Payment and Zapp, which enable customers to make use of their mobiles for making payments.

The consumer's adoption of new technologies, in particular the smartphone, is behind much of the change in payments and banking. Smartphones have become ubiquitous, certainly amongst the under-45 age groups, and their owners increasingly expect to be able to use them for almost everything, including payments. The payments industry has responded, and we are seeing for the first time that the aspiration of mobile payments is being matched by the reality of convergence of consumer desire, technology readiness, and the development of appropriate business models. This time it's real.

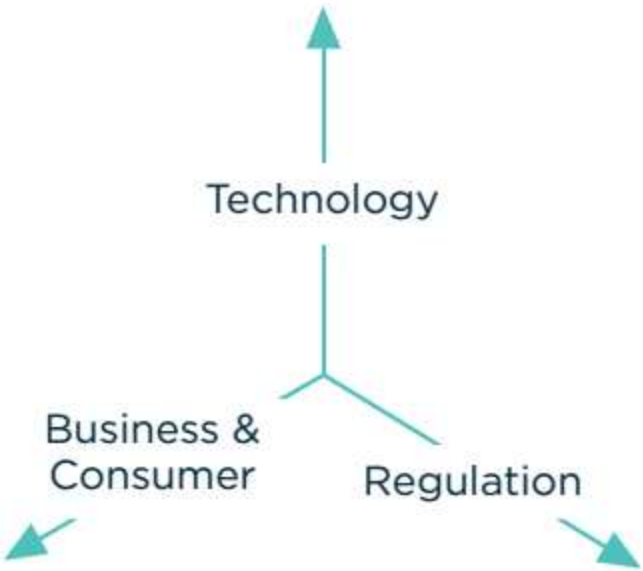
It can seem that the pace of change in the payments industry is at times rather slow. So a historical perspective helps illustrate that this is not the case – and that in fact, the payments market is vibrant and innovative, although the adoption of innovations by the consumer is understandably more restrained. After all, we're all conservative when our own money is involved.

Cheques are an interesting example of a technology that persists, despite apparent obsolescence. They fit into a particular niche, and customers and organizations that occupy that niche are keen to retain them. There is work underway by the banking industry to extend

their life through introducing faster cheque clearing and cheque imaging (allowing customers to take a photo of a cheque and send it to their bank to pay it into their account). But despite the banking industry's investment in cheque technology, the demographics of who is using cheques means their future looks far from certain. Few people under the age of 50 would be sad to see them go, and the only time that most under-25s see a cheque is when they receive one from a grandparent.

Consult Hyperion (A fintech consulting firm in the UK) believe there are three principal groups of drivers of change in consumer payments; **advances in technology;** the imperative for **businesses to respond to the needs of their customers** (and the consequent emergence of new business models); and **regulatory pressures**. (Payments the UK and Consult Hyperion, 2015)

Figure: Drivers of change groupings

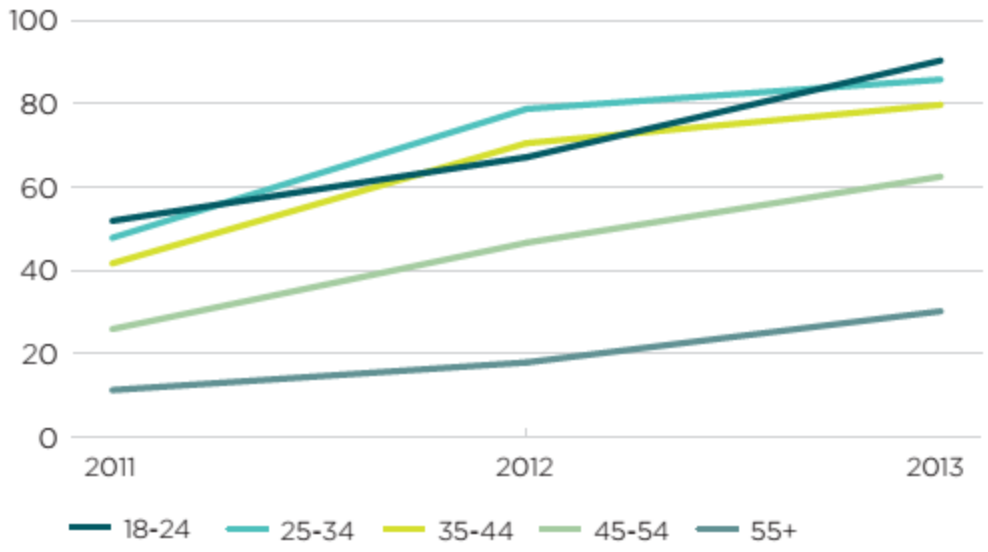


(source: consult Hyperion)

I. **Technology Drivers**

The mobile phone has a very significant role to play in the delivery of services to consumers. In many global markets, smartphone penetration is already well above 50% with the majority of those smartphone owners using mobile internet and mobile apps daily. However, it has taken time to reach this point. Smartphones have been available for some time, yet it has taken several years for their capabilities to reach the point where widespread use is the norm. When we consider the usage of smartphones broken down by age group, the long-term influence of this effect becomes most clearly apparent:

Figure: Smartphone penetration by age



(Source: Consult Hyperion)

The under 45s are very enthusiastic adopters of mobile technology (and the under 55s are not far behind), and increasing smartphone users expect to be able to do EVERYTHING through their

mobile phone ("there's an app for that"). This has clear implications for payments, as suggested in a recent report:

> "*Growth continues in the e- and m-payments markets, along with convergence between the two modes, as some e-payments transactions migrate towards m-payments due to increased use of tablets and smartphones. M-payments are expected to grow annually by 60.8% through 2015 while e-payments growth will decelerate to annual growth of 15.9%.*" (Gemini, 2014)

Today's smartphone is an extremely sophisticated device. Since the arrival of the iPhone and Android smartphones in the late 2000s, the smartphone has gained many features that are extremely useful for payments innovation; for example, a consumer transaction can be geo-logged (fixing the payment to a place) and tying it to that consumer and device. The latest smartphones support Near Field Communication (NFC) for payments – Apple have launched the Apple Pay service (which relies on existing card payment infrastructure, together with newer developments such as NFC and tokenization, of which more below), and Samsung has launched Samsung Pay for their Android devices in 2015. Smartphones have also gained a biometric capability, with both Samsung Galaxy and Apple iPhone devices incorporating fingerprint readers.

At the moment, smartphones are being widely used for some basic financial transactions, such as balance checking, online bill payments, and other general banking functions. We expect the mobile phone to take an increasingly leading role in the payments space over the next five years.

At the heart of this trend are two key concepts, which build on the NFC capabilities increasingly available on smartphones:

- Safe storage of payment details in a smartphone, allowing a customer to carry their payment details around in their phone and leave their wallet at home, through the use of a range of technologies known variously as Secure Element (SE), SIM SE, or Host Card Emulation (HCE).

- The removal of the need for passing card or account details to a retailer when shopping, so that a customer need never worry about their account details being misused by a retailer. This is achieved through a process called tokenization, in which the card details are replaced with a token derived from the card details. When payment is made, this token is passed to the retailer by mobile phone. The retailer's device then passes the token on to the bank for verification – the bank can verify the token, and authorize payment, and the retailer never has to see the customer's card details.

Tokenisation is not only useful for payments on the high street. It also has the potential to make internet shopping through your mobile phone as secure as a chip & PIN.

II. Business and Consumer Drivers

The strongest driver for development in the retail payment sector amongst the business community is competition, principally aimed at customer acquisition and retention. This has only increased in recent years with the emergence of new payments companies, such as PayPal, and more recently Apple Pay and Samsung Pay. These have increased the pressure on the traditional payments organizations – principally the banks and international card schemes – and have encouraged them to innovate to compete, for example through the Faster Payments infrastructural development, and individual services such as Mobile Apps tailored for their customers.

Another strong business driver in the retail sector is always cost, and pressure in this area increased when CBN voted to stop charge on fees on credit and debit cards when used outside the customers' banks ATM.

The underlying business needs of retailers themselves have also been strong drivers of payments developments in recent years. Traditionally, small and medium-sized retailers have relied upon a simple payment terminal, whose only functionality is taking payments. But this is only a small part of what many retailers need; many want inventory management (so they know what they have in stock, and how much they have sold) and transaction reporting for accounting and stock control. For these retailers, the principal innovation in recent times has been the development of the mPOS – a point-of-sale device that uses a mobile phone or tablet, with a card reader attached

in some way. But for every customer that is keen to adopt the latest device or service, there is a customer who is rather more cautious.

In general, it is probably true to say that most customers do not feel there is a hole in their lives that only a new way of paying for things can fill. They typically have concerns around:

- Privacy: maybe they don't want their bank (or anyone else) to know what they bought that day.
- Security: they want to be confident that they won't become a victim of fraud – or if they are, it will be sorted out quickly and efficiently. In particular, they want to be confident that their bank is "handling all of that sort of thing" on their behalf. It's not reasonable to expect customers to be au fait with IT security countermeasures.
- Ubiquity: they want to be able to pay for their goods anywhere, not just a select group of shops.
- Understanding: Some customers need more time to become familiar with and have confidence in a new way of paying for things. So banks need to give them time and answer their questions as honestly and openly as possible.
- Ease of authentication: People are used to using PINs, and weaknesses in some forms of authentication such as biometrics that can require multiple attempts before authentication succeeds can put people off. This may increasingly become an issue with the drive towards multiple-factor authentication. A failure to reflect on these customer drivers can severely impact the potential success of an innovation in the retail payments sector, and developers would be well advised to consider them carefully.

III. Regulatory Drivers

Regulation is playing a crucial and powerful role in determining the future evolution and development of payments, with a potential for revolutionary change over the next few years. In the international arena, the most significant recent influence has been increasing concern amongst governments and financial regulators around money laundering and terrorist financing. This has given rise to the international Financial Action Task Force (FATF) Recommendations;

essentially a set of guidelines for financial regulators and institutions on good practice in Anti-Money Laundering (AML), Countering the Funding of Terrorism (CFT), Customer Due Diligence (CDD) –also known as Know Your Customer (KYC) – and Partner Due Diligence (PDD). High profile prosecutions by the US Treasury and others have ensured heightened emphasis by financial institutions and other Payment Service Providers on establishing customer identity; ensuring a continuing relationship with the customer so that the initial identity verification holds good; monitoring transactions; and the diligent enforcement of transaction limits. The net result of this international activity has been an increasing interest amongst Financial Service Providers (FSPs) in technologies that can authenticate customers after an account has been opened; that is, to tie them back to the original registration. Interest has increased in technologies such as biometrics and various PIN alternatives (though the PIN remains surprisingly effective for most customers).

The European regulatory initiative of interest in payments is around plans to revise the existing Payments Services Directive (PSD). In mid-2013, the European Commission outlined proposals for what is commonly referred to as PSD2.

PSD2 is seeking to address the emergence in recent years of the Payment Initiation Service Providers (PISP), an intermediary who establishes trust and assurance of payment between that payer and the payee so that transactions can go ahead as quickly as possible.

CONCLUSION

The Central Bank of Nigeria in the year 2012, established a cashless policy to curb excesses in handling cash. The new cash policy was introduced for several key reasons, including:

1. To drive development and modernization of our payment system in line with Nigeria's vision 2020 goal of being amongst the top 20 economies by the year 2020. An efficient and modern payment system is positively correlated with economic development and is a key enabler for economic growth.
2. To reduce the cost of banking services (including the cost of credit) and drive financial inclusion by providing more efficient transaction options and greater reach.

3. To improve the effectiveness of monetary policy in managing inflation and driving economic growth.

With the above reasons, the swift acceptance and usage of contactless payment is unarguably the way to go for payment and cash-related transactions.

This is a wake-up call for the financial industry to speed up the move into contactless payments before our markets get hijacked by foreigners.

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