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Financial IT

Innovations in FinTech

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FINTECH IN THE TIME OF COVID-19

WHAT IS GOING TO HAPPEN AT THE INTERSECTION OF FINANCIAL SERVICES AND IT OVER THE NEXT 12 MONTHS OR SO?

Only some of the articles that have been contributed to this edition of Financial IT deal with the impact of the COVID-19 virus, which become seen as a global pandemic in mid-March.

As of 15 April, the epicentre of the pandemic appears to have moved from Europe to the United States. COVID-19 is yet to be brought under control. In particular, it is unclear what will be the best way of preventing the virus from overwhelming the fragile healthcare systems in many developing countries.

Nevertheless, a number of trends and themes that are very relevant to Fintech are already apparent.

Perhaps the first of these is a swing away from transactions in finance or commerce that involve face-to-face meetings and physical contact. Traditional banknotes and coin are, and are widely being seen as, potential carriers of disease. The adoption of digital payments has been given a major boost.

However, the shift is not just in payments. In wealth management, there is an opportunity for robo-advisers that can guide individuals towards sensible investment decisions through apps or websites. In InsurTech, there is an opportunity for companies that can act as brokers, underwriters or protection/savings solutions providers through purely digital channels.

A second major theme is that counterparty risk has increased for many transactions that are undertaken. Businesses that are dependent on tourism or high global energy prices have been hit very hard. The disruption to the movement of people has led to a disruption to the movement of goods through global supply chains. Many key links have been broken or are at risk of being so.

However, not all businesses are experiencing a sharp downturn in custom and payments. Some businesses – such as online food retailers and logistics companies – are experiencing a boom in business. Systems and platforms are being tested. Those companies that did not have proper contingency plans for a massive upswing or downturn in their businesses are facing a particularly difficult time. This is the third major theme.

Governments around the world have had to deal with two major challenges more or less simultaneously. One – to contain the spread of the virus and to treat the sick – has little to do with Fintech. The other – to contain the negative impact on economies – has much to do with Fintech.

At the time of writing, economic rescue packages are being talked and written about rather than actually being executed. However, most packages involve the payment of money to people and small and medium-sized enterprises (SMEs), transfers to large businesses and an extraordinary extension of credit. It is astonishing in 2020 that the mainstream media is talking about the governments of major economies making payment to tens of millions of consumers with cheques. There is a huge opportunity for all Fintechs that can accelerate the transfer of funds, whether as cash handouts or SME loans.

The need for speed in execution of the rescue packages gives rise to a fifth theme. Over recent years, there has been a move towards more red tape in financial transactions – thanks in part to international tax agreements and AML-CFT rules. The current crisis requires a move away from red tape and towards near-instant on boarding of clients – a U-turn. Customer experience is about to become even more important than before.

At an extraordinary time, there is always at least one X-Factor – something that changes radically but which is not obvious until a pandemic (or war) has been raging for some months. Whatever that X-Factor may be on this occasion, we are very confident that it will provide an opportunity for, and not a threat to, Fintech.

by Andrew Hutchings, Editor-In-Chief, Financial IT

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DEPOSIT CASH, GET ARRESTED

Banking has evolved more in the last few years than in the last few decades. The main reason is technology closely followed by regulation.

The famous statement that "Cash is King" is no more!

Banks, due to regulation and to limit their own risk, have been working with government to limit our usage of cash. A good example is your ATM account. Most people are limited to no more than $500 to $1,000 in withdrawals per day. Even though you may have more and need more, you cannot get more – and it's your money!

When I call my bank asking about this policy, the answer bank officials gave me is "But sir, this is for your own protection". When they say this, you may rest assured that it is for the banks protection. They do not care about you! If your ATM account gets hit, the bank MUST cover your loss. By limiting the withdrawal, banks limit their own potential loss. (Oh, so that's why!)

Governments are making their Central Banks print money at an ever-increasing rate. At the same time they are quietly decreasing your ability to use cash. The reasons for using less cash is to reduce money-laundering, drug money, terrorist financing, illegal weapons, black markets, and more. It is true that "a criminals best friend" is cash! These are not the main reasons they do this. Although this will have some minor impact on crime – how do you justify the amount of money being printed?

The reasons are to make the law-abiding population leave spending trails that can be monitored anytime and are centrally controlled. They do this to keep purchasing power in the country, tax collection, approved spending, hard currency rules and control how much you can spend. The governments will authorize banks to automatically deduct your tax burden quarterly from your account. The rationale is that it will be faster, easier, formless, safer, cheaper and no worries about one large payment at years end. Sounds like a big benefit for the common man and woman.

The trend toward eliminating cash is moving quickly. We are welcoming the convenience that this brings. But – this comes with a price. If society is cashless – then all transactions can be tracked. What does this mean for privacy and freedom?

To this point, an interesting development has been announced. Australia has a law proposed that will make it a crime to do cash transactions of $10,000 and over. If passed, the Currency Bill (Restrictions on the Use of Cash) could be implemented in 2020. This brings with it a $25,000 fine and two years in jail. A stiff penalty for those convicted of using their own cash!

The Australian governments Black Economy Taskforce claims that this law will help eliminate tax evasion, money laundering, terrorist financing and other crimes. This is the first step towards controlling the law-abiding population. If this passes, we will see similar laws passed in other countries. All these proposed laws will be aimed at creating capital controls on your money.

If a country like Australia passes such a law, other countries will look to adopt similar laws. The justification will always be to protect you from crimes like money laundering, terrorism, and other scare tactics. Blinded by the possibilities, the people of each country will welcome these laws. They will not understand that the banks, and by default the government, can control your spending. With many countries enacting such laws, and others copying them, it will appear normal. How bad can it be if other countries support this? Trust me – this will be bad!

These laws assume that cash will be eliminated. Transactions will all be done through the banks. Banks will examine your spend. They will start by examining your large spending and gradually move to smaller

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expenditures. The bank can then suspect and refuse your spending. People with a history of questionable transactions would be monitored and placed on watch lists. Sounds pretty scary to me!

A threat to these laws and intentional planning is cryptos. Cryptos are becoming an option for purchasing goods and services. Cryptos have become the greatest invention of the twenty-first century. When they go mainstream, Cryptos are potentially a huge threat. They have the potential to kill the "banks money making" ability and ruin the plans of governments. They cannot let this happen to their traditional economy. I see a time coming where the crypto trader can be exposed and prosecuted for "economic terrorism". This term that will soon be upon us.

One thing to remember is since the crisis of 2008, all countries including the US have been printing money hand over fist. This new money has been going into the stock and bond markets, as well as real estate markets. Interest rates are at their all-time lows. There is $17 trillion worth of bonds having negative rates – you would think this impossible! This is due to mortgage, car, student, credit card, government, and corporate debt. Even the US dollar is a form of debt. The dollar has been the number one US export for a few generations. Yes, interest rates are low – but when interest rates go up much of this debt will be unsustainable and defaulted upon.

The 2013 Cyprus bank crisis proved that money in your bank account is not yours. Instead of the Cyprus government bailing out the banks, customer accounts were used to "bailed in" the banks. The global debt-heavy economies are a potential for future bank failures. The Cyprus bail in method could be followed by other governments to solve banking failures. Your funds are at risk. The safety of the bank is an illusion. Central banks are the world's engine for inflation. They indirectly assist governments in taking peoples money. They do this by printing more money than needed. This allows governments to spend what they don't have.

The major asset of the world's central banks is US dollars. Central bankers understand that the dollar is a US government unsecured asset. The dollar has this position because most things are priced in dollars. The countries like Russia, China, and Iran don't want dollars clearing through New York. They want to avoid dollars and don't trust each other's currencies. The

Russians and Chinese are trying to replace dollars with gold. Soon other governments and central banks will follow.

Because of this, I see the world going back to gold. Six billion ounces of gold are now mined. The new supply is growing less than 1.5% per year. The gold price will continue to go up in value. The movement toward gold has started gain attention. Gold is the "go-to" asset in an unstable world. The buildup of fear will drive up the prices of gold and other commodities. During 2020 we will likely see gold prices break to new heights.

Banking and money should be left to the market and not be a tool of the government. Gold and crypto will be the new measures of financial freedom. Cash is Jailtime!

by Chris Principe, Publisher, Financial IT

Financial IT
Innovations in FinTech

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PAYCORE.IO: TECHNICAL PAYMENT HUB FOR ONLINE BUSINESSES AND PAYMENT INSTITUTIONS

An Interview with Den Melnykov, Co-Founder and COO at PayCore.io

Financial IT: Please tell us more about PayCore.io and your background?

Den Melnykov: PayCore.io is a payment platform and payments hub for online businesses and payment institutions. On the infrastructure level, we establish connections to APIs of payment providers and acquirers and ensure their security, integrity, and stability. There are now over two hundred different ways to make electronic payments and thousands of payment providers globally. We aim to be the most connected technical provider in the world, facilitating market expansion across different regions and continents.

PayCore.io has three co-founders who have extensive experience in product development, sales and customer front: Denys Kyrychenko (CEO), Dmytro Dziubenko (CTO), and me (COO). Denys Kyrychenko works closely with the development team to make sure the product reflects our vision shaped by the market feedback. Dmytro Dziubenko manages R&D team and oversees the overall software development cycle. And I get in front of customers and business development.

For more than ten years, our core team is developing products for the payment industry. Payments play an essential part of any business but rarely are the business itself. Internal tools to manage payment processes aren't only crucial for faster scaling of the business — they help to focus on the company's mission rather than internal payment system development. Providing businesses with the internal tools to fuel the growth has been a guiding philosophy for PayCore.io since the very beginning. FinTech has some characteristics that make it a little harder to implement the concept of MVPs — it took us almost two years to discover ways to grow the idea and make it work. Being a small team, we have developed several side-projects that are now part of our platform.

Our story began at the end of 2018 when we launched our first customer in a live environment. A half a year before, we have started almost from scratch. Such progress was made possible only thanks to our motivated team with years of experience. We kept in mind that this industry is continuously evolving, with new payment options, flows, technologies, regulations and compliance requirements appearing. At the same time, the payment industry is in full digital transformation. The experience of managing payment services has grown much more fragmented. That's why we were confident that a platform that provides online business with unified management, control and analytical tools could streamline payments and help to adapt to the continually changing payment environment faster.

Financial IT: What are the major trends in the payments sphere this year?

Den Melnykov: First of all, of course, there's a worldwide pandemic, that affects everything from public health and wellbeing to the global economy. It has already changed the way people shop and pay. We can see that the demand for online shopping, contactless delivery and digital payments is increasingly growing. Aside from all the horrible and irreversible consequences, COVID-19 would have, I believe that ultimately it will serve as a significant push towards digitalisation and cashless economy. Therefore, online payments will be on the rise, with more and more payment tools and options appearing.

In particular, mobile payments are multiplying, reinforced by the ubiquity of smartphones. Altogether, it is giving rise to the biometric authentication, as many customers globally now have

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Den Melnykov,
Co-founder and COO at PayCore.io

Den is a Chief Operating Officer at PayCore.io, which is a a payment platform and payments hub for online businesses and payment institutions.
He is a profit-oriented executive with leadership skills in production, strategic planning, operations, and finance. Extensive record in both domestic & international business management in high growth environments. The major objective is to manage a business to a market leadership position.
Den overseas the activities of all the team, collaborates with with CEO on the development of market-driven strategies and is responsible for successful implementation and execution of business plans.

devices with the support for biometrics, be it a fingerprint scanner, facial recognition, or even more advanced options, like iris or vein pattern recognition. It is forecasted that in 5 years biometric hardware will be present on 90% of smartphones.

The regulation also provides momentum for the use of biometrics to authenticate payments. In particular, a new security protocol 3DS2 implies a requirement for two-factor authentication, which expectedly will drive merchants to adopt biometrics to enable a seamless checkout experience.

Another related trend is the increased usage of mobile wallets. More than 2 billion customers are already using them, and the number is growing steadily. Apple, Samsung and Google surely had a hand in that by launching and expanding their mobile wallets globally and giving a push for more companies to launch their own wallets, often with some specific features, or tailored to some region or a country. I believe we'll see a growing list of mobile wallets and a significant increase in their users base in the coming months.

Financial IT: Can you please tell more about PayCore.io products?

Den Melnykov: We offer advanced omnichannel gateway that centralises, normalises, and streamlines the way of accepting payments and making payouts. All the data is available in real-time and can be accessed through a single dashboard. Our customers can also configure their integrations, manage transactions, and switch a variety of settings there. For instance, set up transaction routing and apply real-time FX rates for currency conversion.

Moreover, we've recently refined our Checkout, giving our clients the power to hit the market faster and to increase conversion rates by granting a smooth and intuitive experience for shoppers.

Given the fact that we have experienced development team and a proven track record in bringing payment solutions to the market, we decided to expand our offering with the white-label PSP. It helps companies to provide payment services to their merchants without excessive investments into technical infrastructure or software development. That's on us so that our clients can focus solely on interacting with merchants and scaling up of operations.

Additionally, we build tailor-made solutions, putting clients' ideas into life. We handle consultancy, design and development, deployment and quality assurance.

Still, I provided just a glimpse into PayCore.io capabilities. There's actually much more handy tools and features facilitating payment processes for online business.

Financial IT: How does it work? Please give us a real-life case example of applying your service?

Den Melnykov: PayCore.io comprises of the tiny APIs to connect and the back office dashboard, from where you can operate your internal payment system. One integration with us allows you to connect an unlimited number of merchant accounts in various payment providers to accept payments and make payouts. In case a provider you're working with not yet connected to our platform, we will establish an integration for you. Being a PCI-certified service provider enables us to host tailor-made payment pages and tokenise payment cards, which minimises a PCI-compliance burden for our customers. PayCore.io is not only about payment processing but also harmonising payment data coming from all those disparate sources. Our platform can be used as a single data source for customer support, accounting, marketing, risk and finance teams. Moreover, we offer the solution to automate labour-extensive account reconciliation.

We were a small technology startup last year. One of our institutional customers has already had a payment system in place. Completely replacing or changing legacy systems was a risky endeavour for them. In parallel, they decided to launch an alternative platform. Rather than build their own custom solution, they went with PayCore.io. In half a year, we helped them to double the number of transactions and to shift the success rate by 52%. Since then, PayCore.io is providing this customer with the flexibility and agility necessary to sustain rapid growth.

Financial IT: What are the key milestones for PayCore.io that we should look for in the next couple of years?

Den Melnykov: We're growing and developing so fast that we're ourselves wondering where this journey will bring us. Our team more than tripled since the last year, and we continue to hire and expand our offices. We need more specialists to bring everything we have in mind to live. We are going to introduce our improved version 2.0 soon, with new products and features, and even a new website.

PayCore.io will also expand globally. We have our eyes on starting sales in North America and Asia and expanding current activity in Benelux, Scandinavian, and the German-speaking countries this year.

Having our aim to unify all types of payments in mind, we constantly work on adding new integrations with API's of payment providers and acquirers. Our goal for this year is to reach 300+ integrations next year and become one of the most connected solution providers globally.

Financial IT: What are your predictions for the payment industry for the next five years?

Den Melnykov: I bet that digital payments are the future. In the coming years, we will see global transitioning from physical cash to digital payment methods. Some countries are already moving towards building a cashless society, and I believe more will join this movement consequently, adopting digital payments and all related technologies and trends.

The ongoing focus on digital transformation drives the e-commerce (m-commerce, in particular) and neobanking, as well as every single technology providing supporting features for these fields. Namely, chatbots, augmented reality and voice assistants are new tendencies in online shopping and banking, which are projected to grow significantly in the next few years.

Payments are where digitalisation will bloom in full effect. We're proud to be not only onlookers but participants in this exciting journey.

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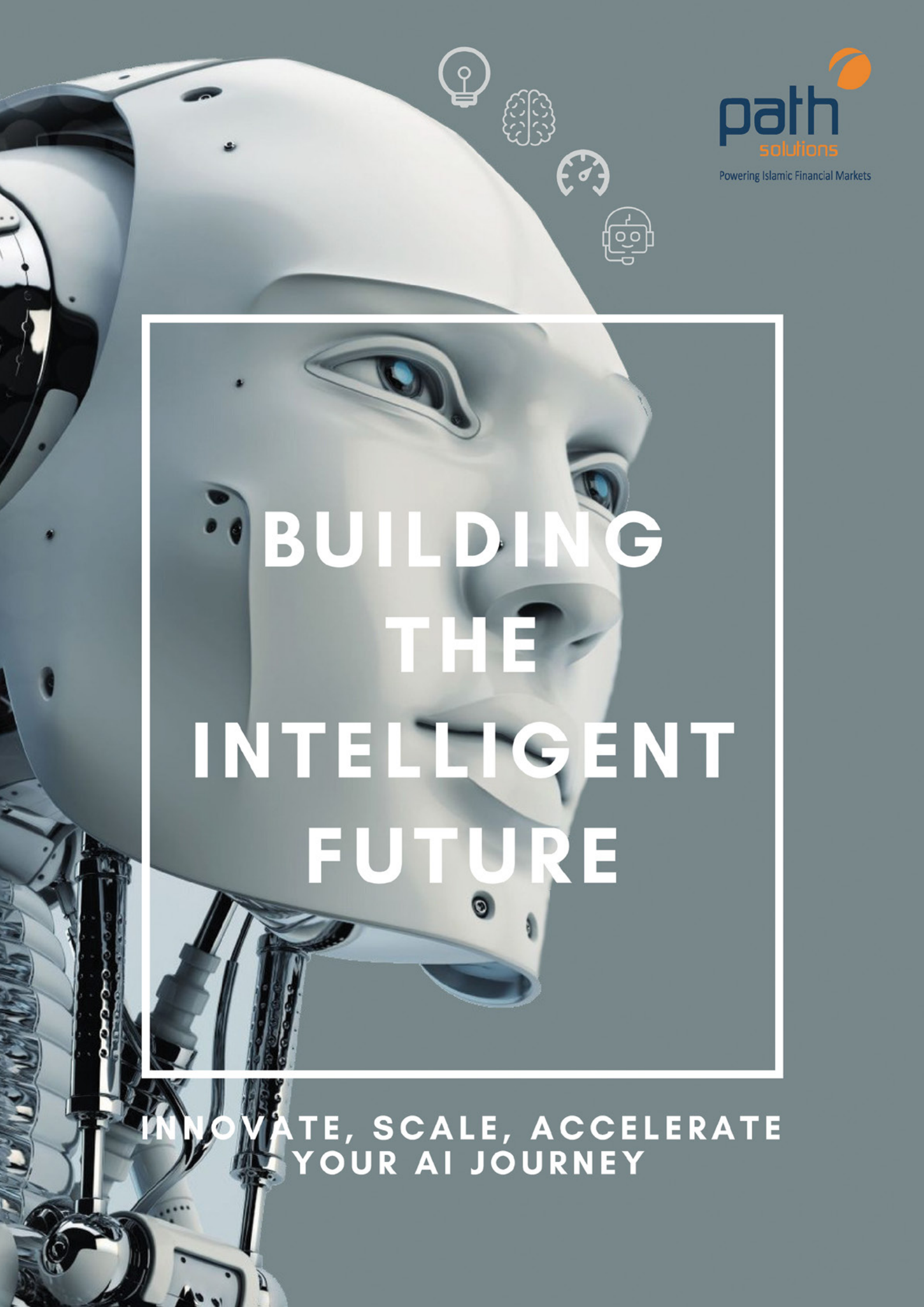

BUILDING THE INTELLIGENT FUTURE

INNOVATE, SCALE, ACCELERATE YOUR AI JOURNEY

Financial IT
Innovations in FinTech

ENTITY V PROCESS: THE COLLECTIVE POWER OF AI

Huw Kwon,
Vice President and Global Head of AI,
Cognizant

Huw Kwon is Global Head of Artificial Intelligence for the AI and Analytics Practise at Cognizant. Huw previously worked for McKinsey where he led global AI projects and advised C-Suite clients across industries as an Associate Partner. Prior to McKinsey he led Data Science and Analytics CoEs at Accenture, EY and Lloyds Banking Group. At Cognizant, Huw will lead our offering in Europe across Data Modernisation, Customer Intelligence and Operational Intelligence. He also sits on the Global AIA leadership team and provides leadership at a global level for the development of our intelligence offering and strategy.

Most, if not all, financial institutions are exploring how the range of new and emerging technologies collectively known as artificial intelligence (AI) can improve their performance across a range of activities and processes. AI offers methods and algorithms to solve various optimisation problems as efficiently as possible, that is, to close the loop in the system and achieve superior control of the phenomenon at hand. It is no wonder there continues to be keen interest in the field, despite the hype curve tailing off.

Research by Cognizant[1] shows that 74% of financial services executives said AI was extremely or very important to the success of their companies today, while 53% said it would be extremely important in three years' time. The emphasis on the importance of AI is more pronounced in financial services than in other industry sectors. That's because financial services possesses one of the key ingredients to make AI successful: plentiful sets of rich, labelled data.

However, while the enthusiasm for AI is clear, there's less evidence of real progress on the ground. Only 29% of executives reported that AI projects were in full implementation. The majority say that AI initiatives were at the pilot, proof of concept. These often generated improvements that, while positive, were not enough to justify swapping them with existing methods or services such as customer lifecycle management models, NBA engines, credit scoring modules, pricing, etc

Such data-driven services in banks have traditionally been entity-based (whether that is a customer as an entity, or a firm, or a portfolio). This, in essence, is a data snapshot taken at a specific time, whether that is predicting a customer default, the sale of a loan or cross-selling of an insurance product.

AI and the customer as an entity

AI advances that banks and financial institutions are making today focus on the customer experience. Chatbots deploying natural language processing (NLP) offer customers 24/7 access to virtual agents that can provide routine account information such as checking account balances and requesting new products. Machine learning, a key AI component, can recognise patterns and continue to learn from experiences, feedback and interactions to improve the decisions and recommendations it makes. While this can be applied to accelerate and increase the accuracy of credit decisions or fraud detection, such systems and methods already exist and the AI plays more on the incremental opportunities. These areas are, in most banks, relatively mature and likely to be only marginally improved rather than through seismic innovation.

In customer analytics, greater improvements using AI (Deep Learning algorithms in particular) offer enhanced scope for personalising services, upselling and cross-selling, as well as recommending next best actions on the fly. Like the digital natives' use of similar methods, these can help drive revenue growth and go beyond the bank's existing NBA engines, which are more often than not based on old business rules.

Yet, there is an area that remains to date largely unexplored. That is the way in which AI and data analytics can effect dramatic improvements in operational efficiency by looking at process.

From RPA to Operational Intelligence

Many banks have deployed Robotic Process Automation (RPA) to address discrete

[1] Cognizant AI research of 230 financial executives in the US and Europe.

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and well-defined processes (which can be expressed as a logical flow diagram in most cases). These include document management in areas such as underwriting or product applications and some automation of call centre activities. Coupled with high accuracy character recognition, RPA makes it possible to automate a variety of mundane, time-consuming tasks that used to take hundreds of work hours and inflate payrolls.

Employing RPA for high-frequency repetitive tasks eliminates the room for human error and allows a financial institution to refocus workforce efforts on processes that require human involvement. However, despite these benefits, RPA remains relatively limited in its scope and impact.

Beyond automation

AI, coupled with its technology enablers, now offers the chance to go much deeper and capture the true picture of operations, providing intelligence and insight that was not available, and do so at lightning speed. This process insight will transform financial institutions' understanding of complex, end-to-end processes. That will enable them to take actions and make changes that can have a materially significant impact on costs. And at a time when many banks have 'squeezed the juice' out of optimising and restructuring to improve their cost-income ratios, the appeal of true, data-driven process improvement is self-evident

Operational intelligence covers everything that is process driven . And, after all, what isn't a process? Aside from the simplest business processes, banks have found it near impossible to see in detail how most operational activities really work end-to-end. A logical model of A-Z operations – or what the business thinks those are – describes in theory what should be happening across operational processes.

Even when operational processes are documented in rigorous detail, it remains impossible to identify the dynamic or even chaotic delays and manual interventions that drive costs up and increase complexity. However, in an increasingly digitised environment, where every interaction with an app, writing of an email, search, telephone call, request ticket raised, every click of a mouse or stroke of a keyboard, leaves a trace, it is feasible to capture every single element of every process.

A vast wealth of such process data is now available to reveal the detailed inner-workings of an end-to-end process. These are by their nature dynamic and varied, which paints a very different picture from the logical process diagram banks are used to but which are far from reality and in which ample potential improvements lie hidden .

From complexity to insight

Of course, without the tools to understand what all that data shows, it would simply represent a highly detailed record of massive complexity. But advances in big data analytics , process-mining AI capabilities makes it possible to assess the logical model of how an entire operational process is supposed to work against a true, data-driven representation of actual performance.

This process-data-driven reality shows the enormous complexity of what is really happening. The question is, what can be done with that to start making significant improvements that will enable real gains in operational efficiency? Using the computer processing power and algorithms that we now have available, it's possible to take the highly complex process journeys that the data reveals, consolidate them, and identify where problems are in order to address them and transform performance.

Using AI to create operational intelligence offers a game-changing ability to isolate a specific point in the execution of a process journey. The data analysis is able to show exactly why a problem is happening – for example, the length of a delay, which department or even individual made an intervention. And as the picture improves over time, it's possible to gauge the impact of improvements. AI's ability to create a new monitoring capability, removes the guesswork from introducing process improvements. Now is the time to rely on machine learning and AI with real-time, click-by-click, second by second process-data-driven analysis of banking operations that can reveal significant opportunities for measurable improvements.

Data at the heart

At the heart of operational intelligence is data. In fact, data is at the heart of all AI initiatives. More than that, having the right data in the appropriate form is a fundamental but all too easily overlooked prerequisite for success with AI. It's an issue that financial services executives are aware of. Forty-five percent of them said that getting access to accurate and/or timely data was very or extremely challenging for their companies in deploying AI. Data engineering is the hidden, yet most important, element of any AI or digital work. Everything that banks want to do must be built on the basis of modernised data.

It's essential that data engineering links directly to business value. AI initiatives often take a top-down strategically-driven approach. All too often, that results in a pilot or proof of concept that is unable to scale into production. In contrast, a bottom-up, process-data-driven approach connects the people, processes and technology that can deliver real AI-led value at scale. It does this this by bringing together all the right talents and capabilities – from data engineering, platform technology, data science, UX/UI designer and the business – all in an agile team with a shared objective.

People before technology

Having the right data foundation in place is essential. In reality, that often means democratising data to a wider audience of users (ie by moving to the cloud) and it's a change that many may find uncomfortable. Overcoming their resistance will require support for re-education into the 'new', which is key to sustained success especially in larger organisations.

That is a key aspect of any AI initiative. The change it creates has to be seen in human, rather than technological, terms. An effective AI strategy therefore requires a human-centric approach. Forty percent of executives say that one of the AI challenges they face is the need to retrain employees, and 38% say that the ability of employees to interact effectively with AI applications is a further challenge. Banks need to be ready to reskill employees to work in an AI-powered organisation. And with 50% of financial services executives citing access to talent as the biggest AI-related challenge they face, financial institutions must be prepared to reshape their organisational cultures to attract and retain sought-after skills and capabilities. This can include broadening roles, pushing decision-making authority to the individual contributor level, and building attractive environments that enable the adoption of AI.

To find out more about Cognizant's AI capabilities and POV contact Huw at *Huw.Kwon@cognizant.com* or visit *https://www.cognizant.com/operations-two-point-zero*

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AHEAD OF THE CURVE

With consumers shifting to online banking, the strength and agility of a bank's digital systems has never been more important. Through its innovative solutions, ICS Financial Systems equips banks for the digital age.

As with many industries, the banking sector has been hit by a wave of digital disruption in recent years. Investment in online platforms by digital incumbents and start-ups is significant and, while some banks had the foresight to start investing in digital infrastructure early, many are still struggling to capitalise on the fintech revolution.

Nonetheless, the importance of providing an exceptional online customer experience is more or less undisputed within the sector. According to Deloitte, US retail banks will invest over $15.2bn in digital banking in 2022, while only $11.4bn will be spent on developing branches (see Fig 1).

But developing a high-quality digital platform is far from easy. Increasingly, customers expect a bank's online user experience to be as seamless as those offered by fintech competitors. For this reason, the system a bank chooses to implement is more important than ever.

As a global software and services provider, ICS Financial Systems (ICSFS) is dedicated to supplying banks and financial institutions with world-class digital solutions. Through its fully integrated banking software, ICS BANKS, ICSFS enables organisations to automate and streamline their services. World Finance spoke to the company's managing director, Robert Hazboun, to learn how its digital solutions help banks become leaders in their respective sectors.

What challenges do banks face in today's digital age?

We all recognise that people around the world are now choosing online banking over traditional in-branch banking. Banks and financial institutions are under pressure to adapt to this huge shift in consumer behaviour.

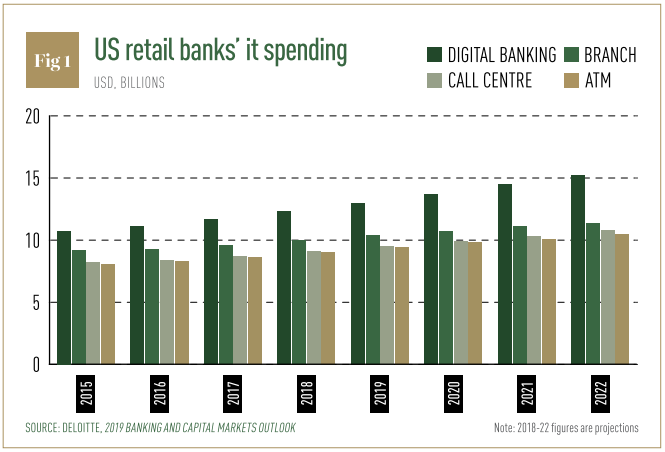
The digital age presents banks with several major challenges. As well as tackling digital transformation and disruption, banks must compete with new players in the digital banking ecosystem and try to stay on top of the continual emergence of new technology. They also need to manage customers' expectations while winning their loyalty and addressing a host of regulatory challenges. Last but not least, banks must cope with the added operational costs of digitalisation.

How does ICSFS provide solutions to these challenges?

Ever since digital disruption started to transform businesses, ICSFS has embraced innovation and agility as core drivers of value within the global market. In addition to open banking, we provide solutions through open application programming interfaces (APIs) and complete cloud platforms. Our extensive channels also drive empowerment through financial inclusion. In this way, we create multiple touchpoints that help banks expand their customer base. What's more, we enrich customer service through the unification of digital systems, fostering customer relationships across different channels.

ICS BANKS' dynamic products are built to be highly secure, scalable and f lexible, thereby increasing banks' market share. Our process automation saves time and enhances consistency and clarity across the business. Finally, our continuous technological advancement lowers our customers' total cost of ownership.

Having a comprehensive digital solution that caters for a host of world-class technologies is a must for any leading bank. As a fully integrated software solution that



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covers all aspects of online banking, ICS BANKS puts financial institutions head and shoulders above the rest. With digitalisation taking the sector by storm, and with the pace of change so fast, ICSFS offers robust tools that enable banks to not simply ride the wave of digitalisation, but become leaders in digital banking.

What should a bank look for when partnering with a fintech firm?

Banks should always look for indications that a fintech firm's solutions will bring real value to their customers. As a long-standing player in the banking technology industry, ICSFS has designed its banking software to meet customers' expectations and increase customer engagement in banks' services.

At the same time, our solutions help clients better understand their customers' needs, providing them with guidance on what services to offer and how to offer them. This reduces the time taken to bring new products to market and gives the bank a more significant competitive advantage.

As well as offering a wide range of technological tools, we deliver implementation services and boast a cost advantage over other banking software providers. In fact, we have the highest-rated customer satisfaction for our implementation experience. ICSFS addresses customers' fundamental needs and expectations with free-of-charge upgrades and reduced operating costs, all while generating more revenue growth and delivering real value to banks' customers.

How do you help banks respond to increased competition and rapidly changing markets?

Increasing competition and rapidly changing markets require businesses to stay alert and react quickly to challenges. With new banking technology continuing to emerge, banks around the world are pushed to invest heavily in new tools that will help them manage their operations, connect with customers, promote their services and stay ahead of the competition.

ICS BANKS enables a given bank to meet its customers' needs by utilising the latest technology, such as cloud availability, open APIs, agency banking, artificial intelligence, robotics, blockchain, cash management systems, chatbots, smart contracts, cardless payments, customer onboarding processes and wearable banking technology.

By implementing ICS BANKS, financial institutions will be able to generate new opportunities, enhancing their market advantage and providing a better customer experience, including 24-hour availability, smart banking and lower charges – not to mention greater security and transparency in their transactions.

There are a number of regulatory hurdles within the banking sector. Can ICSFS help banks meet international standards?

After the 2008 global financial crisis, a process of regulatory reform took place within the banking industry. Now, meeting accounting and supervision standards has become a part of day-to-day life for all bankers. However, banks will struggle to meet these standards and provide regulatory reports if the appropriate tools are not deployed.

By harnessing ICS BANKS, our clients can obtain the latest updates on standard regulatory reports and bodies, such as International Financial Reporting Standards, Basel II, Basel III, the Accounting and Auditing Organisation for Islamic Financial Institutions, and the Islamic Financial Services Board, as well as become compliant with the most recent SWIFT standards within planned releases. As a result, ICS BANKS users can enjoy a reduced total cost of ownership and access the specific regulatory reports required by authorities, such as central banks.

Know Your Customer compliance and regulatory challenges such as anti-moneylaundering (AML), the Foreign Account Tax Compliance Act (FATCA) and the Common Reporting Standard (CRS) have also presented difficulties for financial associations. In light of this, ICS BANKS empowers banks to take a more holistic approach and improve their processes for verifying the identity of clients.

ICS BANKS' comprehensive touchpoints and omnichannel capabilities allow banks to leverage data and acquire desired customer information at any time. ICS BANKS supports AML, FATCA and CRS, while its APIs connect to local and regional authorities for further regulatory and compliance processing. Finally, ICS BANKS' onboarding user experience cycle is completed with its digital business process management facilities.

How can banks ensure they are sufficiently future-proofed?

Making processes more agile is one of the main priorities of today's banks. According to KPMG, banks can drive agility in five key ways: first, by changing their culture to focus more on customer value and continuous improvement; second, by connecting with customers; third, by prioritising technological development; fourth, by increasing flexibility through mergers and acquisitions; and finally, by embracing innovation.

Across these five key areas, ICS BANKS offers numerous solutions that drive agility. The platform's flexibility, integrated design and data inclusion give banks the tools they need to change their culture. Digital touchpoints make the bank available to customers at any time, while strong reporting tools ensure institutions are always one step ahead of customer needs.

In addition, ICS BANKS helps financial institutions stay at the cutting edge of technology through applications such as cloud banking, APIs, open banking and blockchain. ICS BANKS' customers can also enjoy a clear flow of information online using the platform's reporting tools. This enables them to easily understand and analyse their status at any time, which can help inform their decisions regarding mergers and acquisitions. In other words, ICS BANKS' innovative technological tools future-proof banks and transform them into pioneers of their industry.

On top of all this, ICSFS offers banks real financial clarity and a low total cost of ownership. Whether a bank is looking to boost its profitability or cut its operational costs, ICS BANKS provides it with maximum financial efficiency. The system is also designed with a scalability feature to support banks' growth and lead them through a successful lifetime business. In this way, we stand firmly by our motto: 'our customers are our partners.'

ICS FINANCIAL SYSTEMS LTD

Published by World Finance Magazine

THE NEW FINANCIAL ORDER: EMERGING TECHNOLOGY AND CROSS INDUSTRY COLLABORATION IN THE GLOBAL PAYMENTS SPACE

Incumbents are faced with the challenge of serving an increasingly digital customer base, and consequently have had to adapt to changing customer demands. This is stimulating innovation in the sector, with cross-industry partnerships and investment in technology becoming central to providing solutions to long-standing customer challenges. Applying either approach presents an opportunity for companies to grow their revenues, but if not done properly, businesses may be putting themselves at risk of loosing customers to competitors.

Focus on what you do well

When working with cross industry partners, financial institutions should make sure they work with companies they identify as 'need-matching', so that there is a clear benefit to each partner. Effective collaborations are built upon a strong sense of self-awareness about a company's strengths and weaknesses. Firms should be proud of what they do well, and humble about activities that others handle better. If companies focus their time, energy and investment on improving their core competencies, not only do they differentiate themselves from competition, but they free up staff to focus their time on making distinct products and features that work as well as possible.

The key to making this work is to focus on the problem you're trying to solve for customers. Typically, these problems can be broken into some form of workflow, whether that's completing an e-commerce purchase, paying a tuition bill, or managing FX risk. Mapping out these workflows allows companies to identify the moments in the value stream where they can add maximum benefit for the customer, and that is where the company should focus their energy. Any other moment in that value stream is therefore a partnership opportunity. Partnering with best-in-breed providers for those "other moments" in the stream can help companies improve the overall customer experience, which can drive loyalty and grow sales.

Global industry leaders like Western Union are built on these partnerships. We work with some of the largest travel and expense providers in the world to help their end customers reimburse their employees for expenses, and we help universities accept tuition payments from international students, in the students' local currency, through our global network of bank accounts and payment methods. In all these cases, this collaboration allows our partners to improve their customers' experience and grow revenue with relatively low effort.

Let the customer challenge guide the technology

As companies, ultimately our goal is to solve problems for our customers, whether that's a person sending money to a loved one in a different country or a business paying a cross-border invoice. It is important to ground technology investments in those principles; rather than jumping on the bandwagon to implement the latest "shiny object," we should carefully consider how a new technology solves a customer challenge before we commit to using it.

This relentless obsession with the customer experience provides a great filter for ensuring that new technology adds value for the users of our solutions. It is particularly important as we're in the midst of a technology revolution in the payments world, with countries shifting from decades-old batch-based ACH systems to newly developed API-enabled real-time payment schemes.

Real-time systems typically provide immediate feedback on the success or failure of a transaction, rather than needing to wait one to two days using the old ACH method. This offers several benefits. Firstly, for person-to-person transactions, this can provide a delightful experience with greatly improved certainty that transactions happened. Similarly, for B2B payments, real-time posting and settlement means that companies have better control over their working capital. However, it is still very much operating on a domestic level and the sector needs to look at connecting borders and industries on a global scale.

Other key innovations which are likely to infiltrate into the financial services sector further over the next decade, in order to improve customer experience, are artificial intelligence and machine learning. We're already seeing several companies use AI technology to power chatbots, drive efficiency in back office activities, and improve their compliance capabilities. The next step here is combining AI with Open Banking and Open Data services to help consumer and business customers make better choices about their financial lives.

Importantly, as new technology continues to emerge and develop, businesses will need to adapt, or risk being left behind. When the appropriate approach to such digitalisation is taken, however, we will see an increase in speed, security and collaboration within and between businesses.

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Scott Johnson,
Vice President, Head of Product, Western Union Business Solutions

Scott started working for Paymap Inc. (a subsidiary of Western Union) in their San Francisco call center in 2000. Scott worked on the Paymap business for 8 years in a variety of roles, eventually taking on site leadership of Paymap's San Francisco office and management responsibility for the 150+ person Paymap Operations team.

After working through the transition and closure of the San Francisco Paymap office in 2008, Scott relocated to Denver's Western Union office, taking on various Operations leadership and strategy roles, eventually joining the integration team for Custom House (acquired in 2009), which was subsequently rebranded to Western Union Business Solutions. During this stint of his career, Scott led various Operations teams and drove several transformation and integration initiatives.

After Western Union acquired Travelex Global Business Payments, Scott led the integration of the Go To Market functions before joining the global Product team. He's spent most of the last 6 years in a variety of Product roles, including running the governance and prioritization processes and acting as Product Director for GlobalPay for Financial Institutions (GPFI). Scott has most recently served as Chief Product Architect, where he formed the vision for Western Union Business Solutions' modernization program, helped launch the WU EDGE and NGO GlobalPay products, and lead a strong team of Product Managers responsible for WU EDGE, GlobalPay for Financial Institutions, the WUBS payment processing system, and our portfolio of legacy applications.

Scott has a degree in Business Administration from University of Phoenix and is based in Denver, where he lives with his wife and two daughters.

Pierre-Antoine Dusoulier,
Founder and CEO,
iBanFirst

THE IMPACT OF THE CORONAVIRUS ON THE BANKING AND FINANCE INDUSTRY

As the coronavirus outbreak worsens with a growing number of cases on a daily basis, the impact will not only affect public health but also have far-reaching connotations on the global economic outlook.

With fears rising, China's central bank have injected tens of billions of euros into the economy – to prevent the growth rate from falling too quickly. However, within China there's no signs of the virus slowing down, in fact shops are now losing considerable business due to the quarantine of individuals.

The effects of the coronavirus on the global economy

The coronavirus outbreak is set to cause significant damage to the global economy. As China is such a key player, the global economy faces threats from multiple channels.

Firstly, disruption to the supply chain is profound, with China being the largest exporter and second-largest importer of goods, it plays a crucial role in the global supply chain. The closing of factories and travel restrictions are disrupting the flow of supplies in and out of China.

Financial markets globally continue to fall as countries try to prevent further spread by restricting mobility. Such efforts are impacting a number of sectors – tourism, transport, retail sales, and education, as well as changes in investment activity and supply shortages. Research from the consultancy Capital Economics state that as the outbreak continues, the possibility of turning into a global pandemic increases, resulting in serious implications for world trade, markets and currency crises.

How has the coronavirus impacted the foreign exchange market?

On the foreign exchange market, it is the currencies of emerging countries that are suffering due to falling prices for commodities like coffee and oil.

Investors are increasingly seeking out the safety of the dollar and other hard currencies. However, indirect forces are also at play. The price of coffee, for example, has fallen by 18% as major coffee chains close down thousands of Chinese branches. The effects of the price drop can be seen in Brazil – a major coffee exporter, where this kind of setback has significant implications to the economy. Additionally, the industrial metal prices have also seen a sharp decrease due to slower Chinese growth. As Brazil is also one of the main industrial metal exporters, the economy has been hit twice as hard, resulting in the Brazilian real losing 6% of its value against the dollar within a few weeks.

The forex market of Petro states have also fallen victim to the coronavirus. With the expectation that residents of China will not be taking to the roads due to lock down and self-quarantining, oil prices have dropped nearly 14%. This has wider implications on the global economy as China is known as the world's biggest oil importer. The sharp decline triggered a 5% drop in the Russian rouble against the dollar within the last three weeks of January. Despite this, the loss of value in the Chinese renminbi itself has been extremely resilient, with only a mild decline when compared to other emerging currencies as it held to around 2% against the dollar.

The decline of 'safe currencies'

However, it's not just emerging countries' currencies that have been hit hard by the coronavirus.

As the impact travels West, measures are put in place to instil a sense of confidence that an adequate solution will be found. For the European Union and its faith in the euro, this presents a major challenge. This year alone, the euro's value has fallen by 3.7% compared to the US dollar, over a period of just 35 trading days. A comparable price and time ratio occurred halfway through November 2018, followed by a temporary recovery ending in January 2019 after the falling 120-day average was briefly exceeded.

Currencies traditionally viewed as safer – for example the Japanese yen have also been significantly impacted. In fact, the number of 'safe haven currencies' has narrowed to just the US dollar and the Swiss franc as the Euro secures limited support.

The resilience of renminbi

A strikingly small loss in value of the Chinese currency, renminbi, can be heavily attributed to the limited leeway the Chinese authorities allow in relation to currency. In order to prevent speculators mounting an attack on the renminbi, it is not permitted to fluctuate much against the dollar. For instance, doing business in China requires restrictions on large amounts of money. To convert large amounts to or from renminbi, the government would need to authorise the conversion, such an approach that prompted the United States to label China as a 'currency manipulator' – an accusation that was quickly withdrawn in January as part of the trade agreement between the two countries.

Despite the mild drop in value of the renminbi compared to other countries, the global economy is now so heavily interlinked that a significant event, like the coronavirus, in any of the major economies has a knock-on effect. With China holding the title of the world's second-largest economy, it's no surprise that we've seen a decrease in currencies across the world.

Ruben Salazar Genovez,
SVP, Products & Innovation,
Visa Latin America & Caribbean

Ruben Salazar is Senior Vice President and the Head of Products & Innovation at Visa Latin America and the Caribbean – He drives Visa's entire portfolio of Core Products, Digital Platforms and the Innovation centers in the region. With over 20 years of experience in financial services, he sets the direction for Product and innovation Strategy for the region, to ensure Visa continues to be the leading payments network.

HOW WILL COVID-19 FORCE A COMPLETE REWIRING OF BANKING, COMMERCE AND PAYMENTS?

Necessity is the mother of all inventions. As the world enters the unchartered territory of less human face-to-face interactions and becoming more and more dependent on technology to operate; innovation will flourish to reconnect the economic, financial and social fabric of the entire planet. Like how the brain repairs neurological connections when they are damaged, the entire planet is now rebuilding old and generating new connections to remain functional and viable.

Suddenly relatively new business models like; Netflix, Instacart, Postmates, Rappi, Glovo, GoJek and others, seems like a prophecy fulfillment of a world obliged to operate remotely and avoid human interaction. These frameworks are here to stay and regardless of the short or long-term effects of COVID-19 they will become a prevalent operating model for almost every industry.

The most obvious effect for the banking industry is the need to rethink the branches model and to accelerate the evolution of omnichannel platforms that can serve their consumers seamlessly without the intervention of human approvers and decliners.

To build more-resilient digital channels, banks may need to think "virtual" first and rethink the technology as an omnipresent platform connected to a core banking system able to interact with multiple tech aggregators. To deliver this connected core, banks will need, among others: a clear API strategy, a cloud based operating model, processes driven by artificial intelligence; an efficient middleware layer able to quickly integrate value-added services from multiple partners and a maniacal focus on simplified user interfaces.

Digital-only banks have a competitive advantage but the models are neither bulletproof nor difficult to replicate with a surprisingly simple tech stack. The match-point is around consumer centricity, simple solutions that accelerate adoption and usage. Banks will need to unbundle and deconstruct their own value proposition and consider all the products as a part of an open tech platform to accelerate integration with other technology solutions.

A "virtual" first bank will trigger innovation efforts that must solve for a highly constrained business reality: the necessary bank is branchless, it is not a monolithic tech core but an open tech architecture, the service model is 100% virtual; the user interfaces are simple; the product's fulfillment and life cycle management is 100% digital from first issuance to write-off; all processes are independent from human judgement – from underwriting to collections – and the customer service is built on a self-service engine that departs from the traditional call center to build user experiences running on machine learning algorithms.

And as such, the same constraints will apply to retail commerce. The new commerce will operate 100% in the cloud and will be designed for the remote consumer. Let's call it the "Amazonization" of all things commerce. It was already underway: regardless of the long-term effects of the pandemic, retail commerce and services will adapt to offer more of these experiences at a smaller scale. The store in your neighborhood will need to operate like a mini Amazon, and the industry will need to build infrastructure for fast and massive on-boarding of small merchants – opening a large space for acquires and Fintechs to collaborate.

Digital payments will continue to support the evolution of commerce, banking and interoperable technologies. Banks, issuers and acquires will benefit from accelerating new core technologies that makes remote commerce possible: Tokenization to increase authorization rates and devalue credentials in remote authorization flows; Push Payments to develop new use cases around payouts, disbursements, P2P and other money movement capabilities; APIs to enhance the utility of digital credentials; contactless to allow mobile devices and cards to interact with the POS in Tap to Pay environments particularly in urban mobility; as well as other technologies to accelerate terminal-less acceptance: SoftPos, QR codes and other entry points.

COVID-19 will accelerate the migration to a payment ecosystem that is: card-less, terminal-less, operates in a commerce space that has less human interaction and is increasingly driven by automated machine-to-machine transactions.

We hope that the world will soon come back to "normal", with minimum impact on human lives, but the pandemic will continue to influence the creation of new technologies that overcome the new constraints and redefine working, living, shopping and entertainment from home. Almost every other industry from agriculture to space travel will need to reinvent themselves and digital payments will play a pivotal role in connecting consumers and providers.

Hopefully the pandemic will also trigger the reinvention of human beings, governments, social interaction, sustainability and the way we live on this planet, but that should be the theme for a future blog.

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VIACASH – CONNECTING RETAILERS AND CORPORATIONS TO DELIVER FINANCIAL SERVICES TO CUSTOMERS

An Interview with Pavlina Popova, Director-Banking

Financial IT: Could you please tell us more about viacash?

Pavlina Popova: viacash is the biggest bank-independent payment infrastructure in Europe. It allows withdrawals and deposits of cash at brick and mortar store checkouts via barcode. Our partners are retailers – such as REWE, Rossmann, PENNY, BILLA, SBB, PAM and dm – have around 16,000 outlets. They offer customers the opportunity to handle their basic banking needs on the way. These include the payment for goods ordered online and bill payments such as utility bills and other invoices in cash. Furthermore, the customers may also make cash deposits to and withdrawals from their bank accounts if the respective banks offers the viacash feature.

viacash is based in Berlin and currently has 60 employees.

Financial IT: Could you please tell us about your own background?

Pavlina Popova: As Director – Banking at viacash I am responsible for strategic cooperations with banks. I came to banking during my studies, while working at Landesbank Berlin AG within the risk department. After my studies, I continued as a consultant for Simon-Kucher & Partners advising mainly regional banks regarding pricing, marketing and sales strategies.

At viacash, I enjoy working with all kind of different banks – challenger banks, online banks as well as traditional retail banks – and contributing to the transition phase that the banking industry is going through right now.

Financial IT: How does viacash stand apart from other payment solutions?

Pavlina Popova: In comparison to other payment solutions, viacash creates a bridge between the "old" world of cash and the new digital way of living, whether it is shopping online or using mobile banking. It offers the possibility to continue to pay with cash or to deposit money and spent it online in the digital age. It is as well aimed at people with an affinity for cash who do not have a credit card: examples include young people who receive pocket money in cash or people working in professions that have a lot to do with cash e.g. waiters, hairdressers or taxi drivers.

Financial IT: How is viacash going to keep up with this constantly evolving technological change?

Pavlina Popova: We provide advantages to three very different groups of actors – the retailers, the customers and the banks. Our solution reduces the overall costs for handling cash – which is good for retailers. The solution reduces the need for expensive ATMs – which is good for banks. Private customers can deposit or withdraw money quickly, easily and without a card issued by their bank at any of our retail partner stores – so they gain from value added services.

Financial IT: What are the upcoming milestones that you have for viacash?

Pavlina Popova: Over the next few years we intend to expand our network of partner retailers in the existing markets and further in Europe. Currently we are operating in Germany, Austria, Switzerland and Italy. Our next target markets include Greece, France, the UK, Spain, Portugal and Poland. Right now, we have three offerings: payment of online purchases; settlement of invoices and cash withdrawal/deposit. In due course, we will introduce new offerings.

viacash

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Pavlina Popova,
Director-Banking,
viacash

Financial IT
Innovations in FinTech

BIOMETRIC PAYMENT CARDS: READY FOR LAUNCH?

Michel Roig,
Senior VP, Head of Business Line Payments & Access,
Fingerprints

In the last decade, millions have interacted with biometric authentication via their smartphones. When they have access to it, 82% of consumers use some form of biometrics to unlock their smartphone and authenticate apps, but mobile isn't the only industry where this technology is offering transformative benefits. The payments world is now gearing up to bring biometric authentication solutions to scale.

Following a flurry of activity, the biometric payment card is closer to being in our pockets than many might think. And in the last year, significant headway has been made: several new contactless pilots with banks have been announced, tipping the total above 20; new accreditations have been achieved; the first volume order of card sensors has been placed, the first commercial biometric payment card launch was announced last November and the first certifications have been passed.
All compelling achievements. But considering the multitude of factors needed before any technology reaches the masses, how close are we to biometric payment cards becoming a reality?
To assess market readiness, it's worth exploring three key elements: consumer pull, industry acceptance and partner action.

Consumers Are Ready

From a consumer perspective, our recent research found biometric payment cards could not be rolled out soon enough, with over 56% of consumers saying they'd prefer using a biometric sensor on their payment card over PINs and passwords.

Fear of fraud is one of the main drivers of consumers' eagerness to strengthen their payment authentication with biometrics. Compared to just 38% of consumers in 2017, almost 6 in 10 now worry about digital payment security – from contactless cards being stolen and used fraudulently, to 'shoulder surfing' and skimming.

To add to consumers' concern about security, there's also great frustration with the most used payment security measure: PINs and passwords. 66% of consumers feel there are too many PINs and passwords to remember and 41% use the same PIN or passwords across several services and apps. A problematic recipe for a poor UX and weak security...

On top of that, with over 80% of consumers that have a contactless-enabled card using it on a weekly basis, perhaps now more than ever consumers are irritated by the spending cap. This prevents use of contactless for all transactions and forces PIN entry – an increasingly unwelcome

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experience in light of current hygiene concerns.

Biometric technology overcomes both consumer worries and frustrations, as it provides a stronger and more hygienic layer of protection while eliminating the need to remember a single password or PIN code. After all, who can forget their fingerprint?

Although many consumers are ready for biometric payment cards, some concerns persist about their security and effectiveness. Thankfully, though, as biometric payment cards go through the payments industry's robust testing processes ahead of commercial roll-out, these concerns are more an issue of education. So, how are the cards standing up to the industry's tests?

Entering the Payments Ecosystem

Like most sectors, payments has put in place a set of industry standards and testing requirements that need to be met before any commercial payments product can 'hit the shelves'. Biometric payment cards have already made major progress in demonstrating they are able to meet these, meeting several testing and certification requirements in the last year.

Industry body EMVCo is the organization at the center of the ecosystem. It manages the EMV® specifications that ensure worldwide acceptance, interoperability and security of contact and contactless chip cards and terminals, and the related testing processes. From November 2019, all of Fingerprints R&D sites have been accredited by EMVCo, demonstrating the development sites for our biometric payment card sensors operate in compliance with security best practices.

In addition to achieving certification and adhering to EMVCo requirements, any payment card or chip-based payments product also needs to comply with the unique requirements implemented by the payment network, whose rails the transaction will run over. The first approval of this kind for a biometric payment card was achieved by our partner Thales earlier this year. The significance of this cannot be overstated – but what exactly do these tests demonstrate?

Testing, testing…

Payment network requirements broadly define a series of hardware and software tests that guarantee payment cards can integrate seamlessly into the current card ecosystem and match the level of security and privacy of the payments industry. Tests of the hardware include assessing thickness and size, temperature and humidity exposure thresholds, durability and even chemical and UV light testing.

From a software perspective, rigorous vulnerability analysis and penetration testing is conducted by an expert independent lab to expose any areas of weakness. It's worth noting that, in biometric payment cards, no biometric data leaves the card, and the matching process is confined to the card. This means the impact on this part of the testing is minimal and, reassuringly for consumers, there's no cloud-based database of biometric data to secure.

While further tests for each payment network remain, passing the first round of these tests demonstrates the readiness of this technology – a hallmark of quality and trust. So, how are banks responding?

Banking on Biometrics

Undoubtedly, the first commercial accreditation from a global payment network is expected to spur on more launches from banks. In fact, several biometric payment card trials, including Crédit Agricole's in France, have already announced a planned commercial roll-out for this year. This action aligns with our recent research finding 90% of banks are planning to implement a biometric strategy by the end of 2020.

While convenience and security drive consumer excitement for biometrics, biometrics' ability to further expedite contactless adoption could be a major influencer in causing banking executives to put it high on their agenda, offering a great UX, quicker throughput and increased card transactions.

Adding biometrics to contactless cards is a natural evolution of the form factor – and a compelling option for banks at whatever stage of contactless card implementation they're at. By strengthening security without impairing the UX, banks can benefit from happier customers and reduced fraud. For those who have long-since implemented contactless, removing the contactless payment cap has become their focus to encourage increased use and remove consumer confusion at the POS.

Not to mention that, in light of the current international pandemic, many countries such as the Netherlands and the UK have already tentatively raised payment caps to reduce cash use and PIN-pad entry. By adding strong biometric authentication to the 'tap', banks can finally feel empowered to remove the payment cap once and for all.

Ready, Steady…Go!

These milestones are extremely significant in taking these cards from trial to commercial launch. While other payment networks and technology partners will follow similar processes before we see significant deployment figures, contactless biometric payment cards have already shown their quality and credibility to enter the payments world. Combined with the ever-growing consumer pull, the business case for banks is increasingly attractive. For those early adopter banks making the move now, the benefits will be great. For those treading water, it could soon become a game of catch up to launch their own biometric payment card…

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FINGERPRINTS

Financial IT
Innovations in FinTech

CAN FINANCIAL INSTITUTIONS HIT A HOME RUN BY LEARNING FROM SPORTS ANALYTICS?

In a time where data is the world's most valuable resource, financial market participants are spending more time searching for an edge using alternative data sources. In the world of sports, technology is becoming increasingly sophisticated bringing to light seemingly limitless datasets which can be used to produce valuable predictive analytics using AI.

Professional sports are placing major emphasis on advancing technology, but how can financial services firms trading in global markets learn from sports use of analytics? Tracking the performance of athletes and sports teams, including baseball, is nothing new.

From batting averages to stadium ticket sales, the importance of sports analytics is vast and traverses across the industry. And now, there a numerous ways AI, machine learning, and data science are transforming the world of sports, including scouting, recruiting, training, athlete health and advertising.

Similarly, AI and data analytics have become more influential across financial markets in recent years – investment banks and asset managers will need to make use of data through AI systems that will produce meaningful predictive analytics. From managing risk to discovering alpha, financial tools are providing access to more data and data of a higher quality.

Yet, what is needed is intelligent financial data management. Unstructured data has long been seen as too expensive to import and difficult to digest and provide value, but as alternative data budgets grow, firms will start taking chances on alternative data in order to unlock unforeseen advantages.

Proactive error detection

So, what benefits can these tools bring? One is proactive error detection. This occurs before the usual validation rules even kick-in and can be key for improving performance. Processing data from a variety of feeds and data vendors poses significant risk because the data needs to be independently validated,

Tom Stock,
Senior Vice President of Product Management at GoldenSource

by a defined set of rules, and then cleansed as necessary.

The problem is that, more often than not, validation processed are set up retroactively after problems have already occurred. And with new data feeds, it's difficult for firms to keep up, having clearly defined rules for what constitutes usable data.

But now, machine learning routines can detect outliers proactively by using previously validated data of the same specific type, meaning they can detect errors without the overhead of writing additional validation rules.

In the world of sport, this is like being able to accurately assess a player's state of mind and general health before he or she even turns up for training and subsequently knowing whether to send them straight to the gym (risk systems) or the physio (exception management team).

Data mapping

Once validated, the next step is to load the data quickly, link the adages quickly, and then analyse. But all your different data now needs to be put into a standardised structure and it takes a huge amount of time to consolidate hundreds of feeds and thousands of fields for analysis and mapping. It's a significant investment for any sized firm.

However, Natural Language Processing (NLP) matching techniques provide a solution. These tools can use a series of methods, including a configurable combination of ML and statistical techniques, to create data profiling which are then used to suggest mappings. As such, the data can be applied more quickly and effectively. This is proving to be very effective in helping analysts to reduce the time and money spent on decoding data.

Accessing unstructured data

Over the last several years there has been an explosion of data available to help buy side firms, both to improve operations and investment decisions. End users, such as market analysts, are demanding direct access, to load and analyze this data to support their research and make timely decisions.

However, data from new sources, such as web scraping, is increasingly coming in semi-structured or unstructured forms, which makes it more difficult to analyse. As such, new sets of tools enable self-service data access while still maintaining good data governance. This allows end users to load data directly into a 'sandbox' area, register the data for governance purposes, cleanse the data and run analytics against it.

In addition, users can perform common NLP functions against unstructured data, including entity extraction and resolution, sentiment analysis and PDF extraction. This allows users to extract company names from financial reports and news stories and link them to the company information as well as determine if the content of that story is positive or negative for their investment position.

Overall, while it's uncertain where AI and data will take the sports industry, it's clear that the potential for companies and financial firms to benefit from it exists. From risk mitigation to market predictions, the potential applications of intelligent automation in finance are significant and it will undoubtedly shake up the market, providing opportunities and a jump in productivity.

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HOW HAS **3D SECURE** AUTHENTICATION EVOLVED AND WHAT DOES THE FUTURE HOLD?

As the online retail sector *continues to see steady growth*, it's increasingly vital for businesses to implement reliable online payment security measures.

Security initiatives such as 3D secure authentication (3DS) are helping retailers do just that. However, the general feeling is that the original version of the system provides a clunky solution. Since it was introduced to the online payments world in 2001, it's taken almost 20 years to introduce a new version.

The latest step in the 3DS journey was the launch of 3DS 2.0 late last year. While 3DS secure 2.0 is still very new to the game, it's an interesting time to take a look back at how the initiative has evolved over the years and ask ourselves: where do we go from here?

3DS 1.0: the first generation

At the time of launch, 3DS was seen as a game-changer in the world of online payments security. It was designed to offer customers an easy secure authentication step, verify that it was the card owner making the payment and reduce the likelihood of fraud.

If you've shopped online over the last few years, you will have experienced 3DS 1.0. It's served as a popup that sends you to a separate page to verify who you are. Yes, it's an additional step in the online shopping journey. But it's a necessary step to leave customers less exposed to potential fraud. For businesses, another major benefit is that the liability for fraudulent chargebacks shifts from the retailer to the issuing bank.

So far, so good. However, the execution of 3DS 1.0 left a lot to be desired.

3DS 1.0: what didn't work

Ultimately, 3D secure 1.0 fell short when it came to its integration in the customer journey. According to a study by Adyen, the implementation of 3D secure resulted in a significant drop in conversion rates in major markets such as Germany and the United States.

There was room for improvement in many areas:

- 3DS 1.0 served authentication prompts in the form of a pop-up. For those customers that hadn't seen an authentication popup window before, this extra step felt invasive. From a customer's perspective, it was an additional step in their shopping experience. If we look at cart abandonment statistics post-implementation, we can infer that it could also have confused some shoppers, resulting in businesses losing customers at the final stage.
- Online businesses strive to create a simple shopping journey that is convenient for

CURVE

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Tom Hay,
Head of Paytech at Curve

Tom Hay is head of Paytech at UK fintech Curve and is a top payments professional with in-depth understanding of information technology. Throughout his career, Tom has designed cutting edge real time payment solutions which are used by Tier 1 banks and by national clearing system operators. Having worked in companies ranging from start-ups to national payment processors, Tom is delighted to be part of the fintech revolution, using technology to deliver great user experiences and business value.

customers. From a merchant perspective, any extra step can be seen as a potential barrier to conversion, and the original 3DS was seen as a hindrance to a seamless customer experience.

- For regulators, the increasing problem of online card fraud led to the demand for stricter anti-fraud laws. There was also pressure from merchants who wanted a security authentication step that would integrate into their customer journey much more organically.
- With mobile shopping poised for further growth, there was also a clear need for a security step that would work well on mobile and apps. 3D secure 1.0 wasn't well optimised for mobile checkout.

Enter 3D Secure 2.0

At Curve, we've just implemented 3DS 2.0 to make online payments safer for all our customers. Introduced in late 2019, 3DS 2.0 is the new and improved iteration of the 3DS system that all card issuers are obliged to use. Businesses have been slow to adopt the new version, and regulators have now extended the deadline for 3DS 2.0 integration from the end of March to the end of the year.

As mentioned, 3DS 1.0 had the unfortunate consequence of increasing cart abandonment. This is understandable – many customers feel perplexed or nervous entering their details on a popup, something that as consumers we have been conditioned to treat as spam.

3DS 2.0 places biometrics at the heart of the verification process. Instead of entering a password on a pop-up or receiving a text message verification, customers can now verify their payment through their banking app. They can even complete their payment with just their fingerprint (or in some cases, facial recognition).

This change is undoubtedly going to have a significant impact on merchants and acquirers. As 3DS 2.0 makes the whole experience a lot more frictionless for consumers, it increases opportunities for sales conversions. According to recent studies, 3DS 2.0 has already reduced checkout times by 85% and cart abandonment by 70%, respectively.

On a more functional level, 3DS 2.0 reduces transaction costs, increases authorisation rate, and shifts liability away from the merchant to the acquirer. All of this is good news for retailers.

3D Secure: what does the future hold?

While huge leaps have been made in fraud prevention, it's not a perfect system yet. Although 3DS 2.0 reduces false-positives triggered by fraud prevention software and improves the customer experience, there is still work to be done to make the overall fraud prevention experience seamless for all.

Hopefully, it won't take too long before we see even more modern fraud prevention techniques kick in and take effect. For instance, there are already softer detection tools out there which indicate elements of risk without impacting the customer, especially with advancements in hardware such as biometrics in mobile phones.

To help better detect fraud, businesses can draw upon a variety of methods such as facial authentication, voice authentication matching and lip movement, anomaly detection and behaviour analysis. Taking the example of behaviour analysis, businesses can better analyse the risk of fraud simply by flagging anomalies in behaviours, for instance, keyboard rhythm or swipe patterns. Analysing users discreet behaviours provides continuous risk-based assessments that the user is who they say they are – without the need for pop up boxes or friction, as experienced by many in 3DS 1.0.

It'll be interesting to see how this space evolves and what the next iteration of 3DS looks like. In the meantime, we look forward to improving the Curve customer experience with 3DS 2.0.

Financial IT
Innovations in FinTech

SMEs and The Growing Demand for Better Global Payments

James Butland,
VP of Global Banking and Head of Europe at Airwallex

James has a background in Financial Services working for some of the world's leading asset management, hedge fund and fintech firms. James joined Airwallex to set up the European business, taking the firm through the FCA licensing process and scaling the team to provide payment services to European clients.

We live in a global economy. And paying for goods abroad has never been easier. Within the world of consumer travel, for example, we've seen a shift from dollars everywhere or travellers cheques, to cheap card payments and withdrawals in less than half a decade. But with global payments for SMEs, this hasn't been so straightforward. Businesses have often missed out on innovations that consumers have had access to a lot sooner. Cross-border payments have long been the victim of high-transaction fees, slow, manual processes and reluctance from banks or FX traders to do things differently. But things are changing. As business leaders realise how easy it is for them to make payments on their travels as a consumer, they're demanding this ease of access when they make payments as a business.

SMEs at scale

232,000 SMEs exported goods to overseas markets in 2018, representing 10% of Britain's small and medium-sized businesses, and this number is growing; which means SMEs are more ingrained in the FX world than ever before. And within this world, SMEs have largely been short-changed. From the complexity of understanding how the rates are charged, to the lack of understanding of the back-end systems of those FX providers, SMEs have often received a raw deal. According to a paper from the European Central Bank, banks across Europe have been earning hundreds of millions of euros a year from overcharging small corporate customers for foreign exchange services Clearly there needs to be a greater level of transparency in this space. And that's largely why there's been an explosion of fintech innovation in the past few years. Platforms such as Airwallex are aiming to help SMEs to manage their margins through better visibility of the FX rates they are actually paying. Nowadays, for example, as a UK business working with Airwallex can set-up a local collection account in Australia (with local bank details); buy a product from a Chinese warehouse in CNY, or transfer revenue from the US back to your British based account in GBP all within the same day. And this can be done as low-cost as possible, due to the proliferation of fintech focused on cross-border payments, which has significantly reduced overheads to the benefits of businesses.

It's through platforms such as ours that SMEs are able to access the interbank exchange rate, with completely transparent and low-cost fees. Having a virtual bank account within other markets – such as the Eurozone – also means they're able to act like a local, reducing the need for other overheads such as establishing their own operations within that market. This is particularly important with Brexit on the horizon. Potential economic turmoil usually impacts SMEs the hardest, and this is why it's so important that these businesses can equip themselves with technology to weather the storm. Innovations within payments will unlock value for them, meaning they can mind their margins and continue to thrive.

On the front foot

The key here is better access to banking solutions that help SMEs with ease of use and instant access to their accounts, as well as a better understanding of how FX affects their margins. By benefitting from new business-focused fintechs, SMEs will have better access to their hard-earned money – sending it where they please. In the long run, these partnerships will put SMEs on the front foot, no matter what challenges lie ahead.

Airwallex

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trustshare_ What is escrow infrastructure as a service?

Big question. Let's break this down. Let's start with "What is Escrow?" then move on to "What is Infrastructure as a service?" and finally we'll discuss how the combination of the two is going to revolutionise the way transactions are made - especially in markets like construction and delivery where in 5 years time it will be the standard way to pay and protect yourself.

Escrow is where a buyer will guarantee a transaction is made by paying a trusted third party first who holds the funds until the seller has completed the job. This ensures that money will only be released to the seller once both parties reach consensus and also ensures that sellers do not go unpaid if they fulfill their end of the deal. In this process, both parties are also fully verified to make sure that you aren't transacting with a criminal or potentially a dog!

However, despite being an ancient way to pay, only recently have everyday consumers started using it. This is because historically escrow was restricted to payments made via lawyers with slow processing and, as you can imagine, exorbitant costs, therefore restricting escrow to very large transactions like house purchases. At trustshare, we have built out the infrastructure layer for new entrants to unlock the ability for smaller online transactions to be handled via escrow.

To market escrow well you need a lot of "trust capital". Consumers first need to know you and next need to trust you to handle their money and not run away with it. They also want reassurance that you understand their market and will do the right thing. It's very difficult for regulated escrow firms to combat this because they are relatively unknown to the general public.

This comes onto our next point: "What is Infrastructure as a service?" Infrastructure as a service is a type of offering where a company provides the core building blocks of a service but allows its clients to combine these into brilliant end products that perfectly fit their markets' respective needs.

Why is this important in the escrow market?

1. Trust Capital
Escrow is currently not offered by firms with a lot of industry trust capital. Consumers want large household name brands or industry leaders safe-guarding their transactions, rather than relatively unknown escrow providers.

2. Market knowledge
Consumers want their escrow providers to have extensive market knowledge in their particular industry to answer questions and make balanced judgements. For example, trade associations and consumer bodies are well suited to do so, generic escrow providers are not.

3. Product-market fit
The process of buying a car from a private seller is completely different to running a multi-stage housing development which in turn is almost the polar opposite of handling last mile delivery. An infrastructure as a service offering allows the businesses in the know to build a product perfect for that particular use case. Think multi-stage payments, QR code driven dispute handling or car history guarantees.

Escrow will soon be the gold standard way to pay in multiple markets - especially the construction industry (in a similar vein to how Klarna's buy now, pay later method of payment has become mainstream in the fashion industry). However, the gap to bridge is to work with key players in each industry to allow them to leverage their trust capital, reputation and network for large commercial upside. The commercial opportunity here is huge - some of our clients are increasing their total revenue by 300% per member for every transaction made and several other companies have launched from scratch off our infrastructure.

Trust and network effects are the two most important assets modern day platforms can have. When Andreessen Horowitz says that "every company is going to become a Fintech company", we believe that escrow will be a key mechanism to facilitate this by providing the world with trustless transaction frameworks.

Powered by

PAYBASE_

Financial IT
Innovations in FinTech

BLOCKCHAIN REGULATION WILL MAKE OR BREAK THE FUTURE OF DIGITAL TRADE

It's 2020, and trade in data is as worthy of discussion as trade in goods. Yet there are no global, standardised rules around it. It's time to face up to the reality that the regulatory infrastructure for digital trade needs to be updated, writes R3's Alisa DiCaprio.

Upcoming free trade negotiations between the US and UK give these two major economies the opportunity to take decisive action, shaping new global rules for the digital economy through data trade provisions. And at the heart of these discussions will be how to regulate the technology that will form the infrastructure for the future of global trade: blockchain.

According to negotiating objectives released by the UK's Department for International Trade (DIT), the country's trade officials are making it a specific priority to influence global blockchain regulation when they meet with their US counterparts in the coming months.

This is a welcome move that has the potential to provide much-needed certainty to developers and users of a technology that is slowly but surely replacing the creaky legacy infrastructure of yesteryear. If handled appropriately, the outcome of these negotiations can reduce the administration, financial and compliance burdens that can act as a barrier to entry for blockchain.

In many ways, blockchain is the underlying catalyst that has kickstarted the broader discussions happening today around digital trade. After all, the global interest in blockchain is geography-agnostic, reflecting the technology's ability to provide a global cross-border digital trade network.

We are at a unique point in time where resistance to regulations around technology is historically low. It's now time for negotiators in both free trade agreements and the World Trade Organization (WTO) to take this up. It's time to update the global rules for trade to reflect the reality of technological change and digital goods and services.

So how can negotiators add blockchain to their discussions? Use it to inform improved rules in three areas – standards, domestic barriers to digital transactions, and data security. These three areas could update the template for digital chapters in FTAs, and, ultimately, set out the parameters of a WTO agreement on trade in data.

Driving towards a global standard

In order to move towards a truly digitised and connected ecosystem for global trade, mass adoption on a global scale is essential. This elusive network effect can only be achieved if legislators prioritise forward-thinking and inclusive regulatory solutions that lower the barriers to entry for all types of companies involved in the trading process. But this must not be at the expense of maintaining high levels of data protection and privacy standards.

One key goal in trade negotiations is to improve competition. Today there is some concern around blockchain adoption due to uncertain regulatory treatment and uneven rules and implementation around paper documentation.

If only a handful of firms adopt a blockchain solution for trade such as Marco Polo, for example, the solution is useless if one company needs to trade with another that is outside this circle of early adopters. All the other benefits of blockchain such as speed, efficiency and lower costs mean nothing if you cannot use the platform to connect with the necessary counterparties. But this mass adoption is difficult to achieve without consistent global rules and standards around the underlying technology.

How can a bilateral negotiation promote blockchain innovation? Introduce rules about digital exchange of documents. They could do this by promoting implementation of United Nations Commission on International Trade Law (UNCITRAL) model laws. Because these have been negotiated by a group of countries, they are viewed as a neutral set of suggestions. The US in fact already meets or exceeds most suggestions under the UNCITRAL model law on electronic transferrable records.

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Alisa DiCaprio,
Head of Research Global Trade Strategy, R3

Alisa DiCaprio is the Head of Research Global Trade Strategy at R3 in New York City. She joined from Asian Development Bank where she was a senior economist working on digital trade, trade finance and innovation. She has also worked in both the public and private sectors on export promotion, trade negotiations, and labor issues. Her PhD is from MIT, and she holds a BA and MA from Johns Hopkins University.

Updating English law

A second recommendation is to remove domestic barriers to transactions. Trade is transactional, which means that it needs to be underpinned by laws. English law is by far, the most prominent jurisdiction of choice for international trade contracts. Yet, there are some elements that do not support digital transactions.

If English law were to be updated to ensure the legal force of electronic documents and instruments, this could cross the global threshold and start a cascading affect to all other legal structures. Promissory Notes and Bills of Exchange are two instruments that are not able to be digitised under English law. Changing this situation is well within the regulator's grasp.

Because of its position as the jurisdiction of choice, the UK has incentive to tweak the last remaining issues in English law. The FTA offers the opportunity to identify and update those areas of English law that are barriers to digital trade transactions. This could be included in the digital chapter.

Reducing barriers to trade in data

A third recommendation is to include elements of data transfer and security. The USMCA has already added data localization restrictions. The US-UK FTA should also reduce barriers to free flow of data. Data localization clearly violates the WTO principal of MFN, but isn't covered and so distorts trade without limit. Or rather, presents a way for countries to seek to unilaterally limit or promote it.

The agreement should also recognize moves toward decentralized identifiers (DID). While not specific to trade, it is key to some of the benefits that blockchain is providing to international trade. It relates to the idea that blockchain allows for types of identifiers that are able to be certified independently of a central registry. By opening up the ability of small businesses and businesses in developing countries to own their identities, this feature of blockchain can increase financial inclusion, open up new opportunities for trade finance, and help integrate these firms into the global economy.

A digital future

In addition to the promise of the upcoming US-UK FTA negotiations, there are a number of initiatives happening that support these issues globally. The International Chamber of Commerce (ICC) is updating all of its Uniform Rules to be digital friendly, as one example. One of these working groups has developed a digital trade "roadmap" that identifies specific actions countries can take to move the digital agenda forward.

The single underlying challenge for both countries and the users of blockchain technology is that there is no single government official responsible for "digital trade." But there is now an undercurrent of interest. FTA negotiations can solve this problem at a regional scale.

Blockchain has the power to be a transformative technology. It is adjusting how trade is originated, transacted and settled. 2020 is the year that the WTO and domestic governments need to recognise that this opportunity won't last forever. The time for leadership is now.

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THE CHALLENGE AND OPPORTUNITY OF AN INTEGRATED PAYMENTS SYSTEM

Payments are a vital part of the UK economy; every year, the BACS, CHAPS and Faster Payment Systems see over eight billion payment messages exchanged.

It is crucial to ensure that these systems are accessible, interoperable and allow innovation to ensure efficiency in UK payments.

The UK's New Payments Architecture (NPA) proposes a radical overhaul of the current shared payment systems infrastructure. The model will bring together the processing of BACS and Faster Payments under one standard- ISO20022. It will also mean changes to current network infrastructure and existing security protocols.

The implementation of ISO20022- a regulation that has been widely adopted around the world – is an enabling factor in the delivery of the NPA. ISO20022 will allow banks and financial services access to enriched payment data, effectively giving them the ability to provide their customers with an enriched user experience.

While there is strong awareness of the new requirements, not enough of the banks outside the top tier are waking up to the competitive edge this transformation could bring them. Beginning to think about this transformation now will enable financial services to innovate their payments services.

New regulation for the payments industry could bring real benefits to those who are quick to embrace change – and problems for those who are slow off the mark.

The Basics

ISO20022 is essentially the move from legacy MT standards, to modernise the ways in which banks and other financial services institutions communicate payments. The new standard covers all financial information transferred between institutions, including payment transactions, credit and debit card transactions and other financial information.

As the industry continues to expand and innovate at a rapid rate, it is now more essential than ever to welcome a new common standard like this. The challenge now is for banks and financial institutions to ensure they are prepared or run the risk of falling behind in their ability to develop innovative, competitive products and services for their customers.

The Challenges

The NPA presents the biggest changes to the payments processing system since the 1960s. Changes to this scale brings with it challenges that the industry must act on to ensure a smooth transition and, in the end, compliance. Those with responsibility for planning for regulatory change and overseeing this transformation will have a significant checklist to work through.

This will involve gaining a deeper understanding the different types of financial transactions your organisation undertakes, assessing risks and opportunities around the new legislation, anticipating fraudulent behaviour and testing whether your business processes fit for purpose in this new banking world.

On an operational level, there is a need to investigate whether existing IT estates can cope with increased workloads.

If there is a need to transition to legacy tech estates, then a new challenge emerges: who

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Rob McElroy,
Managing Director – Financial Services,
Sopra Steria

is going to help overcome these issues? The reality is – as an industry – there is a lack of appropriate skills in the workforce to assist in the crucial changes this entails.

The shortage of knowledgeable and skilled staff in this region will almost certainly make deployment challenging for banks and financial institutions. As it stands, a significant lack of COBOL engineers within the financial services industry means preparing for migration is daunting. With bigger institutions offering large salaries, it is becoming more expensive to attract talent, and even harder to retain those whose skills are in such high demand.

Banks must begin to look at other ways to acquire the appropriate workforce to complete this migration. By outsourcing this to a third-party partner, this responsibility is shifted and allows institutions to focus on more strategic priorities.

The Benefits

A coordinated approach in adopting the ISO20022 standard in the form of a New Payments Architecture brings challenges to the industry, however, the reward for overcoming them will be far reaching.

The new standard allows rich, quality data to be transmitted between banks. As it stands, payments are limited in their structure and space; ISO20022 will accommodate a wealth of additional fields and data items. This information enables more efficient processing, as well as presenting several new, differentiated services for both banks and customers alike.

This will allow banks and financial services to begin to offer tailored, data led solutions to improve their customers overall experiences. For instance, depending on the data collected, banks may be able to offer location-based services and offers, or specific benefits for customers who may, for instance, shop consistently with the same retailer. This enhanced and standardised data will also aid in the detection of fraud and financial crime.

Alongside this risk will be reduced and international payments will flow more easily across borders. As entry costs fall, competition will rise, facilitating the development of new, innovative services for users.

This will be the prize for those who move quickest to realise these advantages, developing a real competitive edge against their rivals.

Preparing for the NPA and ISO20022

The New Payments Architecture in the UK will be game-changing for the industry and a positive step for consumers. Richer data and quicker transactions will ensure a more competitive industry.

It is estimated that by 2022, *80% of high value transactions* will be completed using ISO20022-therefore it is imperative for institutions to act now in order to ensure compliance.

Any change of this magnitude presents significant challenges and ISO20022 is no different. But the message to industry is clear – the quicker you act, the sooner you can ensure sufficient strategies are in place to deliver these changes and innovate new services for customers.

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THE BORDER DICHOTOMY: PHYSICAL BORDERS CLOSE WHILE MONEY BECOMES BORDERLESS

It's hard to deny the political shift away from globalisation. In recent years, we've witnessed rhetoric from various corners of the world calling for stronger borders amongst geopolitical tensions. The wave reversing global integration is now manifesting into regulation at this very moment in time.

But an interesting dichotomy is unfolding before our very eyes. While physical borders are closing and the world is shifting away from globalisation in many aspects, financial borders are opening up with more options to do business and send money across international geographies in real-time.

Financial access for all

The inherently local nature of banking and financial services has historically manifested into a lack of financial access for migrant communities. For too long, banks and traditional wire services have taken advantage of hard-working migrants through inefficient processes and predatory financial fees.

The figures speak for themselves. The global market for remittances – funds migrants send to their countries of origin – is huge and growing, with US$689 billion sent abroad globally in 2018 according to the World Bank. But it's what happens with that money that is important. Remittances are a vehicle for international development, effectively lifting people out of poverty by funding education, healthcare, housing, and business investments. They allow families that want to make more of their lives to move abroad and seek out better career prospects.

Yet a hefty chunk of the money sent is gobbled up before it even arrives at its destination. The World Bank puts the global average cost of sending US$200 at around 7 per cent – that's US$14. Traditional incumbents have been charging anywhere between 11 and 29 percent of the transfer value, and few can settle those transfers in anywhere near what consumers should accept.

But with more people crossing borders – temporarily and permanently – there is a clear need for financial barriers to be torn wide open. And there's movement on this front, with borderless financial services having created access for migrant communities the world over.

Fintechs lead the way

The fintech market – particular the hub of startups that sits within Europe – is leading the way in opening these financial borders. Digital money transfer services facilitate the flow of money across borders without brutal fees and hidden exchange rate mark-ups, empowering migrant communities by giving them total control over the movement of their money.

For example, money transfer company TransferGo is partnering with remittance network Ripple to change the landscape of outbound remittances by giving consumers faster, more secure, and more straightforward transfer options through advanced blockchain technology.

As well as empowering consumers, a separate cohort of fintechs specialising in payments are opening financial borders for businesses of all sizes. Companies like Stripe, a payments platform, are unlocking the global opportunity for online businesses, allowing them to accept payments in foreign currencies, scale into new markets, and tap the growing global e-commerce market.

Ahead of profits, the brightest fintechs have a purpose driving what they're really trying to accomplish. Disrupting the red tape and inefficiencies within traditional financial services models has been the raison d'être for fintechs and needs to remain that way for both the success of these companies and the communities they serve.

Physical borders may be closing in and some of the loudest voices in the mainstream media may suggest a trend away from globalisation, but we're living in a world made smaller by instant messaging and cheaper travel – and equally, made better by borderless finances and increasing remittances.

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Daumantas Dvilinskas,
CEO and co-founder,
TransferGo

OVER HALF OF ATMS WORLDWIDE TO OFFER AUTOMATED DEPOSIT BY 2024

Banks are continuously seeking to encourage their customers to eschew over-the-counter transactions in favour of self-service machines such as ATMs in order to reduce costs, cut queues and refocus branch staff on more commercial activities. One of the ways they are trying to achieve this is by installing ATMs that allow customers to make cash deposits automatically (ADTs). According to RBR's new study Deposit Automation and Recycling 2019, there were 1.4 million such terminals, with this number set rise to 1.6 million over the next five years.

Demand for deposit ATMs rises as banks opt for multifunctional terminals

Whilst the number of ATMs fell in 2018, as revealed in another RBR report Global ATM Market and Forecasts to 2024, the number of ADTs actually grew. There has been a growing global tendency for banks and IADs (independent ATM deployers) to replace older non-deposit ATMs with newer multifunctional machines. Many financial institutions believe that one ADT can replace more than one traditional ATM without having to compromise on customer service.

This pattern is also seen in the number of bank machines that only accept deposits but that do not dispense cash (SATs). These types of terminals are also being replaced by multifunctional ATMs. In Russia, where half of the world's SATs are installed, nearly 10,000 such terminals were withdrawn in 2018. Traditionally these machines were used for low-value cash deposits for mobile phone top-ups or paying utility bills but in recent years, cardholders have begun to carry out these types of transaction on a mobile device instead. Simultaneously, the number of high-value SME and merchant deposits has been rising so banks have reacted by doing away with SATs and installing multifunctional ATMs with bulk-note acceptance that are much better suited for such transactions.

RBR's research also reveals that customers have been using ADTs more often in recent years. They increasingly accept the deposit technology and appreciate its benefits, namely quicker account crediting, reduced queuing and extended access outside of traditional branch opening hours.

Importance of recycling continues to grow

It's not just the automated acceptance of deposits that banks are interested in but something that goes on behind the scenes unbeknownst to the customer – cash recycling. This functionality that allows deposited banknotes to be dispensed directly to customers can significantly drive down cash replenishment costs for FIs. The proportion of ADTs that comprise recyclers has been growing over the last five years and by the end of 2024, more than two thirds of ADTs are expected to be recyclers. Whilst in 2018, the majority of recyclers were found in the Asia-Pacific region, exponential growth in Latin America and the Middle East and Africa is predicted to even out the global spread over the next five years.

Mexico is an excellent example of this rise. Current reservations regarding the financial viability of investing in recyclers (they can be significantly more expensive compared to a standard ADT) owing to poor note quality are anticipated to be assuaged by technological advances. China is also expected to see a growth in the percentage of ADTs that can recycle cash, with the vast majority of banks interested in utilising this capability across all their ATMs by 2024. This is even more remarkable given that cash is being rapidly displaced by mobile payments in China.

Brazil's exponential growth

Brazil ended 2018 with nearly two and a half times as many ADTs than just a year earlier, with more than 5,000 such ATMs. This trend is set to continue, with the number expected to more than treble between 2019 and 2024. In contrast to other countries like Mexico, where deployers trialled their recyclers in non-recycling mode before deciding whether to activate the recycling functionality, in Brazil, most banks' first automated deposit ATMs were recyclers. Owing to the country's vast landmass, ATM deployers have to outsource cash replenishment to a significant number of different partners that each only operate in specific regions of the country. Given that the cost savings potential of installing recyclers is huge, it is not a surprise that the largest banks have opted to make significant investments in these terminals over the last two years.

The reaction to these terminals from Brazilian customers has been largely positive, which is why the largest deployers in Brazil are expected to continue replacing older machines with these high-tech ADTs. Customers have been particularly pleased by the quicker account crediting these machines offer compared to the more traditional envelope deposit terminals (EDTs). Historically, EDTs have been hugely prevalent in Brazil and even though they are being gradually phased out, especially by the larger banks, around two thirds of the country's ATMs still offered envelope deposit in 2018. Incidentally, some banks noted that since they installed automated deposit ATMs, these machines have processed more transactions that were previously witnessed at EDTs.

Potential for growth remains strong in a large number of markets

Even though automated deposit technology has been available for decades, the ADT market has grown healthily and is predicted to continue doing so. Customer demand, the migration of transactions and cost savings are some of the most influential driving forces behind this trend. Furthermore, in 11 of the countries surveyed, fewer than 10% of ATMs have automated deposit facilities, highlighting the ample potential for growth. Deployers want to focus on maximising the operational efficiency of their ATM estates and they see multifunctional ATMs, including non-recyclers, as an important tool through which they can achieve this. Increased ADT deployment will, in turn, also improve the overall customer experience through reduced waiting times and quicker account crediting.

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