

# Banking Automation **BULLETIN**

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## **Self-service more important than ever in challenging times**

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Cards and contactless curtail cash usage in CEE

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Could cashback make a comeback?

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Egyptian banking and payments making headway

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Central bank digital currencies – can cash go virtual?

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## **Country profile: Nigeria**

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## Banking Automation

## BULLETIN



## Could cashback make a comeback?

Cashback may have originated in the UK in the 1980s, but its popularity has been falling in the country since 2012. Could it make a comeback?

I am not talking here about the rebates that some issuers give cardholders when they spend on their cards (although that type of cashback is also on the decline as a result of reduced interchange fees), but the type of cashback where a customer makes a purchase with a card in a store and obtains cash at the checkout which is then added to the purchase amount.

I should also emphasise that the falling popularity of cashback is more due to retailers having decreasing interest in off-loading excess cash, than of waning interest from customers. There are multiple reasons for this, as detailed in our cashback feature on page 5, but ultimately the result is that most retailers no longer proactively offer cashback and volumes have fallen accordingly.

There has been renewed discussion of cashback recently, on the back of falling numbers of bank branches and ATMs. In the UK, the recently created Joint Authorities Cash Strategy Group, which includes representatives from the country's regulators, central bank and finance ministry, has been tasked with creating a response to the removal of ATMs and has made reference to cashback in some of its pronouncements. The international card schemes have also become further involved; cashback already operates on scheme rails, but both Mastercard and Visa have announced incentives to encourage cashback in certain locations.

The logic for retailers playing a greater role in local cash recycling is strong, and if alternative places to obtain cash become scarcer or more expensive, it is realistic to think cashback could have a resurgence.

Whether this would be in the form of traditional cashback is less clear. Other solutions are emerging which directly connect retailers and customers in the cash cycle. For example, there are fintechs such as soCash, which is based out of Singapore, and Sonect from Switzerland, which offer apps where users can book cash pickups from local retailers.

ATMs could play a role too. There are still a large number of merchant-fill ATMs in the USA, and in countries such as South Africa, there are so called 'cashless ATMs' located in retailers, which look and feel like an ATM but which issue receipts which are exchanged for cash by the merchant.

One way or another, retailers are likely to play a key role in cash distribution in the future – if market forces don't create sufficient interest, then expect governments to intervene.

Dominic Hirsch, Editor

### 2 GLOBAL CARDS

UnionPay still represents largest share of card spend

### 3 ECO-CONSCIOUS CARDS

Fintechs breathe new life into eco friendly card concepts

### 5 UK CASH

Cashback at UK retailers plays important role in payments

### 6 LITHUANIA PAYMENTS

Lithuania continues move away from cash

### 8 SELF-SERVICE BANKING ASIA

Self-service more important than ever in challenging times

### 10 CEE PAYMENTS

Cards and contactless curtail cash usage in CEE

### 12 DIGITAL CURRENCIES

Central bank digital currencies: Can cash go virtual?

### 13 EGYPTIAN PAYMENTS

Egyptian banking and payments making headway

### 15 BANKING SECURITY

Industry connects virtually to tackle security threats at BankSec 2020

### 16 NEWS BULLETIN

Banking and payments news

### 17 COUNTRY PROFILE

ATM and cards intelligence on Nigeria

### 21 CONFERENCE DIARY

Upcoming industry events from around the world

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## GLOBAL CARDS

# UnionPay still represents largest share of card spend



[www.rbrlondon.com/global-cards](http://www.rbrlondon.com/global-cards)

Card spending worldwide has been rising for many years, and 2019 was no exception – global card payments totalled \$35 trillion, up 13% from 2018, according to RBR's new report *Global Payment Cards Data and Forecasts to 2025*. Card expenditure has been increasing for several reasons. In some markets, financial inclusion measures have brought more people into the banking system. In cash-heavy markets, card usage has been promoted as a way to reduce reliance on cash. The rise of contactless technology, too, has helped card payments become more commonly used as a method to make low-value everyday purchases.

## UnionPay accounts for largest share of global spending because of China

UnionPay continues to account for the highest share of global card expenditure, at 45%, an increase of three percentage points from 2018. Almost half of all card spending can be attributed to cards issued in China, where UnionPay represented 93% of total expenditure in 2019. Spending in China has continued to rise as debit cards – historically used for withdrawals and high-value purchases such as property – are increasingly used for everyday payments. Visa (including Visa Electron, V PAY and

Interlink) and Mastercard (including Mastercard Electronic and Maestro) have the second and third largest shares of card expenditure, at 27% and 18% respectively.

However, when the Chinese market is excluded, the rest of the world looks somewhat different: Visa accounts for 49% of spending and Mastercard for 32%. UnionPay itself accounts for only 1% of card spending outside China.

## Domestic schemes have the largest share in MEA owing to Iran

On a regional level, there are marked differences in the shares of card schemes. In Asia-Pacific, unsurprisingly given the size of the Chinese market, UnionPay is the largest scheme by expenditure, accounting for 80%, while Visa and its sub-brands hold the second highest share at 10%. In both Europe and the Americas, however, Visa comprises the largest share of card expenditure, with Mastercard accounting for the second largest share. UnionPay is present in both these regions, though only as prepaid cards in the Americas, and it represents a negligible share of purchase value.

The numbers for Middle East and Africa (MEA), as for Asia-Pacific, are also somewhat misleading owing to the considerable size of one of its markets: Iran. Domestic card schemes account for two thirds of card expenditure in the region as a result of the Iranian market, which comprises 65% of MEA's card expenditure. Only domestic cards are issued in Iran as sanctions prevent the issuance of international schemes, which, alongside the Iranian market's size, distorts the regional view.

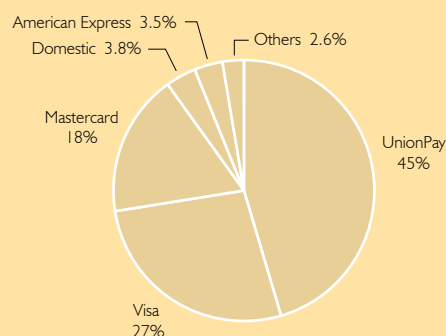
## Schemes' shares of expenditure varies by card type

Debit cards remain the most widely used cards worldwide, accounting for 58% of total expenditure in 2019. The debit sector represents over two thirds of all card spending in China, and as such, UnionPay comprises 58% of global debit card

**Almost half of all card spending can be attributed to cards issued in China**

### Share of global card spending

By scheme, 2019



Source: RBR analysis



expenditure. Visa has the next largest share, although in both Europe and the Americas, the scheme and its sub-brands account for the largest proportion of debit card expenditure.

In the credit sector, Visa has the largest share of spending, at 34%. The scheme has a particularly strong position in the credit sector in the Americas. This is the only region in which debit cards do not comprise the bulk of spending and instead credit cards account for the majority (57%) of card expenditure. This is owing in part to heavy use in the USA, which alone accounted for 29% of global credit card expenditure.

The USA also has a significant effect on the global prepaid sector, accounting for 55% of all prepaid card expenditure. As Mastercard accounts for over half of prepaid spending in the USA, this gives the scheme the majority share of global prepaid spend, too.

American Express is the fourth largest international scheme by expenditure overall, owing to its strong presence in the Americas. JCB is not commonly found outside Asia-Pacific, having a minimal presence in the Americas and Europe, and no cards issued in MEA.

### **The COVID-19 pandemic is expected to boost e-commerce spend**

Card expenditure will continue to grow. Financial inclusion programmes will further widen access to banking services, while card payments are encouraged in order to lower cash use. The drive to reduce reliance on cash has been heightened by the COVID-19 pandemic, which has also seen the promotion of contactless payments as a means to reduce the possibility of virus transmission.

Lockdowns have driven rises in e-commerce transactions, giving a short-term boost to a long-term trend.

In China, there remains potential for further growth as consumers from smaller cities and rural areas enter the financial system for the first time and the country's move away from cash continues. This is likely to drive UnionPay's share of total expenditure. Meanwhile, the rise of e-commerce is expected to prompt a shift towards Visa and Mastercard, away from their sub-brands and domestic schemes, as both Visa and Mastercard tend to be more widely accepted for online payments.

RBR expects these factors will lead to a projected \$65 trillion in global card expenditure by 2025. ■

**The USA also has a significant impact on the global prepaid sector, accounting for 55% of all prepaid card expenditure**

## **ECO-CONSCIOUS CARDS**

# Fintechs breathe new life into eco-friendly card concepts

A number of card products for eco-conscious consumers have been launched over the last few years, supported by the rise of fintechs and increasing awareness of climate change.

Affinity cards donating a percentage of customer spending to environmental causes are a well-established niche in many markets, but other concepts for eco-friendly card products have also emerged. Several products were launched in the first decade of the 2000s, involving carbon offsetting and the use of materials with lower environmental impact than standard plastic, in some cases by well-established banks. However, these efforts typically did not last long.

There has been renewed interest over the past few years. This can be attributed partly to increased awareness of climate change, but fintechs have also played a role by launching eco-friendly cards and creating a more competitive payments landscape, which has propelled traditional market players to innovate.

### **Several alternatives to standard plastic cards have emerged**

Payment cards are typically made of PVC, which is oil-based and takes many years to decompose. A number of new products involve alternatives to standard PVC. One common alternative is PLA, which is made of renewable resources such as corn, ▶

**Fintechs have played a role by creating a more competitive payments landscape, propelling traditional players to innovate**

- ▶ but other options exist too, including recycled plastic. To help issuers make green choices, Mastercard has unveiled a directory of sustainable card materials and vendors, with the aim of eventually launching a global certification scheme for sustainable cards. Visa, meanwhile, has introduced together with CPI Card Group, a card made with up to 98% upcycled plastic, available for Visa issuers worldwide.

In addition to choosing a sustainable material, eco-friendliness can be achieved by ensuring that the card manufacturing process itself, as well as packaging and delivery, have sound recycling practices in place for minimal environmental impact. Issuers who want to go an extra mile and declare their cards 'carbon neutral' can compensate for climate impact by using carbon offsetting solutions.

Dutch challenger bank bunq is one issuer that has tried to address various environmental impact aspects with its metal card which was launched in 2019. While metal is arguably not particularly eco-friendly given its energy-intensive manufacturing process, the card's long validity of six years and sustainable packaging reduce its environmental impact, and the emissions created by the card's delivery are offset by purchasing carbon credits. The card is also available with an affinity feature: when the user chooses the SuperGreen account, a tree is planted for every €100 spent. The company partners with Eden Reforestation Projects to make this happen.

Similarly to bunq, US challenger Aspiration has taken several steps to appeal to eco-conscious consumers. Aspiration's debit cards are made of recycled plastic, and since February, its customers can opt for debit card purchases to be rounded up to the nearest dollar, with Aspiration having a tree planted for each round-up. Premium account customers can also opt for Aspiration to counter the impact of their petrol purchases with carbon credits. Additionally, it offers higher cashback amounts when purchasing from merchants that score well in positive impact areas such as sustainability, and calculates a 'personal impact score' for each customer.

Traditional issuers too are increasingly trying to capitalise on environmental awareness. For example, Mauritius Commercial Bank began converting its portfolio to PLA cards in 2019, and CaixaBank in Spain started making its Visa gift cards from a PLA-based material the same year. Mauritius Commercial Bank also contributes 10 cents for each payment made with its PLA debit card to

the protection of the island's biodiversity, while CaixaBank's plan for reducing its environmental impact involves creating a new recycling programme for all card types. The Taiwanese subsidiary of DBS is another issuer offering a PLA card product, while American Express recently started making its consumer and corporate Green Cards primarily from plastic intercepted from shorelines.

### **Åland Index tracks carbon footprints**

Finland's Åland Index is a success story when it comes to tracking the carbon footprint of card purchases. In 2016 Bank of Åland partnered with WWF Finland, KPMG, Gemalto and Mastercard to create a PLA credit card to promote its Baltic Sea Project. The card can be linked to a climate impact index calculated based on merchant categories. Now all of the bank's cards can be linked to the Åland Index and have the Baltic Sea Project design with the statement "I support a clean Baltic Sea".

The Åland Index evolved into Åland Index Solutions, a joint venture between Bank of Åland and Swedish start-up Doconomy, to enable other payment providers to offer carbon tracking and offsetting to their customers. In April 2019, Doconomy itself launched a biodegradable credit card, which besides a financial spending limit, has a carbon limit, and enables the user to offset their carbon footprint by supporting UN-certified climate projects.

In December 2019, when the Åland Index reached 40 million customers, Doconomy and Mastercard extended their collaboration to enable any Mastercard issuer to conveniently offer their cardholders the carbon tracking ability. Mastercard also made an equity investment in Doconomy to fast track a global rollout of the solution.

The Åland Index is being used by companies such as Nordea and Bank of the West, a US subsidiary of BNP Paribas. Nordea's customers in Finland can track the carbon footprint of all their Nordea credit and debit cards. Bank of the West enables carbon tracking for its debit cards which are made of biodegradable plastic and linked to its '1% for the Planet' account.

Amid growing competition in the emerging open banking landscape, eco-friendly cards can be a good way for issuers to distinguish their products and gain new customers. The experience of the Åland Index suggests that successful eco-friendly offerings might be best developed in cooperation between banks and fintechs. ■

**To help issuers make green choices, Mastercard has unveiled a directory of sustainable card materials and vendors**

**Eco-friendly cards can be a good way for issuers to distinguish their products and gain new customers**

**UK CASH**

# Cashback at UK retailers plays important role in payments

Cashback originated in the UK in the 1980s when it was first offered by supermarket Tesco. By the 2000s, it was common for supermarkets and other retailers in the UK to actively promote such transactions, which were carried out at the till's cash drawer via an EFTPOS terminal.

The benefits for both the retailer and the consumer have been numerous. For retailers, especially supermarkets, the withdrawal of banknotes by customers has lowered cash-in-transit costs, as fewer banknotes need transporting. The convenience of cashback has also increased customer loyalty and sales, as users appreciate it obviating the need to make separate trips to ATMs where they may face security risks.

Since 2012, however, the number of cashback transactions at the point of sale has been declining strongly. According to industry body UK Finance, between 2012 and 2019, the number of cashback transactions at retailers dropped by more than half, and the value withdrawn fell by around 45%. This decline was primarily a result of UK retailers no longer promoting the cashback service to their customers, rather than falling demand for cash per se – although in recent years cash usage has faced downward pressure as more people are using cards, particularly contactless. Although customers can still ask for cashback, data indicates that the number who do so has been falling.

## **Fewer retailers offering cashback**

There are several reasons why increasing numbers of UK retailers have stopped actively offering cashback. Growth in the use of electronic payments has meant a decrease in the volume of cash held at supermarkets and thus a reduced need for supplementary cash removal. In addition, the gradual increase in the use of retail cash automaton devices (machines which count, verify and securely store banknotes) has lowered the costs of manually counting and storing banknotes at the end of each day, further lessening the

benefits of having customers reduce the cash stores.

Furthermore, supermarkets increasingly have on-site ATMs, which are either deployed by their banking subsidiaries or by partner banks, and supermarkets are more likely to promote the use of these. The increased use of such terminals yields acquiring or site-rental income, which is more profitable for the retailer than giving cash back via an EFTPOS terminal, which, as a card transaction, incurs costs to the merchant.

## **Cashback to compensate for removal of branches and ATMs?**

Although cashback at the larger supermarkets is unlikely to be promoted as it once was, there are moves to incentivise the greater use of cashback transactions at small and medium-sized shops in more remote areas. The ongoing closure of branches and the withdrawal of free-to-use ATMs in some parts of the country are of increasing concern to the UK authorities and regulators, and the use of cashback in areas with declining ATM provision is of interest.

One of the benefits that has been suggested is the recycling of cash at a community level, which would help reduce costs for all parties. During the summer, industry body UK Finance stated, *“Retailer cashback has a more significant role to play and can support the efficient recycling of cash in local communities, as well as providing much needed support for high streets generally. Cashback can drive a healthy and efficient local cash ecosystem, whereby cash spend in shops is re-drawn and spent again locally”*.

Cashback has been something of particular interest to the recently created Joint Authorities Cash Strategy Group (JACS), which includes representatives from regulators, the central bank and the finance ministry, HM Treasury. The group was created as a response to the removal of ATMs, particularly free to use ones, in more

**Since 2012 the number of cashback transactions at the point of sale has been declining strongly**

**There are moves to incentivise the greater use of cashback transactions at small and medium-sized shops in more remote areas**

- ▶ remote parts of the country. JACS highlighted that there is a “link that cashback provides between cash withdrawal facilities and cash deposit points,” and claimed, “Several major banks and payment services firms are currently developing new and innovative ways in which cash access can be maintained for consumers in locations where ATMs and bank branches may not be easily available”.

#### Card schemes support cashback

Card schemes are also playing their part in this re-emergence of the cashback concept. In the last twelve months, both Mastercard and Visa have announced that local shops and businesses will earn a fee of £0.12 every time they dispense cash to a shopper paying with a debit card. The

card schemes are keen to reduce any criticism they might face from politicians and consumer groups over the disappearance of ATMs and bank branches from the high street, following the nationwide shift from cash to card payments.

#### Ensuring people aren't left behind

As the use of ATMs in mature markets declines, deployers are increasingly removing unprofitable machines in areas with low footfall. The effect on communities that prefer and indeed need to use cash can be profound in these circumstances. The return of cashback as a promoted service could play an important role in ensuring vulnerable groups are not left behind by the more general evolution in payments seen at a national level. ■

**Cashback could play an important role in ensuring vulnerable groups are not left behind**

## LITHUANIA PAYMENTS

# Lithuania continues move away from cash

The results of the eighth annual Bank of Lithuania survey on consumer payment habits, published in September 2019, indicate that Lithuanians are steadily moving away from cash. There are some limiting factors, however, both for consumers wishing to use payment services and cards, and for banks hoping to encourage their wider use. Consumers are increasingly willing to use cards over cash and expecting them to be accepted – but many are facing issues around card acceptance, contactless security and efforts by merchants to discourage card payments.

#### More consumers are using local e-money institutions

During the first three months of 2019, 93% of respondents indicated having used the services of at least one payment service provider, while 75% of respondents had used the services of banks; both figures have remained largely unchanged since 2018.

However, the proportion of those that had used Lithuanian e-money institutions increased from 13% to 19%, while the proportion using foreign providers fell from 16% to 12%. Moreover, the proportion of

residents who held an account with a Lithuanian bank or credit union increased from 82% to 87%.

These figures show not only that consumers are opening accounts and using them to make cashless payments – but also that local players are increasingly meeting the needs of customers who previously may have sought such services from a foreign provider.

#### Many unbanked individuals do not intend to open accounts

A considerable proportion of Lithuanian residents, however, do not see the value of opening an account with a bank or credit union. Around 18% of those surveyed do not hold an account with either type of institution – and of those, 70% indicated that they do not intend to open one, with 45% saying there was no need and 18% receiving their income in cash.

Of those respondents holding no account, the majority of them had nonetheless used payment services at institutions which accept cash: 50% settled bills at payment or e-money institutions, while 26% made such payments at bank branches. These figures were up from 42% and 20% in 2018 respectively.

**Local players are increasingly meeting the needs of customers**



This reluctance by many consumers to open an account represents a key challenge for financial institutions. Nonetheless, non-account holders are at least engaging with such institutions by using their services, and this provides in-branch opportunities for informing customers of the benefits of holding an account.

### **Continuing decline in cash withdrawals linked to problems with ATM access**

While many in Lithuania both receive their income and make their payments in cash, the number of cash withdrawals is actually decreasing. This is in part because customers are increasingly unable to do so; over a third of respondents in the survey reported issues with trying to withdraw cash from their accounts.

Many account holders found it difficult to locate ATMs. 24% indicated that there were no ATMs in their residential areas, 12% that in their areas there was only one ATM of another bank which applies high withdrawal fees, and 4% that there were no intermediaries locally which provide withdrawal services, for example shopping centres or Perlas terminals. (There are around 1,500 such terminals in Lithuania offering cash withdrawal among other services; they are especially useful to residents in rural areas with no bank or ATM.)

Recent RBR analysis shows that the annual number of cash withdrawals in Lithuania decreased by 5% in 2019 and dropped by an average of 4% each year between 2015 and 2019. This clearly indicates a shift away from using cash, albeit that many consumers are being forced to use it less frequently rather than actively choosing to do so.

### **Card acceptance is growing, but there is room for improvement**

In 2019, 95% of account holders surveyed indicated that they had a payment card – which represented 84% of all residents. Furthermore, 65% of surveyed cardholders had a contactless card, up from 50% in 2018. However, only about a half believed that the contactless function was safe.

In 2019, a slightly smaller share of respondents than in 2018 were unable to use their cards at (at least) one point of sale, yet quite a significant share of respondents were still unable to use them at markets, fairs and salons, as well as on public transport. Indeed, there is currently only

one city in Lithuania – Šiauliai, its fourth largest by population – which has contactless acceptance integrated into its public transport system.

There is, then, considerable scope for growth in terms of card and contactless acceptance, with banks needing to focus in part on easing customers' concerns around the security of such payments.

### **Cash payments remain important at POS, with many retailers incentivising them**

Only 6% of Lithuanian residents surveyed in 2019 indicated that they do not receive or use cash. In addition, 17% of residents receive their income in cash, although this was down slightly on the 2018 figure of 19%.

The vast majority of Lithuanians use cash on a day-to-day basis. One day before the survey, 34% of respondents had paid at points of sale using cash only (down from 36% in 2018), while 30% paid at points of sale using either cash, card or smartphone. The latter figure is up from 15% in 2018, which indicates strongly that residents are moving away from always using cash at every point of sale. Furthermore, a larger share of cardholders indicated preferring card payments (65% in 2019 versus 62% in 2018) to cash payments (only 18% in both years).

However, for those preferring to pay by card, it is sometimes discouraged. 22% of respondents had at least once been offered a discount by a retailer if they could pay in cash instead of by card. This figure is down from 26% in 2018, though, and there are also retailers which offer a discount for paying by card instead of cash (5% of respondents had been offered such a discount).

### **Banks need to reach the unbanked while merchants need to embrace payment cards**

Lithuania is steadily becoming a less cash-reliant society. However, there are obstacles for customers and challenges for banks which will need to be overcome in order to ensure that payment services and cards are used more widely. Largely, this will depend on banks better reaching unbanked populations in rural areas and better facilitating the opening of accounts and the receipt of incomes electronically. Aside from this, it remains to be seen how far and how quickly customer demand will encourage or even oblige retailers to truly embrace cards as a form of payment. ■

**Many account holders find it difficult to locate ATMs**

**There is considerable scope for growth in terms of card and contactless acceptance**



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## SELF-SERVICE BANKING ASIA 2020

# Self-service more important than ever in challenging times

**The global pandemic has highlighted the need for banks to transform quickly in response to rapidly changing customer behaviour**

*Self-Service Banking Asia 2020*, the region's leading conference on self-service, digital banking and financial inclusion, took place on 23<sup>rd</sup> and 24<sup>th</sup> September as a virtual event. Held online for the first time due to COVID-19, the conference was able to extend its reach beyond Asia, as delegates across the world tuned in to hear a broad range of industry perspectives and learn about the latest trends in self-service and digital banking. The global pandemic has highlighted the need for banks to transform quickly in response to rapidly changing customer behaviour – not least because changes that were already happening have been greatly accelerated this year. Social distancing has made traditional face-to-face interactions between banks and their in-branch customers challenging, and as such, the role of self-service channels has grown in importance. The interactive, online event provided a platform for the industry to discuss how innovation in banking is responding to the unprecedented challenges we have seen this year.

## Regulation as an enabler of transformation

Asia, in particular, is one of the most dynamic and innovative markets for self-service banking. There is still a significant need to bring large numbers of people into the financial system, and governments are driving this through a focus on regulations that support financial inclusion. The proliferation of fintech companies, high mobile phone penetration and Asian consumers' tech-savviness have all created an environment in which new digital self-service innovations can thrive.

The programme opened with a keynote presentation from Bank Indonesia's Mr Donanto Wibowo who underlined the ongoing financial inclusion measures to address the significant inequalities within the region. He pointed out that self-service payments can play a key role in bringing people into a country's financial ecosystem, but payment systems should be 'agnostic' and not tied to any brand. By ensuring that every type of

payment in a country can be processed through any channel and institution, the payment ecosystem can support digital transformation and make banking more direct and inclusive.

## Digitisation is needed to power growth

One of the central themes of the conference was the extent to which digitisation is helping banks in the region scale their services and meet ever-changing customer expectations. Delegates heard from OCB's Mr Tam Nguyen and UOB's Mr Jason Yeo about how innovation is powering change in Vietnam. While 63% of Vietnamese adults have bank accounts, 70% have access to the internet and social media, so digitisation is playing a role in allowing banks to extend their reach to bring more people into the banking system. Moreover, COVID-19 has underlined the importance of digital channels in the country, with Mr Nguyen stating that 80% of customer transactions at OCB are currently conducted online, and the country as a whole is seeing a significant increase.

Although online channels are increasingly used in Vietnam, both Mr Yeo and Mr Nguyen agreed that branches continue to play an important role in serving customers and building trust. ATMs and kiosks in branches are coming into their own by allowing customers access to online channels through bank terminals, and this is particularly important in rural areas where mobile phone ownership and infrastructure might not be as advanced as in urban areas. Furthermore, branches continue to play a key role in providing advisory services for longer-term, larger-value products. Both Mr Nguyen and Mr Yeo agreed that ultimately it is the customer that decides which channel they want to use and that banks must provide choice and convenience.

## Branch transformation for the new normal

The role of the branch and how it can ensure banks engage positively and proactively with customers

**ATMs and kiosks in branches are coming into their own by allowing customers access to online channels through bank terminals**



were discussed by several other speakers at the conference. A move towards self-service channels for transactional activities and this year's imperative for social distancing are fundamentally changing how branches operate and how they are physically laid out. Mr Ron Batisan of UnionBank in the Philippines explained how the bank uses data-driven customer profiles to tailor branch designs. By developing 'self-service hubs' in high footfall areas where customers with fast-paced lifestyles can transact, the bank saves on the requirement to acquire a central bank branch licence and also on staffing costs. Moreover, rather than being limited just to providing transactional activities, these self-service terminals are increasingly used to cross-sell. Mr Batisan also shared some inspiring examples of how UnionBank has used its branches creatively to support its business customers by enabling them to sell their products at in-branch events – on the condition of course that they accept digital payments.

The idea that banks need to take the opportunity to use their branches to re-engage with customers was echoed by Mr Mark Aldred of Auriga. He pointed out that with the right technology, self-service channels can be used to increase customer satisfaction and revenues, and that self-service technology can be instrumental in the creation of local 'lean branches' which can use video banking to provide 24/7 customer service.

### **Technology is rising to the challenge**

A theme running through the conference was the role that self-service and digital banking have in responding to shifting customer expectations. ING's Mr Mohamed Keraine explained how the bank believes that success lies in focusing on customer experience. Customer expectations are being set by the Big Techs; customer service needs to be easy, personalised and instant, so banks need to rise to these challenges and differentiate themselves. By leveraging data, banks can bring smart insights to customers to help them make better financial decisions.

Mr Edwin Lai from CIBC outlined how data analytics can help banks fine-tune their ATM offerings by determining the optimal location, product mix, features and functionalities. Moreover, in addition to increasing satisfaction, the better use of technology in branches can reduce costs, lead to greater efficiencies and power growth. BCA's

Robert Chahyadi presented a compelling case study outlining how the deployment of teller cash recyclers had enabled significant business growth. Customers are able to deposit their own cash into the machines, and one teller can manage several machines at a time. This year the teller cash recyclers have been particularly essential to branch operations by helping to manage queues, enabling social distancing and reducing physical touchpoints during cash processing.

### **Omnichannel should successfully combine the human and the digital**

Much has been made over previous years of 'omnichannel' – the ability to deliver financial services seamlessly across digital and physical channels. When COVID-19 hit and customer behaviour changed overnight, omnichannel strategies were put to the test. Even banks that had invested heavily in digital transformation found that there were gaps in their service models as complex products and services are not as easy to deliver over direct channels.

In his presentation, Maurice Lisi explained how Intesa Sanpaolo has used the pandemic as an opportunity to redesign its business delivery model. With regulators seeing the need to change rules over electronic signatures, the bank has been able to deliver products such as loans online, which would have previously needed to be completed in person in the branch. In addition, it has launched a 'fully digital' programme, meaning customers are no longer solely in physical or digital channels, but can be in both at the same time. By leveraging real-time text or video chat, customers have access to human support while they are on digital channels. Combining human and digital interaction in the same ecosystem means customer journeys can be convenient, responsive and personal all at the same time.

### **Social responsibility makes good business sense**

COVID-19 and the global Black Lives Matter movement have highlighted structural inequalities and discussions centred on how the banking industry can be part of the solution. ANZ's Ms Mayda Lim gave an engaging presentation explaining why diversity and inclusion should lie at the heart of what banks do. She states that a variety of backgrounds and perspectives creates a greater

**Self-service and digital banking have a role in responding to shifting customer expectations**

**Combining human and digital interaction in the same ecosystem means customer journeys can be convenient, responsive and personal all at the same time**

- ▶ range of talent for innovation, gives access to a greater breadth of insights, and improves employee engagement and retention. It is clearly important for those who design self-service technologies to have an intuitive understanding of the end users.

Mr Arga Nugraha from BRI explained how agency banking can help support businesses locally, not only by providing financial services in remote areas but also by innovating to solve problems created by the pandemic. BRILink, BRI's agency banking initiative, has set up a website to virtually connect sellers and buyers (who would normally transact in markets), thereby stimulating the economy and helping the microsegment through challenging times.

Innovation in cash distribution is another example of positive change that is happening in the industry. Mr Wang Wardhana demonstrated how Bank Muamalat's collaboration with 18,000 stores in Indonesia to provide cashback is generating revenue for retailers and the bank in the form

of a transaction fee, whilst at the same time providing customers with greater access to cash at a lower cost than a not-on-us ATM fee. Mr Hari Sivan from SoCash, a fintech based in Singapore, outlined how this cashback solution can be developed to help retailers increase sales by offering incentives and discounts through a marketing platform.

Circumstances this year have been difficult for the banking industry, but there was broad agreement that self-service is providing many of the much needed solutions. Multifunction ATMs, self-service kiosks, contactless and mobile technologies are all becoming integrated into a financial ecosystem which unifies the customer journey in a safe and accessible way. No longer to be thought of as a separate silo, self-service works best when it is at the heart of a bank's digital strategy, and this was perhaps the conference's most important takeaway. ■

**No longer to be thought of as a separate silo, self-service works best when it is at the heart of a bank's digital strategy**

## CEE PAYMENTS

# Cards and contactless curtail cash usage in CEE

**Cash-heavy markets have seen card expenditure matching or overtaking cash withdrawal amounts for the first time**

It seems to be a turning point in central and eastern Europe (CEE): the value of ATM cash withdrawals in the majority of the region's markets typically exceeded that spent on cards in any given year – up until now. RBR's latest research, *Global Payment Cards Data and Forecasts to 2025* shows that by the end of 2019, several traditionally cash-heavy markets including Russia, Kazakhstan and Belarus had seen a shift, with card expenditure matching or overtaking cash withdrawal amounts for the first time ever.

While in some markets it has been a steady climb, in others the shift has been seismic. Growth in card payments in Kazakhstan, for example, has been accelerating since 2015, with card expenditure more than doubling in both 2018 and 2019, representing the highest growth in CEE. Much of this is down to large scale expansion by Kaspi.kz,

which embarked on mass debit card issuance and recently launched a proprietary payments network boosting card usage both on- and offline.

### **Cardholders benefit from lucrative cashback and loyalty programmes**

Driving the uptake of card usage in many markets is an abundance of cashback and loyalty programmes: high interchange fees still reign in several markets outside the EU, allowing issuers to offer their cardholders favourable promotions. In Ukraine, which saw the region's second highest growth in 2019, credit cards have up to 100-day grace periods, far longer than in many other markets. Additionally, sites like smarty.sale aggregate the various cashback offers available across Ukrainian merchants, incentivising card usage at retailers. Similarly, Russia's national payment system NSPK is promoting use of the domestic scheme Mir by



offering up to 20% cashback across hundreds of retailers.

The abundance of loyalty programmes in conjunction with the commonly-termed 'salary slavery', whereby employers choose the bank into which they deposit employees' salaries, has led to many employees in Russia and Belarus holding multiple bank accounts. Account holders then transfer funds from their employer-chosen one to another with more favourable terms. Between the devaluation of its currency, the slow economic decline and more than two decades under authoritarian rule, Belarus has had a turbulent time. The country has seen a sharp uptick in card spend, however, with the third highest growth in CEE in 2019, primarily driven by loyalty programmes encouraging consumers to opt for cards for everyday spending. It remains to be seen what 2020 will bring, however, with the COVID-19 pandemic, the disputed elections and weeks of large-scale protest.

### **Tokenisation rising in tech-savvy markets**

While cash continues to outnumber card payments at POS in some markets, the switch to mobile contactless payments is accelerating. Many markets in central and eastern Europe have their own peculiarities: in Ukraine, where smartphone penetration is increasing rapidly, mobile wallet uptake is growing more quickly than in most countries. At the end of 2019, Ukraine, with a population of 37 million, was in the top ten markets globally for mobile NFC payments. This has its roots in the historically low levels of contactless cards issuance: mobile wallets provide a sort of contactless loophole, with banks avoiding the higher issuing costs of contactless cards, while consumers still benefit from the ease and convenience of contactless payments.

High smartphone penetration also offers great potential for growth in mobile payments in Kazakhstan. Virtual cards are common, being particularly favoured for increasingly popular e-commerce purchases. Because such cards can also be tokenised and used at POS, the share of contactless transactions and values is much higher than that of contactless cards themselves, as seen in Ukraine.

Yandex.Money, one of the main e-money providers in Russia, has seen NFC payments grow to account for almost half of contactless

transactions on its cards in 2019. The majority of its prepaid cards are virtual, being quick to issue and offering all the benefits of plastic thanks to tokenisation.

### **The lure of online spending necessitates a shift away from cash**

It is not only at bricks-and-mortar merchants that cards are thriving, however. With the increasing availability of better deals from both domestic and international online merchants, consumers are turning to e-commerce in ever growing numbers. Cash on delivery has long been the preferred payment method when shopping online in many CEE markets. The reasons have been manifold: distrust in the security of online payments, unwillingness to make payment before inspecting goods, the lack of either online acceptance or a payment method which can be used online.

But the tide is turning, with growing consumer confidence boosting online card payments. In Russia, virtual prepaid cards are commonly used for e-commerce, being seen to bridge the gap between security and convenience. Mobile wallets are also increasingly used for online purchases in markets like the Czech Republic, while card payments for e-commerce in Kazakhstan are being driven by online marketplaces offering exclusive discounts and payment by instalment. In Belarus, meanwhile, it is no longer uncommon for couriers to arrive armed with several POS terminals in order to accept cards on delivery for online orders. While not traditional card e-commerce, it is certainly a step away from cash.

### **Cash drops off the COVID-19 cliff**

While 2019 may have been a turning point, the decline of cash is not likely to slow soon, with the 2020 pandemic rapidly turning the previously unbanked or cash-reliant into card users. RBR research projects card spending in CEE to exceed the value of cash withdrawn in 2020 by a fifth. Like the rest of the world, there has been a universal increase in online shopping, an uptick in contactless payments and a drop in ATM withdrawals. In markets where e-commerce was less common before the pandemic, usage is now expected to remain high as services such as grocery delivery are normalised, and consumers appreciate the benefits and gain confidence in online transactions.

**An abundance of cashback and loyalty programmes is driving the uptake of card usage**

**RBR research projects card spending in CEE to exceed the value of cash withdrawn in 2020 by a fifth**



- ▶ Cards are not the only option, however. Alternative payment methods are growing both in number and popularity across markets. Russia's national Faster Payments System, SBP, has offered peer-to-peer transfers via mobile number since its launch in 2019. Consumer adoption is increasing, and with the country's largest bank, Sberbank, joining the system in mid-2020, such a payment method may well begin to encroach on cards'

territory. B2C payments through SBP via QR code has been possible since 2019. Such payments are not only frictionless for the consumer, but incur much lower acceptance fees for the merchant compared to cards. With an ever-increasing number of digital payment methods available, cards may not necessarily be the future, but cash increasingly looks like the past. ■

**Central banks have been exploring digitised forms of their national currencies**

## DIGITAL CURRENCIES

# Central bank digital currencies – can cash go virtual?

Almost every aspect of life in the modern world has seen dramatic change in recent years, driven by technological and social development, with cash and payments being no exception.

From Bitcoin and other cryptocurrencies to Facebook's Libra project, many attempts have been made to digitise cash. However none of these projects has fully broken into the mainstream as either a store of value or a means of payment.

Central banks in countries from the Netherlands to China have been exploring the possibility of creating a digitised form of their national currencies. Such projects would differ from previous virtual currencies in that they would be issued by the central bank (as opposed to a private entity or through a decentralised system) and would hold the status of legal tender within the relevant country.

One can see why there is interest in such projects. Introducing a central bank digital currency would offer opportunities to combat financial crime and money laundering, owing to greater traceability of transactions. However this is a double-edged sword, with such technology also raising the prospect of ever greater levels of state surveillance. Meanwhile, countries must consider questions of national security and sovereignty – with keeping control of the technologies used to implement a virtual currency and guarding against

cyber attacks being a priority concern.

### Central banks actively exploring virtual currency ideas

The European Central Bank has been considering the development of a digital Euro for some time, with discussion also taking place at a national level. In early 2020 the French central bank launched applications for partners to begin experimenting with digital currency projects. The Bank of England also released a discussion paper on central bank digital currencies, while other European central banks and banking associations have also been engaged in discussions around the future of virtual money.

Perhaps the most advanced pilot projects in this space are taking place in China, where a digital currency project has been under development for some time. It was announced that a pilot project to introduce a digital currency would continue to be expanded further in selected cities, although no public launch date had been given as of September 2020.

### Implications not yet clear

The development of a central bank digital currency, however, raises a number of questions regarding its implications.

One question is how such a currency would impact existing financial and payments services. Further reduction in the use of physical cash could

**A central bank digital currency would offer opportunities to combat financial crime and money laundering...**

be beneficial to businesses that can save on cash handling costs. However, for those businesses that need to accept large volumes of cash, either because of regulatory requirements or the needs of their customers, physical cash handling services could become more difficult and expensive to access.

The use of a central bank digital currency for payments could also have major implications for existing participants in the electronic payments ecosystem, with players ranging from payment card providers to mobile payment services, all potentially facing disruption from a new kind of payment infrastructure.

Furthermore, if central banks issue digital currency which can be accessed directly by the public, this could have a major impact on the business models of existing retail banks. If individuals and businesses are able to hold electronic money directly with the central bank, retail banking institutions could see their deposit taking businesses facing serious challenges.

Lastly, while current pilot schemes and discussions typically envisage an e-currency existing alongside physical cash, it is also possible to picture a future scenario in which virtual cash would effectively

replace physical cash. Unfortunately, further reducing access to and use of physical cash could be detrimental to the financial inclusion of groups such as the elderly, disabled and those living in poverty, who may struggle to access digital financial services owing to low levels of digital literacy or the costs of the required technologies. On the other hand, introducing a central bank digital currency could also potentially widen participation in banking and payment services in some countries, with people living in areas with limited access to physical banking infrastructure able to access digital financial services more easily through mobile phones. It remains to be seen what the overall implications would be.

#### **Further developments ongoing as interest remains high**

As of summer 2020, all projects in this space remain at the discussion or pilot stage. Nevertheless, interest in virtual currencies, both central bank issued and otherwise, remains strong in many countries around the world, with the COVID-19 pandemic only accelerating the trend towards digitisation in many aspects of life. It looks like we can look forward to many further developments in this space. ■

**... but could have major implications for existing participants in the electronic payments ecosystem**

## **EGYPTIAN PAYMENTS**

# Egyptian banking and payments making headway

The Egyptian banking industry has been through a turbulent period since the beginning of this decade. The volatility and instability in the country caused by the revolution in 2011, along with subsequent changes in the ruling administration, had hit Egypt hard. However, the country has been making a gradual recovery as the political situation has stabilised, complimented by other economic factors such as budgetary and exchange rate reforms, support for international lenders, financial aid from other states and natural resource development. Egyptian banks have likewise experienced an upswing in their fortunes and the sector has since become one of the largest and most profitable in the region.

The Central Bank of Egypt (CBE) has embarked on a programme to increase financial coverage while also strengthening the regulatory framework of the industry. The government, eager to bolster the banking sector and further strengthen the economy and develop the country, naturally sees banks as key to achieving these aims.

#### **Increasing the scope of the Egyptian banking sector via financial inclusion**

Despite Egypt's comparatively low level of financial inclusion, there has been a noteworthy reduction in the proportion of the unbanked population from 80% in 2017 to 67% in 2019. Much of this comes

**There has been a noteworthy reduction in the proportion of the unbanked population**

- ▶ from a determined push by the government to bring about greater financial integration among its citizens, with banks providing the mechanism for achieving these aims. In tandem with the banking sector, the government has brought about various changes to influence a shift from cash payments and further integrate Egyptians into the banking system. One example is the government's decision in May 2019 to accept bill payments via electronic means only, such as cards or mobile payments.

**Aside from banks, a number of fintech companies have also been contributing to the development of payment services**

In underserved areas, particularly outside urban centres such as Cairo and Alexandria, banks, backed by the government, are also expanding the scope of their services, and there has been a gradual integration of rural dwellers into the financial network. While many in rural communities do not have bank accounts and continue to carry out transactions almost exclusively with cash, the increasing presence of agricultural banks and the proliferation of ATMs and prepaid cards are aiding this shift. The Agricultural Bank of Egypt is planning to install 25,000 POS terminals nationwide at companies and establishments working in the agricultural sector. In addition, the bank is also working with e-finance, the company that runs the national digital payments infrastructure, to disburse salaries and pensions to farmers, and has distributed over 680,000 farmers cards to date.

#### **The modernisation of banking and payment services in Egypt**

Banks in Egypt have not only been occupied with providing the delivery mechanism of the CBE's financial inclusion programme, but have also been pushing to implement the latest technologies. The government-sponsored Meeza cards, which are issued by most of the major banks in Egypt, come equipped with contactless functionality and numbered about 4 million at the end of 2019. Most of these cards are prepaid, which are accessible to people who do not have a bank account.

Aside from banks, a number of fintech companies have also been contributing to the development of payment services. There has been a greater proliferation of QR codes, with banks and other companies applying for licences from the CBE for the use of such technology. Smart Cards Application has cooperated in the wider effort to modernise the payments industry, while also integrating unbanked citizens, and has embarked on transforming the 18.5 million government benefits cards into full payment cards.

The e-commerce industry has also been on the rise, as internet penetration has been increasing over the years and now includes over half of the population. In spite of this development, many internet users do not own a credit or debit card, and cash-on-delivery is a common way of paying for goods purchased online. The tide is changing, however, as there has been a notable shift to payments via cards and mobile wallets, with the use of electronic payments expected to accelerate in light of the COVID-19 pandemic.

#### **Rapidly developing payments infrastructure**

Egypt's payment infrastructure has rapidly expanded, and the country experienced one of the highest growth rates of EFTPOS terminals in the Middle East and Africa region; the number of terminals increased to over 88,000 at end-2019, up from 77,500 the year before. Moreover, in line with the increased efforts in modernising the banking sector, most terminals accept contactless payments, with the major banks having updated most of their terminals with NFC technology.

One company which has played a pivotal role in developing the payments infrastructure is Fawry. First established in 2008, the company developed services that allowed Egyptians to carry out a variety of transactions from bill payments to e-commerce via electronic means. It has since grown to become a bedrock of the Egyptian payments industry and achieved a market cap of one billion dollars in 2020. Developed by Egyptians, Fawry has highlighted the innovative solutions that are being provided by domestic companies rather than the international players, which have dominated the field in other developing markets. The company's profits continue to climb, particularly as a result of COVID-19, which led to an increase of 47% in revenue in the first half of 2020.

Egypt's banking industry and payments infrastructure have undergone considerable positive changes in spite of the volatile political and economic situation that the country has endured. Although Egypt continues to have a large unbanked population and cash is used extensively, the the country's payments industry has been developing rapidly. With a young and enterprising population, payment solutions providers and banks alike are seeking to satisfy the ambitions of the Egyptian people. More significant changes can be expected to come. ■

**Egypt's payment infrastructure has rapidly expanded, and the country has one of the highest growth rates of EFTPOS terminals in MEA**

**BANKING SECURITY**

# Industry connects virtually to tackle security threats at BankSec 2020

*BankSec 2020* – the leading event on physical and logical banking security – returns on December 14<sup>th</sup> and 15<sup>th</sup> 2020 to offer the industry a new virtual forum in which to discuss the latest challenges and innovative solutions in the area of banking security.

While the events of 2020 are rapidly reshaping how banks reach and interact with customers, the challenge of repelling an ever-increasing array of security threats remains a top priority for the industry at large. ATM usage may be down, but determined criminals have exploited lockdown conditions to launch more audacious physical attacks as well as increasingly sophisticated logical attacks against devices. Meanwhile, the surge in digital banking and payments has greatly increased opportunities for cyber criminals to target both systemic and human vulnerabilities online. Effective cross-industry collaboration remains key to insulating banks and their customers from the multitude of threats.

*BankSec 2020*'s new virtual format offers an unrivalled opportunity to connect to over 400 industry specialists from across the globe, including

many who would not normally be able to travel to the physical event. As with RBR's long-running physical conferences, at the heart of the two-day event is a diverse speaker programme of presentations, panel and fireside chats covering themes from emerging cyber security threats to countering ATM explosive attacks, as well as how to transform branches securely. Speakers hail from global banks, payment providers, law enforcement agencies, hardware and software providers, and industry associations across Europe and the world.

Alongside the speaker agenda is an interactive exhibition area with over 20 virtual booths featuring the latest innovations in physical and digital security technology, including cutting-edge ATM hardware and software products, and the latest cybersecurity protection and monitoring solutions. Networking opportunities also remain plentiful, with delegates able to connect in the digital lounge, join video meetings and enjoy virtual coffee chats with their industry peers. ■

For more information, please visit: [www.rbrlondon.com/bsec](http://www.rbrlondon.com/bsec)

VIRTUAL

BSEC20

14<sup>th</sup> - 15<sup>th</sup> Dec

## BankSec 2020: Overview of speaker programme

### Keynote presentations

- Overview of the evolving cybersecurity landscape Microsoft Cybersecurity Solutions Group (UK)
- How to transform branches securely Lloyds Bank (UK)
- Making cybersecurity approachable for all IASME Consortium (UK)
- The growing geopolitical angle to cyber threats Nationwide (UK)
- Expert panel: Profiling cyber security threats in the financial sector

### Safeguarding cash throughout the cycle

- Optimal preventative measures to protect ATMs in cash-centric society Bradesco (Brazil)
- Ensuring the effectiveness of ink staining on polymer banknotes University of Leeds (UK) and SICPA (Switzerland)
- Expert panel: Why banks cannot ignore cash security in the post-pandemic world

### AI-Driven insights to fight fraud across channels

- Protecting online merchants and using big data analytics Yandex.Money (Russia)
- Understanding and neutralising malware-based ATM threats European Bank and GMV (Spain)
- Stopping fraudsters in their tracks with AI/ML-based solutions Nets (Denmark)

### Cyber defence strategies for the financial sector

- Applying a robust cybersecurity model to the ATM channel ABANCA (Spain) and Auriga (Italy)
- Maintaining a 24/7 cybersecurity framework in the Swiss ATM ecosystem
- Joerg Engelhardt SIX (Switzerland)
- Fireside chat: Key components of a successful cybersecurity strategy

### Repelling physical attacks against ATMs

- Stemming the tide of physical ATM attacks in the UK West Midlands Regional Organised Crime Unit (UK)
- Secure ATM – Putting an end to ATM crime and theft Cardtronics (UK) and Spinnaker (UK)
- Evolving threats and solutions for protecting ATMs against attacks Wells Fargo (USA), and NCR (UK)

### Protecting customers from emerging threats

- Videoanalytics to cover tomorrow's security threats UK-based bank and Genetec (Austria)
- SIM-swapping – closing a vulnerability gap for mobile banking users EMA Interbank Association (Ukraine)
- An update on international security standards PCI Security Standards Council (UK)

### Closing keynotes

- Why collaboration remains the cornerstone of effective security Cyber Defence Alliance (UK)
- Research-based view on ATM and payment security RBR (UK)



# News Bulletin

## UnionPay launches digital bankcard

UnionPay has announced the launch of its digital bankcard together with commercial banks, major mobile phone manufacturers and key merchants and payment institutions, providing cardholders with what it describes as “a new generation of payment experience”. Announcing the launch, UnionPay says there are four main features of these debit and credit cards, which will be available both within and outside mainland China:

- They digitalise traditional bankcards with a range of services delivered digitally, including cash deposits, bank transfers and QR code payments
- Users can apply for cards, link them, and use them via various platforms including bank apps
- Payments made with the cards are secured with technology including tokenisation
- They help connect different industries and ‘use cases’, e.g. they can be used on public transport, with e-commerce retailers or through an e-wallet

## Deutsche Bank to close 20% of German branches

Deutsche Bank has announced that it will close 100 of its 500 branches in Germany with the aim of cutting costs and also in response to the way customer habits have been changing as a result of the COVID-19 pandemic. Philipp Gossow who oversees the retail banking business in Germany is reported as saying that closures would mainly be in urban areas and would take place as soon as possible. This comes a few weeks after its rival Commerzbank’s announcement that it would permanently close 200 branches which it had shut earlier this year due to the pandemic.

## FCA finalises guidance on access to cash for customers

The Financial Conduct Authority (FCA) in the UK has set out its expectations for the steps firms should take when they are considering closing branches or ATMs, or converting a free-to-use ATM to pay-to-use.

The finalised guidance says that where financial institutions have plans for closures or conversions, they are expected to inform the FCA in good time in advance of a final decision, enabling the latter to assess whether customers are being treated fairly.

Ahead of any final decision regarding the closure of a site/conversion of an ATM, the FCA will expect firms to summarise their analysis of the needs of customers currently using the branch or ATM, how those customers will be impacted by the proposals, and alternatives that are, or could be, put in place should they be implemented.

In the event a decision is made to implement a closure or conversion, a minimum of 12 weeks’ notice to customers will be expected, and the financial institution will need to make customers aware of the alternatives available to them.

## Egyptian central bank to continue suspension of ATM fees

The Central Bank of Egypt (CBE) has announced that it will continue to suspend ATM withdrawal fees until 31<sup>st</sup> December. Also to continue is the ability of customers to make bank transfers in Egyptian pounds without incurring fees, the free issuing of electronic wallets and prepaid cards, and the cancellation of all fees on transactions between mobile phone accounts.

CBE said that it hoped that extending these measures, which were originally introduced in March in response to COVID-19, would help maintain the advances which had been made in increasing demand for electronic payments in line with CBE’s vision to reduce the country’s dependence on cash. ■



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**COUNTRY PROFILE**

# Nigeria

At the end of 2019, there were 22 commercial banks, 903 microfinance banks, 35 primary mortgage banks, one non-interest bank, five development finance institutions and four merchant banks operating in Nigeria. In 2017 Keystone Bank was sold by Asset Management Corporation of Nigeria, meaning there are no longer any state-owned banks in the country.

Approximately 30% of the Nigerian population is unbanked owing to factors such as insufficient income or documentation, mistrust of the banking system and lack of banking infrastructure in remote regions.

Branch numbers fell from 5,865 in 2018 to 5,827 at end-2019, as branches were rationalised following the April 2019 merger of Access Bank and Diamond bank. Four of the five largest banks by branches number saw growth, however.

Largest bank branch networks 2019	
Bank	Number of Branches
FBN	945
UBA	750
Access Bank	562
Ecobank	445
Polaris Bank	380

Source: RBR analysis

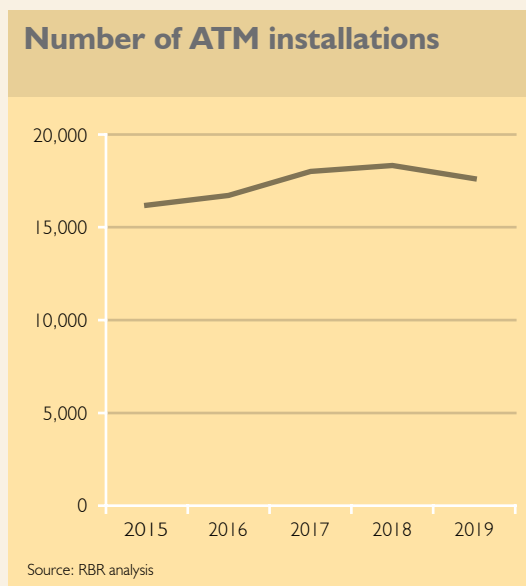
**ATM MARKET OVERVIEW**

**Infrastructure:** Since 2008 all ATMs in Nigeria have been shared through the Interswitch network. Formed in 2003, Interswitch was Nigeria’s first transaction company. Equity in the company is held by four banks – First Bank of Nigeria, Union Bank of Nigeria, United Bank for Africa and Zenith Bank – along with three private investment groups.

**Size and growth:** In 2019 the Nigerian ATM installed base declined by 4% to reach 17,620 machines at the end of the year. Representing the first decline in ATM numbers since 2011, this was

the result of the Diamond Bank / Access Bank merger and the ongoing process of connecting Diamond Bank’s ATMs to the Access Bank network.

The Central Bank of Nigeria’s (CBN) ‘Cash-less Nigeria’ policy aims to encourage the use of card payments at point of sale and the uptake of e-commerce. However, in its initial phase, the policy promotes the use of ATMs in place of transacting at branch tellers. This has encouraged ATM deployment.



**Density:** Due to a rapidly increasing population, the density of ATMs per million people in Nigeria is among the lowest in the MEA region. In 2019 there were 88 ATMs per million people in Nigeria, well below the regional average of 136, indicating there is potential for further expansion. The density of ATMs per 1000km<sup>2</sup> is higher than the regional average however, at 19 compared to 6. The density of ATMs per 100 bank branches is also above the average for the region.

**Largest deployers:** First Bank of Nigeria was the largest ATM deployer at the end of 2019. The bank operated over 1,000 more ATMs than the second largest deployer and accounted for 17% of all ATMs. Together, the top five ATM deployers accounted for 55% of the national installed base. Four of these five deployers saw growth in 2019.



[www.rbrlondon.com/global-atm](http://www.rbrlondon.com/global-atm)

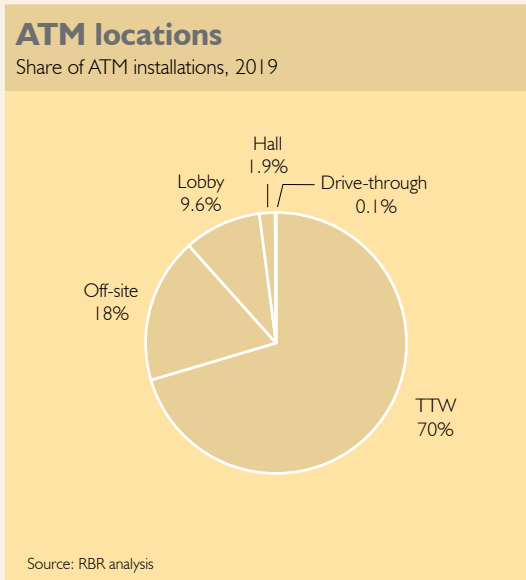
- ▶ Guaranty Trust Bank saw the strongest growth, with its installed base increasing by 20%, though this was not enough to counteract the overall decline in ATMs resulting from the Diamond Bank / Access Bank merger.

### Largest ATM deployers 2019

Deployer	Number of ATMs	Share
FBN	2,980	16.9%
UBA	1,860	10.6%
Access Bank	1,850	10.5%
Guaranty Trust Bank	1,501	8.5%
Ecobank	1,460	8.3%

Source: RBR analysis

**Location:** The majority of ATMs (70%) are located through the exterior wall of the bank branch (TTW). This has been the most common location for many years. The second most common location is off-site, accounting for 18% of ATMs. Between 2012 and 2014, the CBN mandated only non-bank consortia could deploy off-site. This policy has since been reversed. However off-site deployment has not increased strongly, owing to security fears and the high costs of off-site deployment, particularly in more remote areas. ATMs located in the bank lobby accounted for 10% of the installed base at end-2019 and bank hall ATMs for 2%.



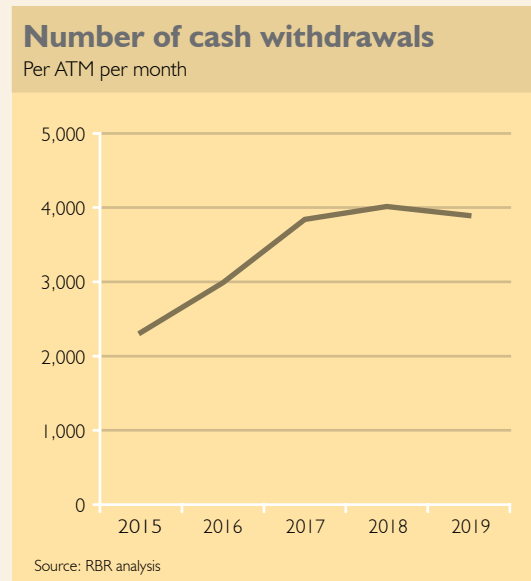
**Functionality:** All ATMs offer bill payment, fund transfers and PIN change as standard. Mobile phone top-up and statement printing facilities are

also commonly found, available at 92% and 79% of ATMs respectively. Automated deposit functionality remains rare, available at only 2% of ATMs, although the technology has been available in the country for a decade, and very few ATMs are able to recycle the deposited cash.

Biometric identification was introduced in 2013, and in 2017 the CBN announced recommendations for deployers to replace PINs with biometric identification. The drive to implement this technology at ATMs is viewed as being particularly important for both the illiterate and the elderly. Only 2% of ATMs had biometric identification in 2019.

**Number of cash withdrawals:** Nigeria is predominantly a cash-based economy, and many small retailers only accept cash payments. As such, the annual number of cash withdrawals almost doubled between 2015 and 2019. However, 2019 saw a 4% decline compared to 2018, with cash withdrawals falling from 876 million to 840 million. This was in part due to the reduction in ATM provision.

The average number of withdrawals per ATM per month also fell in 2019, declining by 3% to 3,893. ATM usage can be irregular in Nigeria, and a drop in disloyalty fee revenue can induce deployers to reduce frequency of CIT visits and allow ATMs to stand empty.



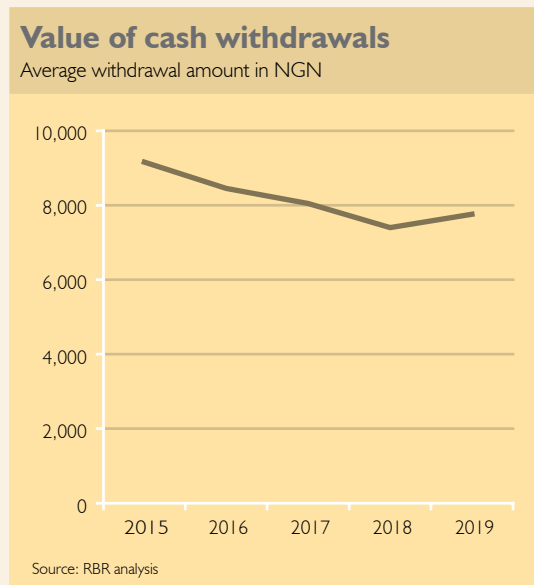
**Value of cash withdrawals:** There was a 1% increase in the value of ATM cash withdrawals in 2019, rising from NGN 6,480 billion (\$18.0 billion) to NGN 6,513 billion (\$18.2 billion).

### Future profiles

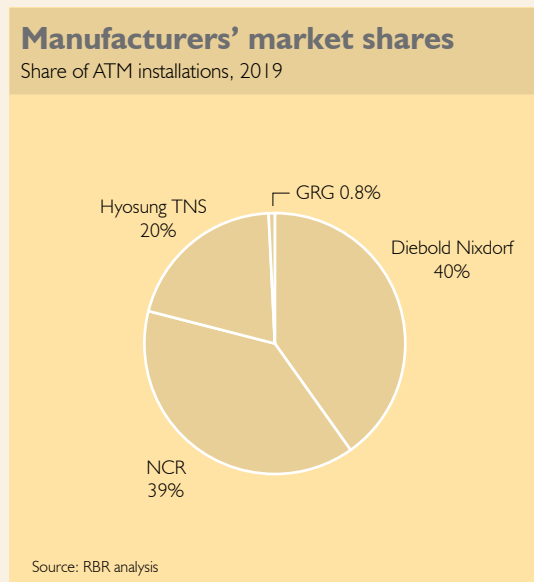
Each issue of the *Bulletin* includes a country profile based on RBR's primary research. Visit RBR's website for more information about our published reports.

- Forthcoming profiles:
- Argentina November
  - Austria December
  - Russia January
  - Morocco February
  - South Korea March

The average value of a cash withdrawal increased for the first time since 2015, growing by 5% during the year to reach NGN 7,755 (\$22).



**Suppliers:** The vast majority of ATMs in Nigeria are supplied by Diebold Nixdorf and NCR. Diebold Nixdorf accounted for 40% of installations at end-2019 and NCR 39%. With 20% of terminals, Hyosung TNS is the third largest manufacturer. Chinese vendor GRG supplies the remaining ATMs, having entered the market in 2018. There are no longer any KingTeller installations, the supplier having exited in 2018.



**Hardware and software:** 40% of ATMs in the country are connected to Stratus network central hardware. NCR's NDC Enterprise is the most common application software, with 42% of ATMs, while 79% of terminals communicate via NDC message protocol.

85% of ATMs were running over Windows 7 at end-2019, down from 87% at end-2018. All remaining ATMs operate over Windows XP and Windows 10. Dedicated ATM security software is present at over 85% of installations, with NCR's Solidcore the most common with a 52% share.

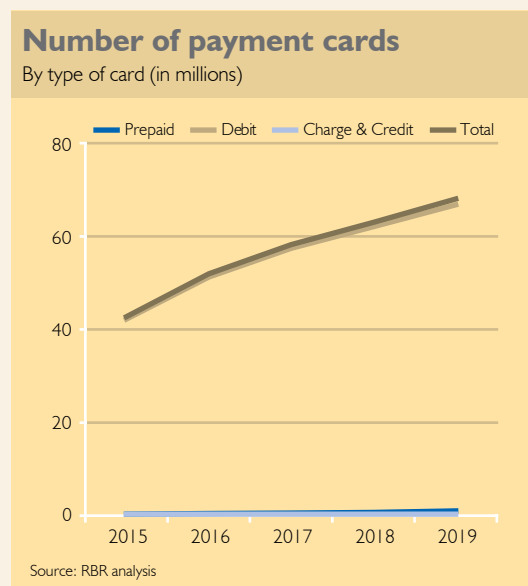
**Service and maintenance:** All deployers carry out cash replenishment and first line maintenance in-house for both off-site and branch ATMs. Second line maintenance is outsourced to third parties for 92% of off-site and 91% of branch ATMs. NCR provides second line maintenance for 41% of installations. Other third parties providing this service include Ark Technologies, Computer Warehouse Group, Diebold Nixdorf, Inlaks, Softworks and Robert Johnson.

### PAYMENT CARDS MARKET OVERVIEW

**Size and growth:** There were 68 million payment cards in issue in Nigeria at the end of 2019, representing an 8% increase compared to end-2018. Card numbers have been growing for several years. The government promotes several initiatives to increase financial inclusion, including the biometric-based Bank Verification Number (BVN) scheme and Shared Agent Network Expansion Facilities (SANEF). The BVN scheme has made it easier for customers to open accounts, while SANEF, launched in 2019, aims to increase financial access points and improve financial literacy.

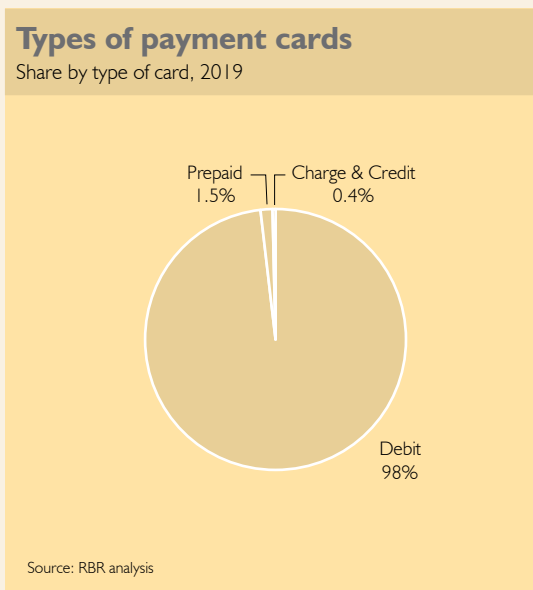


[www.rbrlondon.com/global-cards](http://www.rbrlondon.com/global-cards)



**Types of card:** Debit cards are by far the most common type of payment card in Nigeria, comprising 98% of cards in circulation. Debit cards grew in number by 8% in 2019. Prepaid cards saw

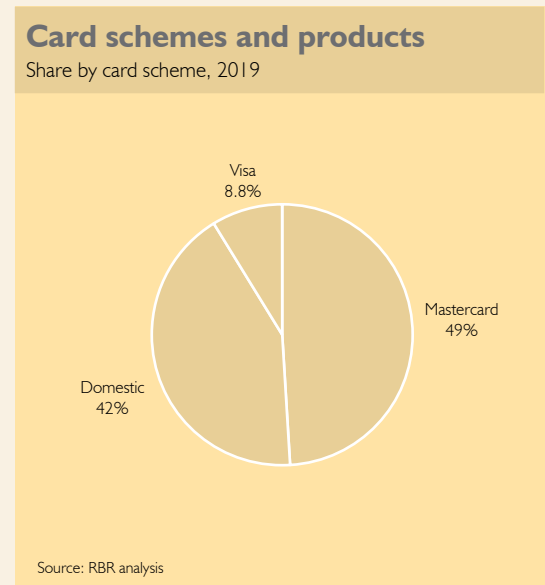
► far stronger growth at 48%, although from a very small base, representing 1.5% of all cards. These cards are considered less convenient than debit cards owing to their limited load values. Although these can be increased, higher load values have higher know-your-customer requirements. Credit cards comprise 0.4% of all cards. The lack of a central credit bureau makes it difficult to ascertain an individual's creditworthiness, meaning these cards are largely limited to high net worth individuals. In 2019 the CBN kick-started a five year policy initiative to expand and develop the credit sector, and expects to see card numbers rise.



**Types of issuer:** There are no private label cards or T&E schemes in issue in Nigeria.

As the CBN prohibits exclusive acquirer agreements, each card-accepting retail outlet is mandated to accept all cards issued by Nigerian banks, resulting in universal acceptance of Mastercard, Visa and the domestic scheme Verve. In February 2020, Interswitch announced a partnership with American Express to introduce acceptance of the scheme in Nigeria.

**Card schemes:** Mastercard accounts for 49% of payment cards owing to its strong position in the dominant debit sector, where the scheme represents 50% of cards. The domestic scheme Verve accounts for 42% of all cards and 42% of debit cards. Visa accounts for the remainder. Despite Visa's low share of cards overall, it accounts for the vast majority of credit cards at 94%, with Mastercard representing the remaining 6%. In the prepaid sector, Verve comprises 88% of cards, Visa 8% and Mastercard for the remainder.



**Transaction volume and value:** There were 538 million payments made using Nigerian-issued cards in 2019, representing growth of 48% compared to 2018. Debit cards accounted for over 99% of all payment transactions, as in 2018.

Total card expenditure stood at NGN 4.1 trillion (\$11.4 billion), an increase of 36% from 2018. Again debit cards comprise the majority of spend, at 99%. Credit cards account for only 1% of total value. This is higher than their share of total transactions as these cards tend to be used by high net worth individuals for luxury purchases. Prepaid cards hold the smallest shares of both transactions and value, owing to their limited load values. ■

### Payment cards issued

By type of issuer (thousands), 2019

Issuer	Prepaid	Debit	Charge & Credit	Total
Financial Institutions	1,010	66,775	249	68,035
T&E	-	-	-	-
Private Label	-	-	-	-

Source: RBR analysis

**Merchant acquiring:** At the end of 2019, there were 384,000 EFTPOS terminals installed, an increase of 6% from end-2018. Cash is widely used, and many small retailers do not accept card payments – this suggests there is room for further growth in EFTPOS terminals, particularly as the CBN continues to promote its Cash-less Nigeria policy.



# Conference diary

The diary lists events concerned with banking and payments technology for which we have information. A comprehensive list of future conferences is available on the RBR website: [www.rbrlondon.com/events](http://www.rbrlondon.com/events).

Date	Conference	Location	Organiser
<b>NOVEMBER</b>			
2-20	Digital Innovation Summit	Virtual	<a href="http://www.ukfinance.org.uk">www.ukfinance.org.uk</a>
3-5	The Europe Cash Cycle Seminar	Virtual	<a href="http://www.europecash.currencyresearch.com">www.europecash.currencyresearch.com</a>
4	QA Financial Forum Stockholm 2020	Stockholm, Sweden	<a href="http://www.qa-financial.com">www.qa-financial.com</a>
4-5	EHI Payment Kongress	Virtual/Cologne, Germany	<a href="http://www.ghi-paymentkongress.de">www.ghi-paymentkongress.de</a>
4-5	European Banking Forum – Digital Transformation in Retail Banking	Zurich, Switzerland	<a href="http://www.arena-international.com">www.arena-international.com</a>
4-6	Il Salone dei Pagamenti	Virtual	<a href="http://www.salonedeipagamenti.com">www.salonedeipagamenti.com</a>
5-6	International PLUS-Forum Payments 2020	Moscow, Russia	<a href="http://www.plus-forum.com">www.plus-forum.com</a>
9-10	Swiss Payment Forum	Zurich, Switzerland	<a href="http://www.swisspaymentforum.ch">www.swisspaymentforum.ch</a>
10	Real Time Payments Summit	Virtual	<a href="http://www.rtpsummit.com">www.rtpsummit.com</a>
10-12	Americas Cash Cycle Seminar (ICCOS)	Virtual	<a href="http://www.americascash.currencyresearch.com">www.americascash.currencyresearch.com</a>
10-13	AltFi London Summit	Virtual	<a href="http://www.altfi.com">www.altfi.com</a>
11	Digital Banking Summit	Virtual	<a href="http://www.africadigitalbanking.com">www.africadigitalbanking.com</a>
16-17	Seamless Middle East	Virtual/Dubai, UAE	<a href="http://www.terrapinn.com">www.terrapinn.com</a>
16-19	IMTC World 2020	Virtual	<a href="http://www.imtconferences.com">www.imtconferences.com</a>
16-20	MoneyLIVE: Nordic Banking Online Festival	Virtual	<a href="http://www.marketforcelive.com">www.marketforcelive.com</a>
17	Bank + IT	Virtual	<a href="http://www.bankitshow.com">www.bankitshow.com</a>
18	QA Financial Forum New York 2020	New York, USA	<a href="http://www.qa-financial.com">www.qa-financial.com</a>
18-19	Fintech World Forum 2020	Virtual	<a href="http://www.fintechconferences.com">www.fintechconferences.com</a>
18-19	Payments International	Virtual	<a href="http://www.informaconnect.com">www.informaconnect.com</a>
19	It's All Banking and Insurance	Milan, Italy	<a href="http://www.itsall-banking-insurance.com">www.itsall-banking-insurance.com</a>
23-24	Branch Transformation 2020	Virtual	<a href="http://www.rbrlondon.com/bt">www.rbrlondon.com/bt</a>
24-26	EBAday 2020	Virtual	<a href="http://www.ebaday.com">www.ebaday.com</a>
25	Australian Financial Crime Summit 2020	Sydney, Australia	<a href="http://www.iqpc.com">www.iqpc.com</a>
30-4	FinTech Connect	Virtual	<a href="http://www.fintechconnect.com">www.fintechconnect.com</a>

# Branch Transformation 2020

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