

Financial IT

Innovations in FinTech

RECOVERING FROM COVID-19: THE NEXT BIG CHALLENGE FOR SMES

Anders la Cour,
Chief Executive Officer,
Banking Circle

YOUR DIGITAL BANK HAS BEEN UNDER SCRUTINY

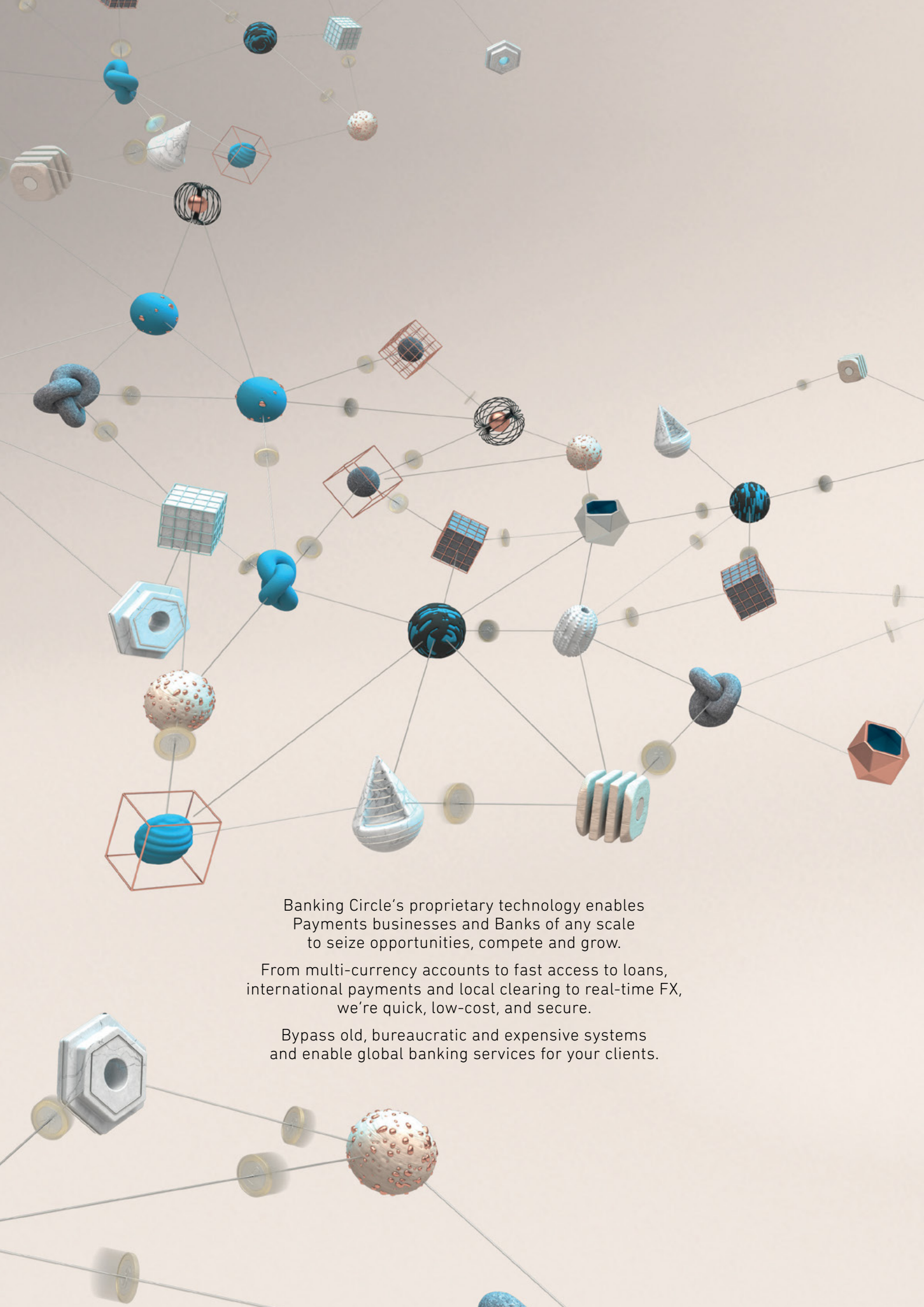
Georg Ludviksson,
CEO & Co-Founder,
Meniga

FINANCIAL SERVICES ORGANISATIONS ARE NOT PRIORITISING COMPLIANCE IN THEIR MODERNISATION EFFORTS – NEW REPORT FROM ADVANCED REVEALS

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Managing Director,
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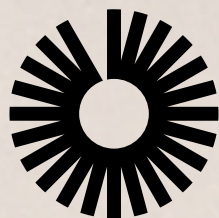
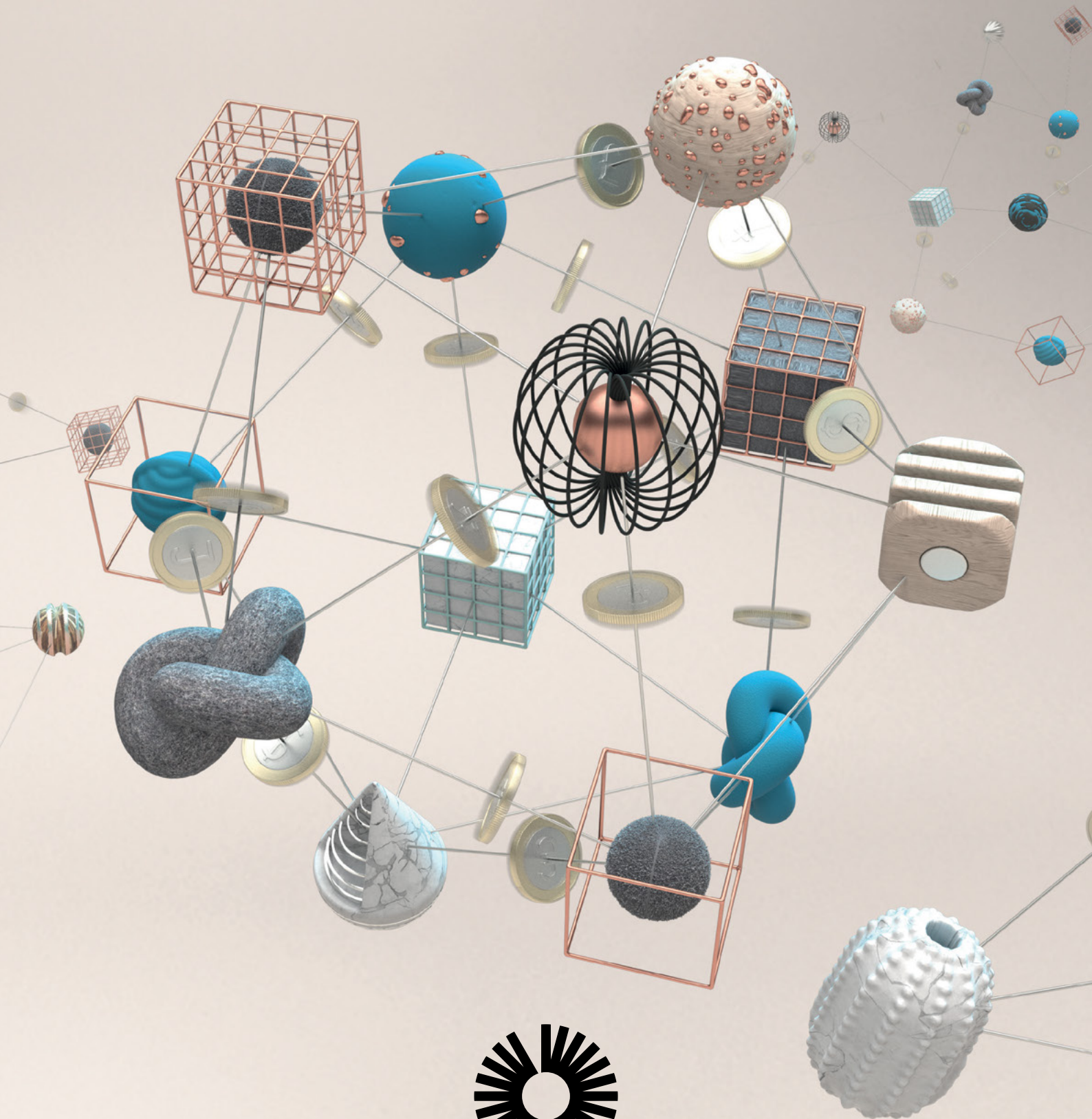
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ONE OF THE FOUR BIGGEST SHIFTS SINCE 1970

HOW HAS COVID-19 CHANGED THE WORLD SINCE EARLY MARCH 2020?



Andrew Hutchings,
Editor-In-Chief, Financial IT

Alongside the rise of Asia, a technology boom and the end of Communism in Central and Eastern Europe, Covid-19 stands as one of the biggest things to have happened globally in the last 50 years. It represents an enormous shift.

It has also been a very fast shift. Unlike the other really big things, Covid-19 has affected almost all of mankind - and in the space of less than four months (as of 26 June 2020).

In the previous edition of Financial IT, it made sense to speculate about what Covid-19 could mean for the world of Fintech. In this edition, the impact of the pandemic is much clearer. Our contributors for this Summer Edition come from a wider-than-usual variety of companies. Collectively, the changes that they highlight are as follows:

#1. Organisational disruption

For many people, remote working is no longer an option or a lifestyle choice. Zoom Inc., providers of the eponymous video-conference software, reported that the number of corporate clients paying USD100,000 on a rolling 12 month basis

was 90% higher in 1Q20 than in the first three months of 2019. The number of Zoom clients employing 10 employees or more soared by 354%. Of course, these numbers were recorded before the pandemic had truly become global.

One consequence is that demand for data has soared, as enterprises have had to operate without key decision-makers all being in the same place. Travel plans have been cancelled. Supply chains have been severely disrupted.

#2. Higher risk of fraud

Among much else, the organisational chaos caused by the pandemic has produced a surge in chargebacks - a problem for merchants and many other players involved with payments. Chargebacks911 noted a 23% rise in chargebacks from the beginning of the pandemic to late April. Increased chargebacks, and general confusion on the part of consumers, has given rise to increased risk of fraud. In the meantime, governments continue to increase penalties for non-compliance with AML-

CFT rules. The costs of mistakes have increased.

What this means that we have moved to a new normal where companies will be deploying Artificial Intelligence (AI) and other solutions to combat fraud. It is also a reasonable bet that many RegTech companies will enjoy a boom in demand - regardless of what happens to the global economy.

#3. E-commerce boom

RegTechs are not the only group of companies that are enjoying higher sales. A search on Google for “online shopping surge” will produce large numbers of articles which describe how consumers who are at home - whether or not by choice - during the pandemic have continued to shop. This is one of the factors boosting fraud.

Crucially, though, it has placed a premium on e-commerce websites offering a smooth and flexible checkout. Successful e-commerce does not just involve providing customers with a means of payment: it requires that the customers can use their preferred means of payment.

#4. Another boost for digital banking

The pandemic has accelerated away from traditional branch banking towards digital banking. Widely publicised research from fintech Nucoro found that 12% of all adults in the UK downloaded their banks’ apps for the first time during the Covid-19 lockdown.

This does not mean that the traditional bank branch is dead.

However, a number of banks will need to rethink how they use their branches to greatest effect - both for themselves and for their customers.

#5. A different angle for Open Banking

In many countries, governments have taken steps to help small and medium enterprises (SMEs) that are facing cashflow problems. At some stage, though, it will be necessary - and desirable - for private sector financiers to become involved.

The challenge will be for the lenders to make decisions quickly. In many cases, the SMEs need the funding immediately - and not three weeks into the future. As one of our contributors explains, this is where Open Banking can have a role to play. Normally Open Banking is seen as enabling Fintechs to gain the information that they need to offer deposit/ payment/ investment solutions to individual customers - or, more precisely, the assets side of the customers’ balance sheets. Open Banking can also facilitate the provisions of loan finance to the liabilities side of SMEs’ balance sheets.

By September 2020, it will be clear that the pandemic has had other impacts on that part of the global economy where financial services meet Information Technology. As ever, we are grateful to our sponsors and contributors.

Financial IT

Innovations in FinTech

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BOND-FIRES OF THE VANITIES

THE US GOVERNMENT PLAN TO SAVE THE BOND MARKET

Many of you may remember the 1987 Tom Wolfe book that became the 1990 movie "Bonfires of the Vanities". The story is about a Wall Street hotshot who watches as his high-flying lifestyle goes down in flames. The origin goes back to Florence, Italy, 1497, when the spiritual and political leading Priest Girolamo Savonarola rallied the populace to rid themselves of their worldly luxuries (the Vanities) into a huge pyramid shaped bonfire.

The Bond market is going to crash and burn!

As this is happening the US Government (with most other governments) will attempt to snuff out this huge Bond-Fire. The Federal

Reserve announced it will start buying Exchange Traded Funds (ETFs) immediately. The Fed is specifically targeting ETFs that own US corporate bonds. The key is bailing out the soon-to-be bankrupt companies that depend on bonds to fund their business.

Bonds are debt instruments. They are issued by companies, municipalities, states, and sovereign governments to finance projects and operations. They are securitized as tradeable assets. Bond coupons are traditionally paid at a fixed interest rate to holders of the bond. Bond prices are inversely correlated with interest rates. When rates go up, bond prices fall and vice-versa. Bonds have maturity dates as to when the principal amount must be paid back in full or risk default.

Exchange Traded Funds (ETFs) are a basket of securities that trade on an exchange. ETF share prices fluctuate all day as the ETF is bought and sold. ETFs can contain all types of investments including stocks, commodities, or bonds. Some offer U.S. only holdings, while others are international. Bond ETFs could include government bonds, corporate bonds, municipal bonds and sovereign bonds. The US Government's buying is focused on ETFs that hold US corporate bonds and debt.

The total US National Debt surpassed \$25 trillion on May 5. At 117% it is the highest percentage of US Gross Domestic Product since the end of World War II. We are at the beginning of economic devastation caused by the response to the World War on Covid-19. We will soon see this debt increase to \$30 trillion.

Clearly, the Federal Reserve System will print and digitally create money out of thin air, and then use that new money to buy ETFs. The plan for the Fed is to try to bail out bankrupt companies across America. This is in addition to any direct industry bailouts. Normally, many medium and large businesses help fund their companies by issuing corporate bond debt. They use the principal and make the interest payments to the bond holders. When the bond matures, they sell the bonds over again so as not to pay the principal and are back to just paying the interest. Even strong and profitable businesses regularly issue bonds accumulating debt with little risk in normal times. Bond holders repurchase for the fixed interest received on a regular basis. This enables them to safely keep their money earning a predictable return.



This has worked smoothly for decades. Companies all over the world do this, and the global bond market is absolutely enormous. So much so, that the global stock market is worth about \$75 trillion with the US having about 45%. That is a huge amount. You probably didn't realize that the global bond market is about \$110 trillion with the US having about a 42% share. Yes, the bond market is larger than stocks although the stock markets get much more press. Disruption to the bond market is a silent killer.

What if bond buyers disappear? And they will! Bond holders are now seeing that companies big and small will not make it through this economic crisis. They will soon have trouble paying the interest much less paying their owed principle. This will be come a game of musical chairs and no one wants to be left holding defaulted bonds.

Airlines, hotels, restaurant chains, shopping malls, movie theaters, factories, cruise lines, shipping companies, retail stores, daycare facilities, schools, construction companies, and more will be unable to survive without the bond market. Most of these companies have been regularly financing their business through bond debt. As their revenue dries up, there will be a tsunami of defaults in the corporate bond market.

As an example, American Airlines has \$21 billion of debt. Would you buy their bonds today? The chance is zero that American Airlines will have the ability to make interest payments. This will trigger defaults throughout their vendors. Thousands of companies are in this position and won't be able to make their interest payments. The problem is even

bigger as bonds mature and the principal needs to be paid back.

In normal times these bonds are regularly rolled over and the principal is moved out to a new term on this debt. This has worked smoothly and without interruption for as long as any of us have been alive.

These are not normal times. The bond market is paralyzed to its core. Few investors want to buy bonds. There are lots of companies with bonds. There are hundreds of billions, maybe of dollars worth of bonds that will be due to mature. Without any buyers there is no way to roll over these bonds and refinance this debt. There will be a wave of defaults of interest payments and principal. Bond investors who own those bonds will suffer major losses. This problem will cause a chain reaction throughout the financial system. When a company defaults on their bonds, the company is ruined. The fund that owns the bonds gets wiped out. Banks behind the funds take a huge hit. It's a snowball running down hill growing bigger and faster every minute.

The Fed will be the only buyer, the buyer of last resort. The Fed has to buy the bond debt and it is already happening. The Fed is buying with the only tool they have, manufacturing money. They will use that money to buy corporate bonds and bond ETFs. Their plan is to assist companies to roll over their bond debt and prevent the snowballing of defaults within the financial system. If only 10% default it will likely be \$4 trillion or more. That is on top of the \$4 trillion of stimulus already spent with more coming for other areas of the economy. There is no way to know

what the future effect will be - inflation, depression, stagflation, recession, etc.? We don't know.

What we do know is that globally central banks will continue to print money as the only plan to hold economies together. This is neither right nor wrong. It doesn't matter. It's being done now and it is too late to change. This is because governments globally have to bail out everything and the cost is trillions of dollars.

Real estate is no longer a real asset opportunity. Physical assets such as gold and silver are the real asset opportunities for today. Precious metal assets historically increase in value when central banks print huge amounts of money. This money creation devalues their currencies. In the past, real assets have been safe havens.

We have all watched as the US went from the largest creditor nation to the largest debtor. I don't believe that this pandemic is over. I see future waves coming back until there is a viable cure which is at best more than a year away. The response of the US population has been blind to this risk. This lack of concern will haunt them into the future.

The bond buyers are going to run away. Only the Fed is left to buy the bond debt. This is already happening. Bonds will be due. What will happen to the underfunded pensions and healthcare liabilities which hold these bonds? It is a Ponzi scheme and it doesn't matter. The Bond-Fires of the Vanities are upon us and burning stronger every day...killing us softly.

*by Chris Principe,
Publisher, Financial IT*

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More Information



A black and white portrait of a man with short, dark hair, looking directly at the camera with a slight smile. He is wearing a dark suit jacket over a light-colored shirt. The background is a blurred cityscape.

Anders la Cour,
Chief Executive Officer,
Banking Circle



RECOVERING FROM COVID-19: THE NEXT BIG CHALLENGE FOR SMES

Banking Circle's latest research found that a quarter of online SME merchants were already borrowing funds to cover business costs or salaries even before the current crisis. Anders la Cour, co-founder and Chief Executive Officer of the financial infrastructure provider discusses the implications of cashflow challenges, and how financial institutions can step in to help fill the gap.

Banking Circle is an innovative financial infrastructure provider that aims to help financial institutions work together to improve financial inclusion for smaller businesses. As a new bank we are not held back from innovation by outdated and

slow legacy systems. Instead, we build our solutions from the ground up, based on gaps in the market we identify through detailed market research. As such, we carry out regular studies to uncover pain points and gaps we can help Banks and Payments businesses to fill.

The latest study, a Europe-wide survey involving more than 1,500 SME online merchants, found that nearly two thirds (64.6%) have needed extra finance in the past two years (excluding borrowing due to the current COVID-19 crisis). Nearly a quarter (23%) needed the additional funding to cover payroll, and a further 26.5% to cover regular business costs.

Although needing to access extra funds is a fact of life for many businesses, our

research highlights the serious gap in how easily and quickly funding can be obtained. This gap will have an even greater impact in the current climate as well as in the coming months of post-Covid-19 economic recovery.

Just under a quarter of respondents had to wait between three and four weeks to receive the cash they needed to cover essential costs, yet 26.4% felt that without access to new cash they would be forced to let employees go. And almost a quarter (24.4%) believe their business would ultimately fail if they were unable to access new finance.

Businesses of all sizes are currently facing a whole new set of pressures, but the strain is felt most keenly by

smaller businesses. The latest Banking Circle white paper, 'Mind the Gap: How payments providers can fill a banking gap for online merchants', highlights the continued issue of financial exclusion for SMEs – and the opportunities for payments providers. These organisations are already connected to online merchants and are perfectly placed to play a crucial role in providing wider banking services, as well as access to funding.

Changes since 2018

This study was conducted as an update and expansion of a 2018 survey of SME online merchants, to give an insight into how the market and access to funding has changed for SMEs in the past two years. In 2018, the study included only UK businesses, but comparisons still reveal some interesting insights.

Since the 2018 study, there has been quite a significant increase in UK merchants having banking relationships in more than one geography: up from 3.2% in 2018 to 17.2% in 2020. This undoubtedly reflects the growth in international trading – but also that small businesses find it hard to find one financial institution that can meet all their needs. And this fact is underlined by our findings which showed that less SME merchants in 2020 are using one financial institution for all the countries in which they trade: 43.9% in 2020, down from 61.9% in 2018.

Reasons for borrowing have also shifted. 51.9% of SMEs in 2018 had borrowed to fund new equipment, down to 36.6% in 2020. Expanding into new markets saw more SMEs seek funding, up from 27.5% to 33.9%. However, the most dramatic and indicative increase is seen in the need to borrow in order to cover business costs and payroll. In 2018, 9.2% borrowed to cover payroll and 9.9% to cover business costs. Two years later, 23.5% needed additional funding to keep paying staff, and 32.8% would have been unable to pay business costs without external financing.

The implications of any inability to gain this additional funding could be disastrous for a small business. In 2018, merchants in the UK said they would have to let employees go (24.6%), and the business could fail (13.3%) without funding. In 2020 these scenarios were even more likely, with 28.7% of

SMEs saying they would have to make redundancies and 21.5% fearing the business would fail. And remember, this is strictly excluding any borrowing required as a result of the Covid-19 crisis, so the challenges faced by small businesses will only increase.

Barriers to banking

The world of digital commerce is a rapidly growing sector; but it is also a sector where entrants face multiple barriers to operate because established financial institutions have a fear of the unknown. Opening a bank account is fundamental for most enterprises but can feel like taking an exam. And access to short-term funding, whether to fill a cashflow gap or to underpin growth plans, can involve multiple hurdles often too steep for smaller businesses to get over.

However, payments providers already supporting the online merchant space can deliver a genuine added value by providing their merchant customers with banking services including access to funding. In the current climate that support is going to be more valuable than ever. Indeed, for payments providers that demonstrate a real understanding of SME needs there could be a significant long-term gain.

At Banking Circle we have always been committed to improving financial inclusion for smaller businesses, and this study helps us and the wider industry to identify – and therefore help to fill – gaps in the current offering.

Key findings

Cross border banking is a challenge

- Across EMEA an average of 19.2% of online merchants have separate banking relationships in every country in which they operate – adding to their costs and resources to manage
 - o 17.2% of UK merchants have separate banking relationships in every country in which their business trades
 - o 44% of UK merchants work with just one bank for all the countries in which the business trades
 - o 26.2% of businesses in the Nordics are the most likely to work with separate banks in each jurisdiction
 - o 13.9% of French merchants work with multiple banks

- o 20.3% of Netherlands firms work with multiple banks

Banking services used by online merchants

- Around half of online merchants surveyed said they use short-term loans (47.8%), overdrafts (49.1%), and finance agreements for specific purposes (48.8%)
- 43.2% access settlement accounts for cross border payments (43.2%) from their main bank
- 35% use their bank for foreign exchange (FX) services (35%)
- German merchants are least likely to access solutions to help with cross border trade, with the lowest proportion of all respondents accessing settlement accounts (38.8%) and FX (16.8%)

Accessing finance – how long does it take?

- Online merchants reported that accessing business finance had taken them as much as 6 months:
 - o 18.8% said it took 1-2 weeks
 - o 24.6% - 3-4 weeks
 - o 21.7% - 1-2 months
 - o 16% - 3-4 months
 - o 6% - 5-6 months

The Opportunities for FinTechs and Payments businesses

- 87.3% feel their business is well served by their current banking partners; German merchants are the least satisfied at 82.9%
- 42.6% of the dissatisfied businesses felt their business is not a priority for their bank, and 41.5% gave high fees as a reason
- Approximately one in four respondents dissatisfied with their bank gave each of the following reasons for their dissatisfaction:
 - poor quality and inconsistent service (28.7%)
 - slow response times (28.7%)
 - poor FX rates (24.5%)

The full white paper, 'Mind the Gap: How payments providers can fill a banking gap for online merchants', is available to download for free at <https://www.bankingcircle.com/whitepapers/how-payments-providers-fill-finance-gap-online-merchants>

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YOUR DIGITAL BANK HAS BEEN UNDER SCRUTINY

FINANCIAL FITNESS IN A POST-COVID WORLD

These unprecedented times have set into motion far-reaching financial ramifications unbiased of location, age, or socioeconomic status. For banks, this means that 100% of your customer base is affected in some way shape or form, but more profoundly felt by middle and lower class earners. Moving beyond your bank's crisis management initiatives, i.e. safeguarding operations, providing relief measures, the truly critical task for your bank lies ahead.

Your digital bank has been under scrutiny and has undoubtedly been tested over the last few months.

"12% of the adult population in the UK – some six million people – downloaded their bank's app for the first time during lockdown" – Nucoro¹

Clients who were once intimidated by their digital bank or just preferred to visit a branch have been forced to adopt these new methods. Those using banking apps will now truly cross over from early adopters to the mainstream, and even to laggard users. Although this usage resulted

from critical need, it is essential that banks now offer clients both user experience and a fully equipped toolbox they can engage with and eventually enjoy using.

"85% of bankers agree the COVID-19 pandemic will force customers to rely more heavily on online & mobile banks"²

Put yourself in the shoes of customers using your app. What are their pain points? Has your bank fully digitized the processes they need? Is your app easy to use? Does your digital bank create value for customers under financial strain from reduced or outright loss of income?

Banking professionals are adamant that developing digital banking channels takes top priority, over streamlining operations and IT infrastructure investment. Interestingly, it also comes before rescue operations, but, as we will see, offering personal financial channels that enable customers to help themselves might be the most effective way banks can assist people now.

What is your bank prioritizing now?³

1. Developing digital banking channels
2. Streamlining operations
3. Investing in IT infrastructure
4. Rescue operations for financially troubled customers
5. Product development
6. Market expansion

Be ready for competition

Interestingly, banking managers anticipate that competition will continue despite radically changed market conditions. Some 70% think Open Banking innovation will accelerate, which could increase competition from challenger banks, big tech giants, and thousands of fintechs.

"51% of bankers foresee that banks will lose customers to challenger banks or 3rd party providers in the post-Covid-19 climate."⁴

Big tech is moving into digital banking in a big way. Banks must recognise that digital banking is no longer simply transactional

¹ <https://fintechnews.ch/covid19/research-6-million-downloaded-their-banks-app-for-the-first-time-during-corona-lockdown/35158/>

^{2,3} Independent survey of senior bankers across Europe

Georg Ludviksson,
CEO & Co-Founder,
Meniga





and "addictive," replicating elements of their design to help gamify PFM. – *Business Insider*⁸

Helping customers build financial fitness

Financial fitness has many similarities to physical fitness – it's all about building the right habits and once in a while, you need to make a real effort to turn things around and get into shape.

Banks that are serious about being trusted financial advisors to their customers should integrate personal finance management into the everyday digital banking experience. Transactions should be categorized, interactive entities rich with insights. Nudges, tips and personalized recommendations should be at the forefront of the digital banking app.

It is equally important to provide tools for deeper engagement. Budgeting and expense analysis is not anyone's favourite activity, but most of us need it from time to time – when we start a family, when we buy our first house – and of course in times of financial crisis.

Your key takeaways

- Digital channels will be used with increasing frequency by a broader demography, making them the most crucial innovation focus for banks.
- Banks must deliver the tools people need for financial self-help via user-friendly banking apps and personal financial coaches or risk losing them to challengers who offer more robust digital services.
- Banks must be agile in their digital transformation methodology, measuring engagement, and other KPIs and optimising as needed.
- Banks must be assertive in helping customers take control of their financial health – Customers will be appreciative in the end.

The adage to keep front of mind as you consider the needs of your customer is to teach them how to fish. This investment in their financial health will not only create customer loyalty but has the potential to have a truly life-changing knock-on effect for their future.

functionality which happens online; it is the capacity to deliver a full-service experience, activating the customer in ways that allow them to control their finances in a simple but effective way.

***"Consumers are more dissatisfied with their banks' PFM services than with any other type of services they provide, and more than 40% of those surveyed stated that they find PFM services from non-bank providers more useful and helpful."* – Business Insider⁵**

Beat the challenger banks by being there for your customers. Give people proactive advice on how to keep more of their earnings. Engage them with spending insights and savings challenges, or suggest they set themselves savings goals. People will appreciate the bank that helps them get through tough times and rebuild their financial lives.

***"This is also an opportunity to demonstrate your commitment in what you do, rather than just what you say. Your purpose and values aren't just words on a wall. Now, when some of the people you serve may be among the hardest hit, this is a chance for your leaders to show what your brand stands for."* – Price Waterhouse Cooper⁶**

How to evolve your digital bank

Enhancements to your digital channel should have clear objectives and desired outcomes. At Meniga, based on our experience providing digital banking solutions to banks worldwide,

we aim to achieve outcomes along four main dimensions:

1. Improve financial outcomes for bank customers (e.g. average savings achieved per customer)
2. Improve quality of digital engagement (e.g. greater log-in frequency)
3. Deliver financial results for banks (e.g. more products sold)
4. Grow customer loyalty (e.g. % increase in Net Promoter Score)

Right now, the balance should be tilted towards improving customers' financial outcomes. People will remember the financial institutions that helped them in 2020. Keep in mind your customers don't just need insights or guidelines, they need tools to put advice into practice.

***"90% of bankers stated that having a good digital banking user experience for their customers will be more important post-COVID"* – Price Waterhouse Cooper⁷**

This is your opportunity to create long-term loyalty through a combination of tangible impact and treating customers with respect.

Per a MyBankTracker study, as many as 53% of US millennials spend no time managing their finances. This means banks have to make their PFM offerings engaging enough to pull in "unengaged" groups, too. Building powerful incentives is core to this: Banks should consider studying what makes apps such as Facebook and Twitter so habit-building

⁴ Independent survey of senior bankers across Europe

⁵ PFM Disruptors Business Insider report

^{6,7} <https://www.pwc.com/us/en/library/covid-19/coronavirus-banking-and-capital-markets.html>

⁸ PFM Disruptors Business Insider report



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IS ARCHITECTING FOR INTEGRATION THE FUTURE OF PAYMENTS?

Over the last two decades, the payments industry has been knocked sideways. We have been talking about and predicting the future for so long, it seems we didn't quite notice when we stopped talking and things started to happen, evolve and accelerate exponentially. In a world where anyone can be a merchant, most things can be a payment method and every device can be a payments acceptance point, the future has already happened. Payments innovation is everywhere, and everyone is in payments; from banks to tech giants, mobile networks to start-ups, from IT gurus to fresh-faced graduates full of ideas – the payments industry is all-inclusive - even regulators are encouraging new ways to pay and facilitating the entry of new market players. The conversation has changed from predicting the future to transforming to stay relevant.

The consumer demand for individual payment services can more than be met by the sheer range and availability of today's technology. The emergence of new disruptive challenger banks and Fintechs has immediately intensified competition for banks, and alongside an insatiable appetite for choice from consumers, the amount of payment services available has exploded. So where is the problem?

In today's landscape, the payments space can loosely be grouped into two categories: those trying to bridge the gap between established technology and new ideas, and those bridging the gap between new technology and a deficit of payments system experience. Each of these categories come with their own set of challenges. The former have the ideas but not the tools, shackled by legacy technology, and the latter have the tools, but these tools predominantly solve niche

problems and struggle to understand and take on the overall complexity of the payment infrastructures; many don't understand how to plug-in to the payments ether.

Triggered by CX, one of the key aims of the industry is to get the attention and loyalty of Gen Z – a rising demographic that doesn't remember a time before Amazon, Facebook, Google or Twitter, without alienating the previous generations. If established FIs are offering core payment products and Fintechs are offering funky fringe features, then the consumer indeed has infinite choice, but no single, coherent view, control or access to all of their payment options. All services are offered by increasingly disintegrated providers.

How do you ultimately solve this problem exacerbated by growing consumer demand in an access-all-areas, everything-

Maria Nottingham,
Managing Director at
Compass Plus



now economy? At a time where agility is everything, the choice is two-fold. You either partner extensively to reap the rewards, which can only be successful if the technology marries together; or you can invest into a new age system that not only enables extensive partnerships, but also allows FIs to build Fintech-style products and services, and allows Fintechs to engage with core payment infrastructures with little effort, all on one platform. And this is why everything has become about integration.

Systems have had to integrate and talk to each other since inception, and whilst the concept is very straightforward, the actuality can be much more complex. Established FIs that have lived by the “if it ain’t broke, don’t fix it” moniker for decades, now find that the technological hearts of their businesses, whilst still beating, are hopelessly outdated, not-fit-for-purpose and their technology stacks, obsolete. This comes at a time when the exact opposite is required of them. These legacy systems perpetually suffer from the need for continuous extensions, work-arounds, add-ons and fixes, and new interfaces (to systems old and new), which in combination creates a mass of disorganised dependencies, with no clear logic or structure.

Initially to combat this, FIs added integration layers or wrappers to keep their spaghetti-like nature under control and simplify integration. Payment services hubs were promoted by analyst firms in the early 2010s but never really took off. Although built with the best intentions: to provide a single view over all operations, these quickly became split by geography or

product, creating new types of silos. The ideology was there, but its simplicity was its undoing, making it unfeasible in very complex environments.

At the other end of the scale, we have Fintechs, who are all about agility, but lack the understanding of payment infrastructure, core payment services, regulation, and long-term customer relationships built on trust. Fintechs tend to have an oversimplified view on how easy it is to integrate because their developers only work using the latest languages and don’t understand the nature of the beast they are trying tame and work with. If they want to work in partnership with other players, they seriously need to consider how they will integrate to third party systems in order to interact with the larger payment ecosystem when building their technology stacks, to avoid being plug-and-play periphery players.

Established FIs sit on one side, Fintech’s on the other, and for different reasons, neither are fully capable of meeting the end goal of providing truly coherent, diverse and engaging payment services to consumers. This is where the true power of APIs come into play.

However, not all APIs are created equal. For everything to work as it should, it becomes critical to have fully-functional, extensive, intuitive, well-structured and documented APIs that are built to last and support modern standards and technologies for integration. Simply having APIs is not sufficient. Good APIs are not something you bolt-on, they need to be embedded into the DNA of any system. Unfortunately, by default this means that anything built pre 2000 have APIs, but they

aren’t the best and some are no longer fit-for-purpose. It sounds like Fintech’s should feel quite comfortable here, but this isn’t always the case. With a lack of overall understanding of the complexity of the larger payment ecosystem and the sheer variety of participants, it’s hard to build APIs that address all of it.

This means that in 2020, any system fundamental to, and at the heart of the business, has to be technologically capable and have unrivalled future-proof interconnectivity, natively ingrained into the very nature of the underlying platform. Only in this set up can FIs and Fintechs offer an end-to-end feature-rich CX and effectively enable new payment touchpoints, provide omnichannel customer journeys and support new business models.

Whilst important, partnerships shouldn’t be used as a panacea for areas lacking. Whether an established player or a Fintech, you have to grow your own offering and not run to a partner for every new feature and function if you truly want to differentiate and build the value of your business. Invest into systems that not only let you seamlessly interact with any payment ecosystem participant, but also inject value into your business and facilitate your own growth.

With many exciting payment initiatives waiting to be turned into new business opportunities, such as the dialogue around Open Banking and the implied accessibility to technology, integration should be at the forefront of any discussion – the future of payments lies in the seamless exchange of data within your organisation and outside of it.

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Heba Rasheed,
Senior Product Manager, ICSFS

DIGITAL TRANSFORMATION OF WEALTH MANAGEMENT

WHAT DOES IT REALLY INVOLVE?

Digital transformation is underway in wealth management, as it is elsewhere. Clients demand instant gratification. Digital transformation is changing the customers' expectations. It is also making it easier for banks to meet – and beat – those expectations.

The two most recent crises for wealth management

The term “wealth management” emerged in the early 1990s to distinguish banks' services to affluent to high-net-worth (HNW) and ultra-high-net-worth (UHNW) investors from mass-market offerings. More recently, the term has spread throughout the financial services industry. Over the years, wealth management became a key business for many banks.

Wealth management has encountered two crises since the turn of the new century. The first of these was the Global Financial Crisis of 2008-09. Banks, private banks and wealth managers who had not understood the world's financial condition prior to the crisis were decimated. However, these were the exception rather than the rule. Most organisations preserved their clients' wealth and flourished afterwards.

The second crisis is the Coronavirus pandemic of 2020. A main issue has been actual client service: in spite of digital transformation, much has depended on face-to-face meetings and actual handshakes. However, there are many other challenges for wealth managers:

- New regulations and compliance requirements
- Extensive security requirements
- Rapid technology changes
- Innovation difficulties

- Evolving away from legacy systems
- Setting an appropriate platform for digital transformation
- Adopting data-driven decision making
- Infrastructure cost
- Cultural adoption
- Improving customer interaction
- Stepping away from operational silos to mitigate cyber-security risks
- Continually rising expectations from increasingly well-informed clients

For many wealth managers, the answer to these challenges is simple: further digital transformation.

At ICS Financial Systems, we have helped our banking and financial customers in making this happen through:

- Open Banking solutions and APIs
- SaaS through cloud-based platforms
- Enriched customer service and experience
- Insightful data and customer analytics
- Unification of all digital systems, to produce an omnichannel experience
- Increased customer engagement and loyalty
- Dynamic products for new business trends
- RegTech solutions
- Continuous technological advancement with lower TCO (Total Cost of Ownership)
- Future-proofed digital banking products

As surveyed by Thomson Reuters and Forbes¹, 68% of wealth managers say learning about and keeping up with new technology is the top challenge they face. The wealth management business or the financial institution must re-engineer the way it does business. It must first face growing challenges with endless disruptive innovation.

Wealth managers have to adopt digital innovation into their business strategies. They have to embark on the digital revolution through the usage of efficient software solutions, to indulge their customers with a perfect customer experience across their entities and business areas with minimum hassle.

All this is complicated by the need to differentiate between the investment needs of each generation; Generation Z is more aware and conscious about their investments than previous generations, millennials are known as the most digitally savvy investors, while Generation X and baby boomers are more likely to invest than millennials.

ICS Financial Systems (ICSFS) can help. Through its ICS BANKS Wealth Management software solution. This enables the bank or the financial institution to serve its customers by providing essential features utilising facilities, and delivering the latest technologies. Further, ICS BANKS Wealth Management supports AML, FATCA, and CRS requirements – whilst its APIs connect to local and regional authorities for further regulatory and compliance processing.

ICS BANKS Wealth Management platform combines many of the latest technologies – including the cloud, data analytics, open banking and open APIs, Artificial Intelligence, machine learning, and smart processes, chatbots, smart customer social and interactive engagements, Robotics, Smart Contracts, Cardless Payments, Digital Customer onboarding and wearable banking and internet of things (IoT).



¹ [Thomson Reuters Report on Digitalization of Wealth Management Reveals Challenges and Opportunities Faced by Wealth Management Industry](#)

IS THE HARD EARNED MONEY OF YOUR CUSTOMERS PROTECTED BY ACTIMIZE?

More than **3 billion**
transactions
monitored daily

Over **\$5 trillion**
protected each day

As the evolution of payments accelerates, is your institution agile enough to keep up?

The way we fight fraud is constantly evolving. With the rapid evolution of payments, we see more sophisticated fraud attacks that require advanced analytics to detect. Analysts must maintain the frictionless user experience that customers have become accustomed to – all while innovative banking products introduce new types of data at increasing speeds.

NICE Actimize, a market leader in fraud management, offers a solution to today's challenges and a path forward to address these inevitable complexities of the future.

With IFM-X our Integrated Fraud Management platform:

- Data has no limits
- Analytics are agile
- Operations are smart

See how we do it > Get in touch >

GENERATION SUBSCRIBER DEMANDS NEXT GENERATION PAYMENTS

The COVID-19 crisis has turned the world on its head, and business conditions are changing almost day-by-day. While many businesses will be feeling the impact of the coronavirus pandemic, there are some that are well placed to deal with this unique situation. One such example is the subscription market.

As expected from many households being placed under lockdown, digital streaming services like Netflix, Amazon Prime and Disney+ have seen huge numbers of new subscribers. Netflix has seen a huge uptick in the number of global subscriptions, with almost 16 million people creating accounts in the first three months of the year, while Disney+ added 22 million new subscribers in two months. But it's not just the streaming subscription services that have increased. The meal-kit market has also experienced a growth as a result of people staying at home, with brands such as [Hello Fresh](#) and [Gousto](#) seeing sales and subscriptions soar.

Against a backdrop of COVID-19, many businesses are turning to subscription models in the hope of keeping customers beyond simple one-time purchases, as well as navigating the virtual world that consumers have been forced to adapt to. According to a [Subscription Impact Report for COVID-19](#) released by enterprise software company Zuora, [22.5% of companies are seeing their subscription growth rate accelerate in March](#) compared to the previous 12 months.

While our lives have slowed down, consumer behaviours towards online are changing, and the new generation of consumer - 'Generation Subscriber' - has

grown as a result. With more and more businesses looking to join the world of Amazon, Spotify, Apple Music and Hello Fresh, it's important to consider a fit-for-purpose payments infrastructure, to sign-up and retain customers who think 'digital-first'.

A smooth and flexible checkout process

The first part of the puzzle is to ensure the online checkout process is as frictionless as possible. This is particularly vital at the point a customer signs up, as it's their first direct experience of the brand. At this point they also need clearly-signposted information such as terms and conditions, how charges are made and cancellation policies. Brands need to get the 'buy in' and confidence of the consumer right from the off.

For subscription businesses, who are often trying to quickly build a base of loyal consumers, payments must be quick, easy and secure.

It's vital that consumers can select from a variety of different payment methods. Customers usually have their own preferences, including debit cards, credit cards, bank transfers and other local systems such as Alipay or WeChat Pay in China and SEPA Direct Debit in mainland Europe.

Subscription businesses also have considerations around recurring payments. In some markets, such as Indonesia, it's not even possible to set up periodic payments – a challenge that Spotify has overcome by allowing its customers to pay each month using bank transfers or with cash at local convenience stores.



Myles Dawson,
UK Managing Director, Adyen

Minimising churn

Involuntary churn – where customers unintentionally have their subscription cancelled due to payment failure – can be a huge source of frustration.

It often occurs when cards expire, are lost, or changed for other unforeseen reasons, triggering a decline in the next payment. Often this happens without the business or customer immediately realising it.

To keep up with their customers, Merchants need instant visibility on these changes, no matter how often, or not, they return. Major card schemes now provide such updates in real time at the time of payment, preventing significant involuntary churn without disrupting the customer experience.

Real time account updates are especially easy to use when paired with tokenisation. Rather than storing sensitive card details, a merchant using tokenisation will store and make payments with a unique ‘token’ number linked to the customer’s card.

Tokens will remain the same, irrespective of any new payment card details. This means fewer false declines and a lower churn rate – with no integration or maintenance required. It also results in the merchant being completely protected against reputational and monetary damages from card breaches, while the payments process is made as simple and as seamless as possible for the customer. Everyone wins.

Protection against fraud

E-commerce-based, subscription businesses are more susceptible to two

types of fraud than other merchants: card testing and reseller fraud. Card testing is where fraudsters test stolen details to see if they can be used to make subsequent transactions. Reseller fraud is where fraudsters sign up for trial periods and then sell them on to unsuspecting consumers for small amounts of money. This delivers a negative customer experience and damages brand perception in the process.

The traditional approach to combating fraud is stopping suspicious transactions. But the consequence of doing so often means potentially blocking ‘good’ customers at the same time as ‘bad’ ones.

Instead, subscription businesses should look to use a payments system that can analyse consumers and their spending behaviour in real-time, in order to minimise false positives. Adyen’s Revenue Protect, for example, uses a data-driven approach to block fraud. Features include behavioural analysis, transaction linking, connecting multiple signals into a single profile for every device and custom risk profiles.

In conclusion

The world is increasingly moving towards a subscription-based model – with a broad range of businesses following the entertainment sector’s lead. In this world, customers demand quality, speed, security and – most of all – an uninterrupted, continuous experience. This applies not just to what they buy, but how they pay for it. Simply put, Generation Subscriber demands next generation payments.

The Adyen logo, consisting of the word 'adyen' in a bold, lowercase, green sans-serif font.



Gavin Waddell,
Lending specialist, Modulr



DRIVING PAYMENTS PERFORMANCE AND EFFICIENCIES WITHIN LENDING IN A TIME OF CRISIS

COVID-19 has put lending in the spotlight. With uncertain economic times ahead, lenders could provide a lifeline to UK businesses as they weather this storm. But while the significant efforts from lenders and government to support struggling businesses should be applauded, the crisis has also revealed the flaws inherent in the current lending and banking infrastructure.

The current problem with lending

Over [900,000 businesses have taken out state-backed loans worth around £38bn](#) under the government's bounce back loan schemes, and there are thousands more UK SMEs still desperately seeking support. But businesses aren't receiving these payments fast enough, with traditional lenders and big banks unable to manage the sheer volume of applications effectively.

That's because many lenders and banks are not equipped with up to date, modern IT infrastructure that's required to provide fast access to essential funds. Consequently, lenders are unable to process loan applications or onboard new customers fast enough, leading to delays of weeks or even months. These delays can have a severe impact on businesses that are already fighting for survival.

In addition, lenders require verified financial statements so they can make informed decisions when distributing loans. The standard request for backdated financial statements for lenders is three months, although during the pandemic the government is requesting that be changed to six.

The manual process of sending, receiving and processing the information for loan approvals has led to significant delays in disbursing funds. These slow and manual processes are no longer acceptable in today's

climate, as businesses need urgent financial support.

Fortunately, there is a better way. New lending infrastructure, powered by APIs and Open Banking, can help lenders improve their speed, security and agility and get funds to businesses faster.

Delivering a better lending experience with Open Banking

With traditional lenders creaking on incumbent infrastructure, there is an opportunity for new lenders to make their mark in this crisis.

By enabling customers to share their banking data with third parties, Open Banking makes it possible for lenders to get instant and up-to-date financial information about loan applicants in seconds, with a consolidated view of the customer's accounts. This means lenders can analyse an applicant's suitability and determine lending limits within hours, rather than days.

Another way new technology can improve the lending process is by reducing internal costs. For example, the reconciliation of loan repayments has typically been a slow, manual and tedious process for lenders. But with an API-enabled payments platform, lenders can set rules to automatically match repayments to loan balances.

Not only does this save time, it also ensures that ad-hoc or extra repayments don't get missed, so that borrowers aren't charged unfair interest.

Finally, Open Banking and new payments technology can help lenders [deliver a better lending experience](#) to customers. Businesses can complete their entire loan application online and easily share their financial information with lenders, without needing to manually email sensitive documents back and forth.

Lenders can also offer customers the ability to repay loans using [Payment Initiation \(PISP\)](#), enabled by Open Banking, which offers a much faster and more streamlined customer experience than paying by bank transfer.

With Payment Initiation, repayment requests are sent as a link to the customer, with all details prepopulated – all the customer has to do is click to approve. Because Payment Initiation runs on Faster Payments rails, funds are settled instantly. An additional benefit for the lender is that they can avoid the significant costs incurred by accepting high-value card payments.

Why this is important as we head into – and hopefully out of – a recession

The pandemic has been detrimental for the economy and there are fears the [UK will enter the deepest recession in centuries](#) as the market continues to plunge. COVID-19 has starkly exposed the problems inherent in lending infrastructure and its slow manual processes.

Lenders need to react quickly. By taking advantage of Open Banking and API enabled payments technology, they can access the data needed for loan application approvals and disburse funds faster. They can automate back-office processes like the reconciliation of repayments, and focus on delivering a more convenient, secure and reliable [lending experience for borrowers](#).

This will ultimately help lenders to manage the soaring customer demand of businesses looking for help, make swifter decisions, and get much needed cash into the accounts of struggling businesses. Equipped with the latest payments' technology, forward-thinking lenders could play a key role in rebuilding the UK economy.

Chargebacks911 is the recognized global leader in chargeback prevention and risk mitigation. Our exclusive technology and processes have been proven to help merchants win more reversals, recover more revenue, and eliminate needless disputes. Our scalable solutions are built to grow with your business.



Chargebacks911[®]
challenge the status quo

For Merchants

For Banks



Fi911
fintech solutions

Fi911 supports global financial institutions through innovative chargeback and back-office management technologies created specifically for the banking and payment industries. By offering direct communications between FIs and their ecosystems, our scalable platform benefits every stakeholder in the value chain.

learn more
Fi911.com

TAPPING INTO THE POTENTIAL OF PSD2 – HOW NEONOMICS IS POWERING THE NEXT GENERATION OF PAYMENT TECHNOLOGY?

PSD2 bears a multitude of implications for many industries. While the payment and banking industry has been the center of attention in exploiting the regulation, other sectors were falling short in terms of its speed of innovation, with the rental market being one of them. Despite its significant market potential, most of its services still rely on tedious and manual processes. Here at Neonomics, we have built over 2,000 API connections enabling payment initiation and account data access to businesses across Europe since 2017. Although we had been mainly working with companies within payments and lending industry, we saw an untapped potential within the housing rental market.

Rental demand soars across Europe

The proportion of the global population who rent their homes is on the increase. According to the latest research from the EU, three out of ten people in EU member states are renting their homes. In countries such as Germany and Austria, the ratio of those renting is even higher, where close to 50% of the population rent. However, without adequate service for deposit protection, both tenants and landlords are exposed to legal

and financial vulnerabilities. Thus, having a deposit account can ensure a securely held deposit for both the landlord and tenant, which neither can withdraw funds from without the permission of the other. This mutual security protects the landlord from damage to the property, as well as not having rent paid, whilst the tenant is protected from the landlord from unlawfully retaining the deposit at the end of the rental.

Looking into the Norwegian market

In Norway alone, 90% of rental terms last for two years or less. This high rental turnover has led to strong demand for deposit accounts. Setting up a deposit account can cost up to 2,000 NOK (approximately 200 EUR), depending on which bank you use, whether or not you are an existing customer, and if you sign up online or in person. Most require that both the landlord and tenant are customers with the same bank. In certain cases, some banks also request that both the landlord and tenant verify themselves at a local branch. This process presents a clear need for digitalization. It has been reported that the number of unlawfully created deposit accounts increased by 23% in 2017 compared to the previous year.

While such leeway may temporarily ease up inconvenience on the landlords' part, it is inherently putting both landlords and tenants at risk, as their rights cannot be protected under the law. There has also been an added concern for potential disputes after the contract has come to an end, regarding the release of the deposit. Our findings suggest that the deposit-related services in Norway still rely heavily on manually driven processes and call for improvements.

According to the DESI (Digital Economy and Society Index) report, Norway is amongst the top five countries in Europe for digital adoption. Key factors driving this include widespread usage of online banking, e-invoicing, and integration of digital technology in areas such as business and e-commerce. This serves as a good indicator that Norway's existing digital infrastructure is receptive to further innovation and improvements in areas where digitization has not been actively adopted yet, such as the property rental market.

Challenges faced by landlords and tenants in Norway

Landlord

- **Costly:** Deposit account creation can cost up to 2,000kr (ca. 200 EUR)



Christoffer Andvig,
Founder and CEO of Neonomics

With extensive experience within the financial industry, Christoffer has built a fintech ecosystem based in Norway, offering various solutions, the most notable being the Neonomics platform. Neonomics provides a leading unified API solution (UAPI) that challenges the traditional banking and payments sector on a global scale.

Since its founding, Neonomics has built connections to over 2,000 banks across Europe, has been the first institution in Norway that can facilitate AIS and PIS within the EU, and has acquired customers across the Nordics and the UK. The companies within the fintech ecosystem are working with many of the leading banks and payment rails today. Neonomics consists of over 40+ employees, with more than 15 different nationalities being represented.

Prior to founding Neonomics, Christoffer developed extensive knowledge through working with Klarna, during its early introduction into the Norwegian market in 2011, and later worked with Collector Bank to build an e-commerce payment system.

- Time-consuming: Manual signage process and a visit to a bank branch

Tenant

- Lack of protection: Unlawfully created deposit accounts with no legal protection
- Not user-friendly: Deposit transfer and signage process need to be done separately

Neonomics, together with EasyBank and Idfy, launched a digital solution using PSD2 APIs

In an attempt to address the aforementioned challenges, in spring 2019, Neonomics launched a joint solution with Idfy and Easybank that offers a simpler deposit solution. The entire process of opening a deposit account, signing, transferring funds, monitoring the status, and finally closing the account, is handled digitally through one interface. Once electronic authentication takes place using Idfy, Neonomics sends an API call to Easybank in order to create the deposit account. As we are regulated as a PISP, the user can also make recurring monthly payments through Neonomics. This also presents an opportunity for the banks to offer a loan to tenants for the deposit

amount, or convert deposit accounts into savings accounts at the end of the contract.

Out of those that have created an account using this solution, 94% said they would use the solution again. Three months post-launch, 1,300 people have already used this solution, indicating a strong demand for a digital solution that offers a simple and inexpensive way of creating a deposit account.

Benefiting both landlords and tenants by entirely digitizing the process

- Fast: making the process of opening a deposit account convenient and fast for both the tenant and landlord by cutting out unnecessary steps.
- Simple: simplifying the process for both the tenant and the landlord as they can verify themselves online rather than physically at a bank branch.
- All in one place: The entire process of creating the deposit account, checking its status, and closing it can all be done in one place, online - saving a lot of time for both the tenant and landlord.
- Reduced-cost: Cutting costs and avoiding insecure deposit schemes through the ability to set up a free deposit account,

rather than paying for a deposit account (that can cost as much as 2,000NOK).

What this could mean for other European markets

By creating a PSD2 API-based deposit solution in Norway, Neonomics demonstrated potential opportunities presented in other European countries. According to our findings, current solutions in most European countries present themselves as long and tedious. There is a clear need for a digitalized all-in-one solution that simplifies the deposit solution process for both the landlord and tenant. Beyond providing a deposit solutions, Neonomics's extensive network of PSD2 API connections to 1,800+ banks across Europe can open a realm of opportunities for other industries. The way payments are made throughout other sectors can be transformed by the use of our API connections through the access of customer data. Banks also have the opportunity to leverage this to access a wider range of customers.



CHARGEBACKS911

THE PROBLEM DEFINED...AND SOLVED

Interview with Monica Eaton-Cardone,
CIO and Co-Founder, Chargebacks911

Financial IT: Please tell us briefly about Chargebacks911 and the products/solutions it offers. What can be done to identify transactions that are at the highest risk?

Monica Eaton-Cardone: Chargebacks911 was Europe's first ever chargeback remediation specialist to tackle the £100 billion+ chargeback problem. The company was born out of necessity after my own online luxury goods business was repeatedly attacked by instances of friendly fraud (fraudulent chargeback claims) and chargebacks. When setting out to combat the issue, it was astounding to see how many companies were suffering with the same problem and how little help there was for those feeling its damaging effects.

That's why we set up Chargebacks911; to help those struggling to mitigate chargebacks. This is still a widespread and growing problem today as many businesses don't know how to distinguish between genuine chargebacks and fraudulent claims, leaving them disputing genuine chargebacks – which loses them loyal customers – or refunding instances of friendly fraud, making them look weak and leaving them open to future attacks.

The only way to establish which chargebacks are genuine and which aren't is by identifying what is causing them at their source. At Chargebacks911, we combine human forensics from our team of industry experts with our ISD technology to identify the cause of a business' chargebacks, whether this is merchant error, criminal fraud or

friendly fraud. Companies then have the information necessary to go about disputing instances of friendly fraud or mending inefficient business practises causing genuine chargebacks.

What's more, the solution operates with independent modules and can be integrated into a business' infrastructure in less than 30 days, meaning it can quickly begin recovering revenue lost to payment disputes.

Financial IT: Comment on your recently launched platform – Fi911. What makes it different in comparison to rival products in the market? How does it help financial institutions, payment processors and merchants to resolve chargeback disputes?

Monica Eaton-Cardone: There's a common misconception among customers that the chargeback process starts and ends with a merchant – this is not the case. Most are unaware of the intricate and often fragmented network of financial institutions and merchants that all have to deal with the complexities of chargeback claims.

So, no matter where an organisation is placed throughout the payments landscape, it must be prepared for chargebacks. The problem is that there are hardly any centralised systems to help with this, so information that was initially shared by the customer with the issuer is often altered, updated and diluted as it is passed from issuers, to card associations, then to acquirers, who pass it on to

merchants. By the time merchants receive the case, they're often unsure of how to respond to it.

To make matters worse, the different institutions that handle these cases are often located in different countries, meaning there are also language barriers during this process.

We launched Fi911 to help solve this problem. It provides financial institutions with next generation chargeback and merchant lifecycle management solutions that enable them to resolve chargebacks faster and more efficiently – all by optimising each step in the dispute cycle. It also allows them to engage their entire ecosystem by helping to mend the disconnect felt throughout the entire payments industry and save on time, money and lost revenue.

In addition to this, it removes legacy redundancies during the chargeback processes for financial institutions situated throughout the payment network, further bolstering the speed and ease at which they can respond to chargebacks. They are given access to intelligent tools, more data connections, and more flexibility, to encourage stronger data-led decision-making and more proactive action to be taken for all chargeback-related activities.

With these tools, we are aiming to mend the inefficient business practises that have existed in the payments industry for far too long. Hopefully then we can start combatting the chargeback problem head on, collaboratively.

Financial IT: What are the trends that will shape the chargeback landscape following COVID-19?

Monica Eaton-Cardone: During the pandemic, we have seen chargebacks grow rapidly, with some of the hardest hit industries expected to experience 10 times the amount occurring prior to the outbreak.

There are a number of reasons for this. In the travel industry, for example, with borders closed and planes grounded, a huge amount of travel plans and holidays have been cancelled, while delays to refunds have led to customers seeking their money back from their banks. In the eCommerce industry, disruptions to supply chains and deliveries have also resulted in customers instigating chargebacks.

What's more, since consumers are feeling financial pressures due to furloughs and redundancies, many are looking to free up money on past transactions by resorting to friendly fraud.

As we emerge from lockdowns, not only do merchants have to be well prepared to

combat chargebacks in order to ensure their survival, but financial institutions must be ready to face them too. This is because many merchants may face liquidation due to the financial instability caused by the outbreak.

If companies do go into administration and can't afford to refund customers, chargebacks are likely to be instigated and acquirers are going to be left cleaning up the mess.

To make matters worse, typically around 30% of claims made against a business after it has gone into administration are not authorised or processed outside of valid rules. This results in disrupted dispute processes and longer refund times for consumers while banks and third parties attempt to identify genuine claims. Once more, this further perpetuates the issue.

As a result, as lockdowns are lifted around the world and the true extent of the damage caused by the pandemic is revealed, financial institutions should ensure that they're able to combat chargebacks.

Financial IT: How has COVID-19 affected your business? What's next for Chargebacks911?

Monica Eaton-Cardone: We've certainly been kept busy as we're helping businesses deal with the sudden spike in chargebacks caused by the pandemic. As such, we're working closely with some of the largest companies in the payments network to help equip merchants and financial institutions with the tools they need to combat disputes and prevent them from occurring in the future.

This problem isn't going away any time soon, either. We'll be spending much more time helping businesses fight for survival during the next phase of the pandemic – enabling them to mitigate friendly fraud and chargebacks efficiently, effectively and quickly.

Yet, the disconnect that was taking place throughout the payments industry when it came to managing chargebacks isn't new. Neither is the battle to mitigate them. So, we're glad to have introduced Fi911 to companies that need it the most during these challenging times.



Fi911 supports financial institutions with innovative back-office management technologies created specifically for the banking and payments industries. By offering direct communications between FIs and their ecosystems, the company's scalable payment product suite offers features that range from fast, flexible merchant onboarding to highly transparent and feature rich client portals.

Fi911's proprietary DisputeLab™ helps make resolving chargeback disputes

faster and more efficient by optimizing each step in the dispute cycle. The company's unified platform also provides threat detection, reconciliation, and risk management tools, as well as the ability to generate commissions and ISO payouts directly through the system. Established by the dispute experts at Chargebacks911®, Fi911 offers global reach and expertise, as well as customized training and support from recognized industry leaders. <https://fi911.com/>



Founded in 2011, Chargebacks911 is the first global company fully dedicated to mitigating chargeback risk and eliminating chargeback fraud. As industry-leading innovators, Chargebacks911 is credited with developing the most effective strategies for helping businesses maximize revenue and reduce loss in a variety of industries and sectors within the payments space. Chargebacks911 provides comprehensive and highly scalable solutions for chargeback compliance, handling services and fraud strategy management. The

company helps decrease the negative impact of chargebacks, thereby increasing revenue retention to help ensure sustainable growth for every member of the payment channel. Chargebacks911's unparalleled category experience and Intelligence Source Detection (ISD™) technology help identify the true source of chargebacks, optimizing revenue recovery opportunities, mediating disputes, safeguarding reputations, and proactively preventing future fraud. <https://chargebacks911.com/>

WHAT DOES THE 'NEW NORMAL' LOOK LIKE FOR ECOMMERCE?

As our lockdown continues and the 'new normal' is affecting the globe, I reflect on major behavioural shifts we have observed so far and the impact they may have on eCommerce in the months and years ahead.

Seismic shift to online ordering and delivery

Lockdown has been a huge catalyst for shifting behaviours to embrace eCommerce.

The large groceries stores have done their utmost to scale their logistics network to cope with such a rapid increase in demand, especially for online purchases. It remains to be seen how much of this demand will continue when we return to our 'new normal' but I'd hazard a guess that many will see that good quality produce, conveniently delivered to your door is not only a time saver but reduces food waste so increased demand will likely continue.

But the acceleration of the eComm adoption curve hasn't just been in grocery. There have been some other surprising growth categories for online purchases including home & garden items, bicycles & exercise gear, outdoor & indoor games, office equipment and reading matter as people across the country shift their offices and entertainment to what they can do at home.

Forever disrupted supply chain

Many small businesses that usually supply the (now closed) restaurants, café's, and even event caterers are pivoting to supply groceries and other household items direct to consumer. They have the means to make

deliveries, but they need to build out a way to handle payments, orders and increase their brand awareness.

The businesses that are doing this successfully are fast attracting and retaining customers with the delivery of their grocery boxes brimming full of high quality, beautiful produce, often in less packaging than your average supermarket delivery would generate.

I believe these businesses will create a loyal customer base during lockdown and likely be faced with a choice when the world returns to normal – to keep delivering direct to consumer alongside their 'normal' business, or not. The demand from consumers to purchase high quality, local produce is certainly there, - will the small business sector grow in the long term, as a result of their new D2C offering?

Social buying

Whilst social distancing moved from buzzword to part of our daily lexicon in record time, group wide video conferencing usage has also risen dramatically. With large families and groups of friends spending virtual social time together I'm noticing a proliferation of new business opportunities here, and opportunities for ecommerce. For example, an artisan chocolate producer advertising delivery of a tasting box for you and your friends to have a tasting experience together (virtually of course) is genius!

Other entrepreneurial ideas have included the mass movement of in person classes online. Anything from baby sensory, to group yoga and even HIIT sessions. These businesses still need to

collect payments for their services but are having to use separate platforms for payments vs. video conferencing.

Consumers have embraced this move to online and, as with the disrupted supply chain, I expect we will still see a new swathe of customers who want to sign up to these services from the comfort of their own home in a post-lockdown world.

Perhaps video conferencing platforms will incorporate group ordering and payments in a simple intuitive way as they see the uptake of their platforms by small businesses looking to charge for their video presence.

Never has there been a moment in time when the right technology, to connect families and friends or buyers and sellers, been so critical to people's mental health and wellbeing.

Times of difficulty are great drivers of change, of innovation and there are so many good initiatives starting up around the globe. I'm certain that in a post-lockdown world many of these changes will persist. The innovation being driven across the world is contributing to defining our new normal. A new, improved normal.



Jennifer Macae,
Vice President
Product Management,
Mastercard





B2B PAYMENTS SERVICES IN 2020-21

The new world of open banking is one where more value is delivered to the customer.

Interview with Bakhtiyor Aliev, Co-founder and Chief Operating Officer at Safenetpay

Financial IT: *What do you see as the main trends for business-to-business (B2B) payments services in 2020-21?*

Bakhtiyor Aliev: I would add online B2B services, and in one sentence, online B2B payments services is an industry where volumes are rising, technology is evolving, regulation is adapting, and customer service is improving.

The volume of business is growing because, until recently, the global economy was expanding and because cross-border trade continued to increase. Payment providers specialising on international payments use new technologies to scale and create value both themselves and the customer.

With the recent global pandemic, and inevitable recession, a lot of companies will feel the short to medium effect of the crisis, some might even cease to exist. But at the same time online businesses will see an increased demand, which will provide an opportunity to grow existing and create new online services.

Financial IT: *What about prices?*

Bakhtiyor Aliev: They are getting lower and will continue to do so with the increased competition. And at the end of

the day a differentiating factor will not be price, but rather added value services which will tip the scale from one service provider to another.

Financial IT: *And the customers want better service, right?*

Bakhtiyor Aliev: Absolutely. Whether they are traditional banks, challenger banks or (like Safenetpay) non-banks, payments services providers will have to compete on service. Expect customer service to be something that is discussed a lot more in 2020. That is one of the really important topics in our industry.

Financial IT: *What is driving these trends?*

Bakhtiyor Aliev: The customers know more than they used to. Informed customers are empowered customers. They expect more. They can make comparisons and select a payments services provider who will consistently deliver the right solutions. Meanwhile technological shifts and capabilities, the continual evolution of technology is making things possible that were not possible four or five years ago. In the payments services industry, more is digital and much more is in the Cloud. Blockchain, AI – those are game changers, and not just in the

payment space. The new technology makes possible open banking – another driving force behind potentially a new cluster of service providers.

Financial IT: *As envisaged by the regulators...*

Bakhtiyor Aliev: Exactly. Open banking has been given a huge boost by the European Union's latest Payments Services Directive (PSD2) and by new regulations in other parts of the world, like US and Singapore.

Financial IT: *If service is the hot topic for payments services providers, what are the changes that will take place?*

Bakhtiyor Aliev: One big change is greater transparency. It will become much clearer to the customer exactly at what stage they payment is in, what are the charges that they are paying, and whether counter-party received the payment. If a payments services provider is using Blockchain technology to deliver benefits to customers, that fact will be explained in detail. Another change is greater data security. Here in the EU, the General Data Protection Regulation (GDPR) has put all organizations which handle customer data on notice that security is essential.

Bakhtiyor Aliev,
Co-founder and Chief Operating Officer, Safenetpay

As a trained lawyer, having earlier completed a degree in International Law, Bakhtiyor traded in career in legal profession to becoming an entrepreneur, pursuing his passion for creativity, innovation and economics of business.

First business venture came at the age of 23 in a form of a restaurant. Then there was more formal Business education (MBA), which resulted in inception, with two friends, of an import-export, tendering and EPC project development company in the energy sector – mainly oil, gas and coal. The company still exists. Then, in 2016, came an offer from a friend to become a partner in a UK start-up. Since then Bakhtiyor is working as a COO of Safenetpay.

Apart from his main job, Bakhtiyor consults several companies on the matters of strategy and banking.

In addition to his professional duties, Bakhtiyor is involved in charitable efforts aimed at improving conditions of people in need in Uzbekistan.



Financial IT: What about customer service in the traditional sense?

Bakhtiyor Aliev:Traditional sense of customer service involves reacting to the customer enquiry via any available channel without delay and with extra diligence. At least that's what we do at Safenetpay. We are taking the extra few steps we can take to make this journey more efficient.

Financial IT: Of course, greater service also implies a greater range of currency pairs that can be handled in cross-border transactions.

Bakhtiyor Aliev:That is correct. For example at Safenetpay we can deliver funds in almost any currency anywhere in the world. And it does not just apply to fiat currencies. One of the ways in which we differentiate ourselves is that we can process crypto-currencies as well for our customers.

Financial IT: Does this mean that the boundary between crypto-exchanges and payment services providers is becoming blurred?

Bakhtiyor Aliev:I would put it this way: provided that they handle the crypto-payments as effectively as fiat payments, and offer reasonable terms for

conversion, the new payment services providers have the capacity to replace crypto-exchanges and become one-stop-shop for hybrid payment methods. Payment services providers are, without exception, regulated institutions: that means that they will have to demonstrate that they can apply AML measures to crypto-payments.

Financial IT: Taking a three-to-five year view, what could be the implications of all this for the crypto-world?

Bakhtiyor Aliev:We will see very clearly whether there really is a future for crypto-currencies. Like a fiat currency, a crypto-currency can only be thought of as money if it is a unit of account, a medium of exchange and a store of value. If payments involving crypto-currencies surge in number and value, it will mean that they are becoming seen as proper stores of value. In that event, expect a lot more regulatory control in the crypto-world.

Financial IT: To date, Safenetpay has been focused mainly on building its clientele in Europe. What do you think are the key messages for B2B payment services providers in Asia?

Bakhtiyor Aliev:The trends are likely to be the same as they are in Europe. The

payments services providers are very innovative. The potential is huge, but so is the competition. Some of the smaller players may well find it a challenge to retain customers in face of competition from larger and more established players. Customer experience will be a key differentiator, and something that is discussed a lot more in Asia in 2020. It will also be great to see a lot more regulatory change in Asia over the next years. That will facilitate entry to the payment services industry by non-banks.

Financial IT: What are the most exciting changes at Safenetpay?

Bakhtiyor Aliev:We are excited about the new and improved services that we can bring our customers – and the growth that we can achieve. We recently launched our online card processing solution working with acquiring banks in UK and EU, and along with the business accounts we currently offer, merchants can have both as a single solution – there is no need for merchants to have a separate bank account. We are also increasing our correspondent banking relationships to provide quicker, cheaper and broader range of services for our business account holders.

worldpay from FIS

THE NEW WORLD OF PAYMENTS

Interview with Pete Wickes, SVP, Corporate,
Worldpay from FIS



Financial IT: Please describe Worldpay in one or two sentences. Our impression is that Worldpay provides the technology and the infrastructure which facilitates B2B and C2B (but not B2C) payments. Is this a fair comment?

Pete Wickes: Worldpay from FIS provides a full suite of payment processing solutions for SMEs, Large Corporate and global Enterprise businesses. Worldpay provides the innovation and technology infrastructure which helps merchants to accept payments from their customers all over the world with whatever payment method they choose.

Financial IT: In very general terms, what are the geographical markets that are most important to you? In relation to the businesses that are your customers, what are the most important industry verticals? How important are cross-border/ foreign currency transactions?

Pete Wickes: Worldpay is very much a global business. We were founded in London in the UK and we do have a very large market footprint here. However, we now work with millions of businesses across the world, with strong presence in the US, Asia, Europe and LATAM markets.

We operate in several verticals, but we are known for our expertise in Retail, Hospitality & Leisure, Financial Services, Airlines, Digital Content, Gaming and Travel.

Our work is increasingly global including facilitating cross-border.

Financial IT: You have highlighted how payments have changed since early March, with the arrival of the Covid-19 pandemic: 66% of Worldpay clients now processing payments via contact-free methods (with the majority over the

phone); 84% rise in number of businesses requesting alternative methods of payment (virtual terminals, pay-by-link and eCommerce); number of payments using Chip and PIN in April/May at 34%, down from 50% usually. Are there any other changes that you would highlight? Presumably Chip and PIN do not count as contactless?

Pete Wickes: The current pandemic has meant we have seen customers change their behaviour at a huge scale all over the world with unprecedented speed. Changes to shopping habits and mindsets that previously would have taken years or decades in individual markets have shifted virtually overnight.

The US, for example, has traditionally lagged other areas in digital payments. It has seen an incredible shift in the way in which people are behaving. Meanwhile, contactless payments have become even more entrenched across the European market – and we have led rises to the contactless payment limits in the UK and Ireland.

Financial IT: These numbers describe the nature of payments handled by Worldpay. How has the volume/value of payments handled changed during the pandemic?

Pete Wickes: We've seen some large shifts in the types of payments people are making across the different verticals. Some of these have been well reported, such as a huge decline in the travel industry as well as bars and restaurants that have been balanced with a rise in online retail spending. However, other impacts are a bit more complex, we have seen an increase in subscription-based products for example, as people look for new forms of entertainment and instant gratification that can be achieved from home.

Financial IT: Worldpay enables orders and payments for businesses that did not previously have websites. How does that work?

Pete Wickes: Worldpay has turnkey solutions to enable small and medium sized businesses to accept payments through virtual terminals, pay-by-link and eCommerce. The infrastructure is provided by Worldpay so small businesses can be up and running in a matter of days.

Financial IT: What are the geographic markets (e.g. Central and Eastern Europe) that are most resistant to moving from payments/ receipts in old fashioned cash?

Pete Wickes: There are headwinds in every geography, Africa for example, does not have a developed physical infrastructure, there are trust issues in Central and Eastern Europe while Japan has a strong legacy of using cash for physical transactions. While it is important to note that none of these barriers are intractable, the uptick in digital payment usage has been seen in nearly every country and we fully expect further improvements over the coming months and years.

Financial IT: Looking forward one year, what are the main changes that you expect to take place in the global payments landscape?

Pete Wickes: A year on from now, the global payments landscape will have thoroughly processed and synthesised the lessons of this pandemic. We'll be moving from systems that were implemented quite quickly as the pandemic took hold, towards solidifying new payment methods trends and capabilities. Consumer habits and the way they buy will have changed significantly in 2020.

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PAPERING OVER THE CRACKS OF LEGACY PAYMENTS INFRASTRUCTURE

The rate at which technology is moving is remarkable. Yet, even today, by the time something has been built, there is a chance that it will feel outdated when launched. It is therefore all the more ironic that many European banks are still heavily reliant on systems that were originally implemented several decades ago.

The introduction of open banking (PSD2) in 2015 challenged the speed of innovation and technology adoption among financial institutions and signalled the start of the disruption era. Fast growing, agile fintechs have since entered in droves, helping to highlight the underlying problems with legacy banking technology and offering a new, digital banking model for both businesses and consumers alike. However, the banks are now fighting back.

Digitalisation on steroids

The need to remove the sticking plaster and completely overhaul critical payments infrastructure in the UK is growing ever more critical as transaction volumes

continue to increase exponentially. The headlines broadcasting the disruption impacting consumers and businesses alike when banking technology fails are ever present.

Right now, you will be hard pushed to find a bank that has not already started to implement far reaching digital transformation programmes. The level of investment is substantial, perhaps unprecedented. These transformation projects are typically extremely complex, the fragility of the underlying legacy systems built on monolithic architecture adding to the risk involved. This requires both a leadership mindset and flexibility from organisational teams as they shift to embrace a new, better way of working - even before the new technology is implemented. The risk of doing nothing is far higher.

The true cost to banks

IBM reports that 92 of the top 100 banks¹ in the world continue to rely on mainframe legacy IT systems, in part because of their

proven processing power. However, the costs of maintaining these systems are growing disproportionately. With banks typically spending 80% of their IT budgets on legacy technology maintenance. A tier one bank could easily spend up to £250m a year on existing software that needs regular updates in order to meet regulatory requirements and manage the ever-growing list of security threats.

Fintechs continue to onboard new customers, their agility and speed of innovation underpinned by the next generation, cloud microservices technology and robust API's on which they are built. This enables these challengers to auto scale as capacity demand grows and to deploy updates incrementally without any downtime or disruption to the rest of the service. In doing so, they are able to keep the needs of their clients at the centre of their proposition while building credibility and solving real world problems. This further increases the pressure on the established institutions to tackle their back-office legacy systems.

¹ [IBM Institute for Business Value analysis based on internal data.](#)



Andrew Frost,
Customer Success Manager (International),
Form3.

Andrew is Customer Success Manager (International) at Form3. He has a strong background in deliverable FX and working with businesses to improve their FX risk management processes. Previously, Andrew was part of the strategic partnership team at Moneyscorp, Currencies Direct and AFEX managing corporate clients and enterprise partnerships.

Papering over the cracks

The pressure to innovate at speed and digitalise means that soon, banks will have little choice but to invest the required resources to keep pace with the new digital economy. Indeed, some have already made significant leaps with mixed success, creating new challenger digital only brands within a bank such as Hello Bank from BNP Paribas and Atom Bank from BBVA et al.

The problem is that, in order to be agile and innovative, a bank needs the underlying systems and infrastructure to integrate with these new technologies and many banks simply do not have the in-house expertise to undertake these endeavours. Building something from scratch is high risk, costly and slow. The temptation to paper over the cracks and carry on regardless is no longer an option.

Instead, banks are now looking to partner with fintechs, drawing on their technical expertise, resources and capacity to help solve problems quickly and in doing so reduce the time, cost, and complexity of enterprise-wide transformation programmes.

Payments technology is no exception and the opportunity to reduce the burden of

maintaining aging payments architecture using the latest cloud-native technology is enormous. As well as improving their ability to mitigate threats and keep pace with scheme and regulatory changes, banks can also dramatically reduce capital expenditure and improve operational efficiency, enabling teams to innovate and deploy new propositions more quickly. Of course, handing over responsibility for any critical infrastructure is far from straightforward and requires both parties to be fully immersed in the project at every stage with full commitment and support across the organisation essential.

Despite the current pandemic, banks continue to progress their strategic priorities and platform transformation projects fuelled by the ever-increasing digital demands of their customers. As their customer expectations increase, the need for real-time payment processing, transparent data reconciliation and low risk, low cost payments infrastructure are more important than ever. Papering over the cracks of legacy systems is simply postponing the inevitable and one thing is for certain, the burden of critical payments infrastructure will only ever continue to grow.



Trusted by financial institutions globally, Form3 is an award-winning, cloud-native payments platform connecting customers to the universe of payment schemes; (FPS, Bacs, COP, SEPA, Cross Border Payments) from a single API, enabling their users to move money freely in a truly real-time payments experience.

Their customers include UK, European and US banks, payment institutions, card payment processors and licensed Fintechs, including Tier1 global brands.

Form3 is regularly ranked in the Top European Fintechs to watch by Sifted and Fintech 50 and named as the Best Digital Innovation by Bobsguide 2019 and runner up in British Bank Awards for Best Technology Partner 2020. www.form3.tech



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

Den is a Chief Operating Officer at PayCore.io, which is 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 oversees 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.



HOW TO BECOME A PSP WITHOUT DEVELOPMENT EFFORTS

Today, [around 3.8 billion](#) people have smartphones. [Almost 60%](#) of the world's population have access to the Internet. These figures continue to grow year over year, encouraging the transformation of consumers' behaviour and triggering businesses worldwide to adapt to those changes.

The ongoing digitalisation received an additional boost from COVID-19 pandemic and long-lasting lockdowns that followed in many countries. New reality cemented online shopping and digital payments as convenient and safe ways to simplify people's daily lives.

In its turn, the need for scalable and reliable infrastructure to power the online economy increased significantly. Payment service provider (PSP) market will [more than double](#) in the coming years, growing from roughly \$40 billion in 2019 to staggering \$88 billion in 2027.

You can become a part of these game-changing snowballing market by establishing your own PSP company without significant investments. In this article, we're going to learn how.

Ten major steps of starting PSP company

If you want to deal with starting a company by your efforts, the main steps necessary can be conveniently rounded up to 10. Let's divide them into two categories to make them more digestible. The first category includes business steps:

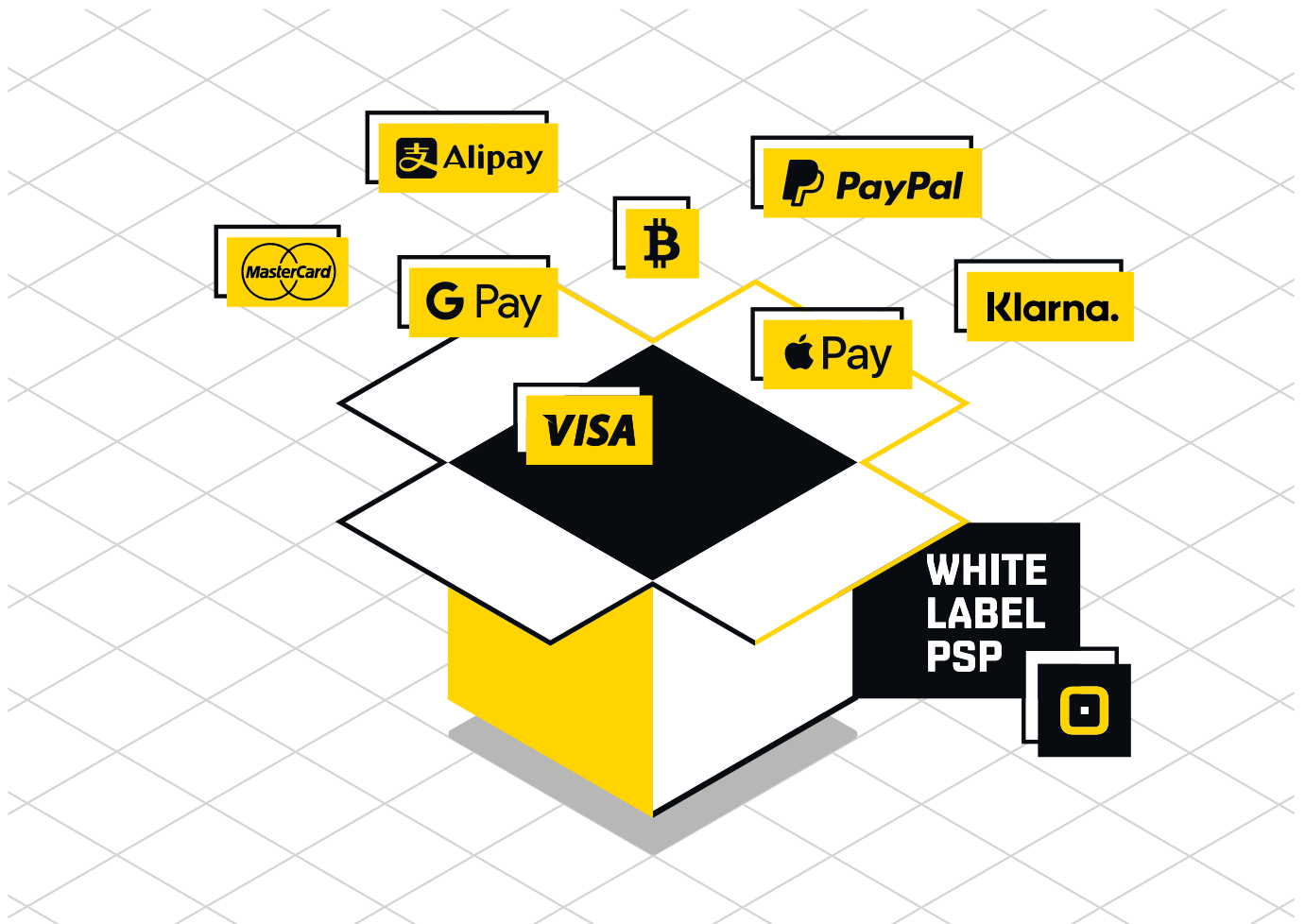
1. **Do market research.** Decide where you'll be registering your new business, which legislation is in place there, and would you be able to handle complying with it. It's better to have a highly qualified lawyer with strong market knowledge to help you set up a company following local regulations. Evaluate the demand level for payment services in your geography and examine competitors' offerings.
2. **Create a business plan.** Without having a thorough plan before starting any business activity, you're most likely to waste money and take your lumps. So, based on the insights gained after the first step, plan out what your exact offering will be, how much you will charge, how much money you need to start and maintain operations.
3. **Find banks to partner with.** Research in which banks you can open accounts for your activity. These banks, or bank, will underwrite your transactions and route them between banks.

Having a detailed business plan increases the chance the bank would agree to work with you significantly.

4. **Get the necessary equipment.** The equipment you need depends on business models you've decided to settle on and the services you're going to provide. Aside from the office equipment any modern business needs, you might as well need processing terminals, servers, ATMs, etc. If that's the case, leasing can help you get what you need without placing a financial burden on your newly-started business.
5. **Hire sales and marketing professionals.** Regardless of how sophisticated and beneficial your offering is, it has no point if your target audience has no idea your company exists. Marketing and sales teams will spread the word about you, growing your customer base, and thus your income.

The second category embraces technical steps. These can vary from PSP to PSP, but generally are the following:

1. **Development of the payment software.** Though being boiled down to a single humble step of our guide, it implies a time- and resource-draining process. It starts with planning and feasibility analysis, followed by design and coding. Place a great deal of focus on building a decent [Checkout](#), as it is a crucial consumer facing element of your system. You'll have to hire a development team and be ready that the development may take months of hard work. After that, the MVP should be implemented and tested before it can be rolled out to the market. And this process never ends, as you must ensure stability and scalability of your product, consistently maintaining and updating it.
2. **Purchase hardware security modules (HSM), tokenisation appliance, or both.** Based on the services you're about to provide, you'll need one or both of these encryption solutions to deal with card payments. It is necessary to ensure security and comply with the PCI tokenisation requirement.
3. **Build a server infrastructure and complete PCI DSS assessment.** You will need it to process and securely store transactions' details and cardholders' data. Bear in mind that the PCI audit has to be completed annually, and it is far from being free.
4. **Select and integrate with banks, processors, and gateways.** Given the high level of competition in the market, your payment



solution has to be versatile and scalable enough to fulfil clients' needs. That's why it is crucial to have many partners in the industry.

5. **Maintain and update your product.** The neverending process of maintenance and betterment is a cornerstone for a successful PSP company.

How to take the technical pain out of becoming a PSP

If you made it this far, chances are you're wondering how everything described above correlates with "without development efforts" in the headline. But the thing is, some companies can cover all technical aspects from the guide for you, offering white-label solutions at a reasonable price.

White-label PSP is an out-of-the-box solution, which allows you to generate revenue by providing payment services to merchants under your own brand.

Why wasting time and resources trying to develop something that industry experts have already done, and are offering to you with a cherry on top? Relying on a ready-made product empowers you to switch focus from pocking around the technical issues to handling business operations and building strong relationships with clients.

Why choose white-label PSP by PayCore.io

We've been gathering insights on the best practices in payments for more than ten years, developing and bringing payment

products to the markets worldwide. This knowledge is what our white-label PSP is based on.

The essence of our offering is a combination of PayCore.io's **payment and payout capabilities** with a feature-rich white-label merchant back office.

With this product, you can roll out your own branded solution to the market and earn money by setting up **fees** for any service you decide to provide, be it incoming or outgoing transactions.

Another great source of income our white-label PSP gives you is FX rates. All transactions involving **currency conversion** will be processed according to the exchange rates selected by you.

White-label **merchant portal** allows running multiple businesses conveniently, having separate commerce accounts and individual settings for each of them. You and your merchants can keep track of funds available on the accounts in multiple currencies in real time. Auto-generated detailed monthly **reports** help with monitoring and controlling cashflows.

Although our white-label PSP reminds of a life ring for aspiring payment companies, we don't just toss it and watch. We're always there to help with onboarding, offer technical assistance, implement new features or establish new connections clients require.

Companies that already run their payment business on our software saved not only months of time and efforts, but up to \$500k in development & maintenance costs. Moreover, they got themselves a reliable and future-proof technical partner. You can, too. Get in touch!



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FINANCIAL SERVICES ORGANISATIONS ARE NOT PRIORITISING COMPLIANCE IN THEIR MODERNISATION EFFORTS – NEW REPORT FROM ADVANCED REVEALS

THE 2020 MAINFRAME MODERNISATION BUSINESS BAROMETER REPORT REVEALS JUST 6% SAY IT'S ESSENTIAL TO MODERNISE LEGACY SYSTEMS TO MEET CURRENT REGULATORY AND LEGISLATIVE DEMANDS

Just 6% of financial services organisations say it's essential for them to modernise their legacy systems to meet current regulatory and legislative demands. This surprisingly low figure is according to new global research from [Advanced](#), which also reveals that only 20% cite an inability to meet compliance and regulatory demands as their top reason for modernising mainframe based legacy systems.

The IT services provider's [2020 Mainframe Modernisation Business Barometer Report](#) surveyed business and technology employees working for large enterprises in the financial services industry with a minimum annual turnover of \$1 billion across Europe and the United States. The report explores trends within the mainframe market, the challenges organisations face, and the case for application modernisation.

The new figures are a cause for concern, especially when the financial services industry is highly regulated, with enormous fines to match. In the six months to the end of June 2019, for example, the UK's [Financial Conduct Authority \(FCA\) imposed fines worth a total of £319 million for non-compliance](#) – more than five times the annual total for 2018 of £61 million.

"These findings are shocking given the regulations, such as the General Data Protection Regulation (GDPR) and California Consumer Privacy Act (CCPA), which have come into force over the last few years, comments Brandon Edenfield, Managing Director of Application Modernisation at Advanced. "It begs the question: have organisations become complacent?"

The research also reveals that over 95% of organisations in the financial services industry feel there would be either minor or no risks of non-compliance or security issues if they didn't modernise their systems within the next two to three years.

Brandon continues: "Arguably, the industry would not want to admit there is a major risk, but there are clearly lessons to be learned. We know from [TSB's IT glitch in the UK in 2018](#), for example, that there have been a number of [outages in banks, with critics blaming legacy systems](#). This demonstrates the consequences of organisations failing to modernise are huge."

When asked what the ancillary consequences to not modernising legacy systems would be, 60% of financial services organisations state difficulty in integrating legacy systems with modern technology. This is followed by difficulty to recruit the right talent (43%) and reduced levels of customer service (38%). Only 19% say inability to meet new regulations.

What's reassuring, however, is that 98% of organisations have active plans to move their legacy applications to the Cloud in 2020, which can support compliance. This push is likely driven by key benefits such as enhanced business agility and flexibility as well as the opportunity to attract new generations entering the workforce who expect advanced technologies. Above all, it offers significant cost savings for IT infrastructures. In fact, organisations could save around \$44 million (£36 million) if they modernise the most urgent aspects of their legacy systems.

Brandon continued: "As our world grows increasingly connected, organisations need to get more serious about modernisation. Many people today do their banking on their phones and tablets, hardly ever setting foot inside a branch. What's more, for the majority of them, banking has become a completely digital experience. However, in almost every bank, once you get past the digital veneer of the customer facing applications, the systems are still the legacy transaction processing applications that have been driving the business for decades.

"If organisations are to adapt to customers' digital habits, they need to consider legacy modernisation as the foundation. Those who fail to prioritise this shift risk falling behind their competition and significant revenue loss in the future."

To view the full report, please visit oneadvanced.com/Mainframe20

Research Methodology

The 2020 Global Application Modernisation Business Barometer Report was carried out online by Coleman Parkes throughout March and April 2020. The sample comprised of 400 people working for large enterprises in Europe and the U.S. with a minimum annual turnover of US \$1 billion. 200 of these people worked for organisations in the financial services industry.

About Advanced

Advanced is a leading international provider of application modernisation services with unique expertise in the legacy modernisation market.

With more than 500 modernisation projects completed worldwide, and 2.5 billion lines of code processed through our solutions we have been driving IT efficiency, agility, and competitive advantage for customers through core application and database transformations for the past 35 years. Over that time, we have helped organisations across all sectors including the UK Department of Work and Pensions, FedEx and the New York Times.

Within the UK, Advanced is one of the three largest providers of business software and services, with a strong track record in helping our customers journey to the Cloud with solutions for public, private and third sector organisations.

We have a £261m turnover, 20,000+ customers and employ 2,500+ employees all helping organisations create the right digital foundations that drive productivity, insight and innovation – all while remaining safe, secure and compliant.

We simplify complex business challenges and make a difference by delivering immediate value, positively influencing millions of people's lives. Advanced's solutions enable a variety of fundamental transactions to take place, including helping care for 40 million patients in the UK, sending 10 million sports fans through turnstiles, managing over £4 billion in charity donations, supporting 2.5 million students and, ensuring 1.2 billion passengers arrive at their destinations on time.

Our international modernisation business was expanded with the 2019 acquisition and integration of Modern Systems.

2020

Mainframe Modernisation Business Barometer Report

Exploring global trends in the mainframe market, the challenges facing organisations and the case for application modernisation among financial services organisations globally.

The Highlights

6% say it's essential to modernise legacy systems to meet regulatory and legislative demand

95% say there would be minor or no risks of non-compliance or security issues if they didn't modernise

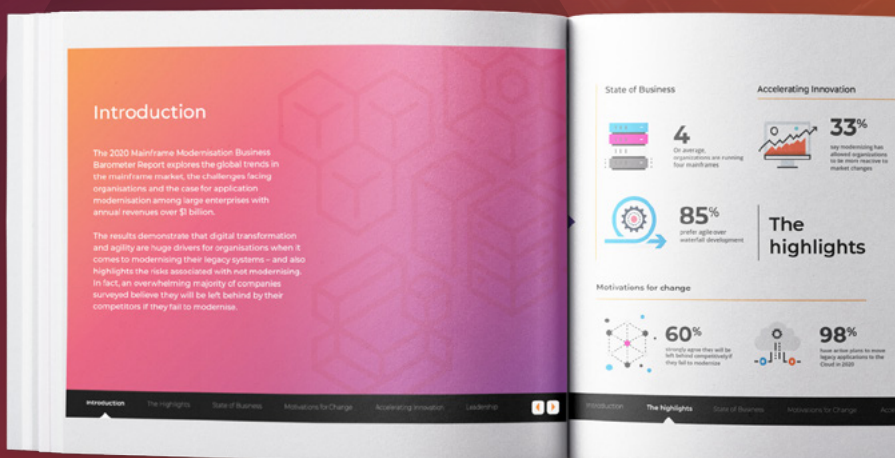
60% say they face difficulty integrating legacy systems with modern technology

43% face challenges recruiting talent to maintain legacy systems

38% suffer reduced levels of customer service because of legacy systems

**Download your copy
of the report at:**


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A portrait of Tim Hooley, a middle-aged man with short brown hair, smiling slightly. He is wearing a dark blue blazer over a dark blue crewneck sweater. The background is a plain, light gray.

Tim Hooley,
Chief Technologist, EMEA FSI,
Red Hat



FINANCIAL SERVICES BRANDS FOSTER A COMMUNITY SPIRIT TO DRIVE INNOVATION

Like most large enterprises today, banks and other financial services companies are striving to become technology businesses. At the same time, CIOs, CTOs and IT managers are under constant pressure to reduce costs and deliver on large transformation projects. The current pandemic situation has left brands having to support remote working on an unprecedented scale, placing greater emphasis on cloud and security.

IT departments need to strike a careful balance between cost and delivery. Consequently, more and more financial services organisations are turning to enterprise open source software. According to Red Hat's own [research](#), 93% of IT leaders from across the financial services industry stated that enterprise open source was important to their respective organisations. A large proportion (83%) also remarked that enterprise open source has been instrumental in allowing them to take full advantage of cloud architectures. This is enabling banks to implement hybrid cloud strategies and develop cloud-native applications.

Open source enables organizations to innovate faster and offers a level of flexibility and agility that would have been

difficult to achieve if they were solely reliant on proprietary software. Besides adopting enterprise-grade software products and solutions, banks can become leaders in setting technology trends and influencing software development through deeper collaboration with open source communities. This in turn helps to attract and retain the very best developers.

The magnification effect

From the outside looking in, it might appear that the financial services industry is ahead of the curve. Think of the many online and mobile banking applications and services we take for granted today. The fact of the matter is that most traditional banks are reliant on aging systems that are unable to keep up with the pace of change in the sector. They face an uphill challenge to remain competitive and be at the forefront of financial services technology.

In addition to using enterprise open source from a trusted vendor, major gains can be made by organisations that are prepared to work directly with open source communities, in what's known as 'the upstream'. This is where code is developed, in a shared process. From here,

the software can be downloaded for free, or, it can be consumed via a trusted open source vendor that hardens the software, securing it, stabilising it, adding lifecycle management and service level support, to make it suitable for use in an enterprise; otherwise known as the 'downstream'.

Upstream communities are the engines of innovation, made up of developers and thinkers, diverse individuals and organisations from around the world, all dedicated to building new software. Collaboration in open source communities is a fluid model that allows banks to contribute directly to the development of new code to help create and refine a particular piece of software. It's a way of expanding a team many times over; supporting open source projects and contributing perhaps just a few hours of developer time per week and gaining the output of hundreds or thousands more. Creating a magnification effect!

In the driving seat

Participating in open source is a far cry from buying an off-the-shelf product. It allows an enterprise to play a leading role in product development by nurturing a

solution that addresses a specific business requirement. Many organisations from the same sector can work together to get the capabilities they need. That's fairly groundbreaking in a heavily regulated industry like financial services. It's also likely the code will become freely available, providing an opportunity for other developers to access it via a set of open APIs. The software is frequently updated and improved by the many developers maintaining it. As well as being the captains of their own destiny, banks and their inhouse developer teams gain added kudos for being involved at the bleeding edge of emerging technology.

FINOS (Fintech Open Source Foundation) is one instance of a community that was set up by banks to encourage greater collaboration on open source projects. It started out as Symphony, a messaging and collaboration tool for the banking community conceived on the back of open source software that developers from a prominent investment bank used to create a secure messaging platform. It was then adapted by developers from other banks who went in to add voice and video capabilities. Symphony is now a major business valued at around \$1.4bn, and the concept has expanded into what is now FINOS. However, FINOS at the moment focuses largely on software development for investment banks, which limits the impact it can have on other aspects of financial services such as insurance or retail banking.

Moving at the speed of innovation

Cloud migration and hybrid cloud adoption is central to any major digital transformation project. Banks need the

agility and elasticity the cloud gives them to extend reach into new virtual and geographic markets. The framework known as Kubernetes - one of the fastest growing open source projects in history - enables companies to automate the management of large numbers of containerised applications across a hybrid cloud environment. Linux-based Kubernetes has become the industry standard for container orchestration. In fact, Red Hat has been contributing to the development of Kubernetes since its inception.

Given the opportunity, banks should be actively contributing to Kubernetes development. The upstream model gives them the ability to do this. They can marry their own resources with all that the community has to offer to shape Kubernetes-based products and solutions to target their own individual business requirements. It's a model that promotes continuous development, benefitting the banks themselves and the wider community.

Banks are not averse to the upstream model by any means. Real-world examples include a major financial services organisation that joined a community to drive the development of a critical piece of middleware. The bank's developers worked side-by-side with the open source community to create new software and features for the business process management platform. The community's involvement allowed them to deliver the project in record time and at a considerably lower cost. Subsequently, the bank is now an active member of the open source community, regularly contributing new ideas and code to drive projects. This model has ensured the bank is able to build the features it needs to enhance its own product portfolio. A clear demonstration that leveraging global communities is a smart

and cost-effective way to drive software development and transform digitally.

A strategic development

So, surely all financial services organisations are signed up to open source communities? Well, not quite. Specialist open source projects like FINOS do exist and there are more examples of community led projects like Symphony out there. However, these open source projects are the exception rather than the rule. Most developers operating in the financial services space are tucked away behind the company firewall. Like banking itself, software development can be a stringent and highly regulated process. It's time to change this. In today's fast paced digital economy, the policy of keeping your developers in a closed environment is no longer tenable. If you're going to continuously innovate then you need to bolster your inhouse teams with the wealth of talent that's available outside of the firewall. On the flipside, developers flock to organisations that are engaged in upstream development because it gives them exposure to exciting community-led initiatives.

There are lots of different ways an organisation can contribute to upstream communities and gain access to a global network of developers. They can invest in a community and support it financially, they can provide technical leadership or advocacy, but the most common model is to contribute code. By doing so banks and financial services organisations can discover, or help to build, software that can be adapted for a specific business need. Enterprise organisations that participate in existing open source projects can stay ahead of the curve, significantly reduce costs and speed up time to market.



Move forward, faster. Build for change.

Financial services companies are optimizing business processes, modernizing technology, and evolving to a more agile culture. With Red Hat, your organization can better manage technology complexity, reduce risk and maintain compliance with tools to innovate in a world of rapid change.

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DATA MODERNISATION

- CRITICAL FOR BANKS TO RESPOND, REBUILD AND RE-IMAGINE IN CHANGING TIMES

Introduction

In the midst of the global shock resulting from COVID-19, banking leaders have been forced to reappraise the suitability of their information systems and applications to meet imminent and ongoing demands. For many, change is the only option. The actions they take now may not only improve their business' prospects of emerging from the crisis on a firm footing, but put them in a stronger position to lead in the aftermath.

Slow progress

Modernisation of data management and business applications has been a priority in the banking industry for many years. Established players have been pressed by the evident disruption

in other industries from nimbler digitally-native services, as well as by regulatory imperatives. Yet progress has typically been slow, often stunted by legacy dependencies, regulatory challenges and an understandable cautiousness to embrace the 'move fast, break things' mindset where customers' savings and investments are at stake.

The current crisis has highlighted the need for data modernisation to be prioritised even more highly in order to enable faster decision-making, smoother operations and significant cost savings. The imperative now is to use the crisis to catalyse lasting change that realises the true promise of becoming a digital business.

Business and IT decision-makers really need to consider artificial intelligence (AI) to complement their digital strategies, especially as AI can help give a competitive edge.



Subash Wali,
Banking & FS lead (UK & I) for the Artificial Intelligence and Analytics practice within Cognizant Digital Business

Subash Wali is passionate about delivering business value by leveraging the power of technology and data.

Subash has a strong foundation in data principles and has been part of many a data transformation journey. He has a unique blend of skills with a strong business and data flavour, a good understanding of technologies and passionate focus on customer relationships. He has 26+ years' experience in the data and analytics landscape across multiple business areas including Banking & FS, Aviation, Manufacturing, Life Sciences and Insurance.

Data and AI

The benefits of running AI across the huge volumes of data firms hold have wide-ranging significance. Operationally, it allows efficiencies to be realised in streamlining processes and applying advanced analytics for better governance and reduced risk (especially around fraud and malicious activity). Externally, it enables improved customer outcomes through the development of more informed and tailored product and service offerings.

Without the right data platforms, enhanced through the use of AI and machine learning in data management, the vast benefits of data modernisation will not be achievable.

As the true scale of the pandemic became known, banking leaders were forced to make impactful, often challenging, decisions to maintain business operations. Yet many have found themselves hampered by the inability of their IT systems to handle this level of stress.

Common issues related to opening up information systems, lack of integrated data, ensuring the quality and integrity of the data and being able to draw rapid insights have brought challenges at all levels, from senior executives through to frontline staff. Issues that needed an immediate response could be dragged out for days due to the reliance on manual processes, poor quality data and ageing systems poorly equipped for the massive customer shift to virtual operations.

As with any sudden shock to the system, business and IT executives have had to re-evaluate their longer-term strategies, re-prioritising items on their technology roadmap to deal with imminent concerns while streamlining costs. The crisis has highlighted gaps and weaknesses in how data is leveraged as a business asset, and shown the urgent need for investment in modern data platforms.

Movement from normal to crisis to 'next normal'

Early evidence suggests that the pandemic will have a lasting effect on banking business models and ways of servicing customers. The 'new normal' is being shaped by online services, AI-based operations and customer service, dynamic forecasting models, remote work and more.

The winners in the new economy will be those able to make tactical, immediate decisions, enabled by data and intelligence to achieve immediate objectives and longer-term strategic goals. This applies across all aspects of their operations, from resource management and budget control through to customer experience and outcomes.

A modern data platform involves a backbone built on fast and frictionless access to information, an accelerated ability to migrate workloads to the cloud and the power and scalability to transform data-heavy operations through advanced tooling such as AI.

The crisis has highlighted the limitations of legacy banking systems in supporting the velocity of today's data volumes and the significant cost burdens of maintaining terabytes (or more) of data that's not used for business outcomes.

Likewise, lack of standardisation across the data and technology ecosystem is delaying the modernisation as well as incurring high operating cost. This is an immediate priority for many banks to fix in the current environment.

Cognizant's own [research](#) into how Financial Services executives are approaching AI showed that while 74% agree that AI is important to their company's success today, less than a third (29%) have reached full implementation of AI projects. When asked on the challenges they've faced in employing AI, nearly half (49%) cited being able to make AI applications work in an integrated manner and 45% pointed to difficulties in gaining access to accurate and timely data.

Improving performance, collaboration, and end-user experiences is infinitely more difficult without data that is trusted, relevant, accessible, and secure.

Making data a vital asset

Investing in a modern data and analytics platform is one of the best bets a business leader can make today. On one level, such systems help to reduce the costs associated with routine internal tasks such as reporting, and customer-facing tasks such as account updates and loan approvals. On another level, they help to speed up decision loops and the transformation of customer interactions through better utilisation of relevant data.

Modernised data operations rely upon having a data platform that consolidates disparate data sources and allows for improved



Nejde Manuelian,
Head of Banking Europe, Cognizant Artificial Intelligence & Analytics

Nejde leads Cognizant's Artificial Intelligence and Analytics practice for Banking and Financial Services across Europe. With over 20 years of commercial and consulting experience specialising in information management, Nejde's focus is on helping financial services organisations drive innovation and transformation through talent, technology, and collaboration. Nejde is also director and co-organizer of the AI Users Group UK and France which delivers knowledge sharing and networking opportunities for big data and AI professionals.

data mining, segmentation and QA. Such a platform also provides the company with a greater depth of data science and machine learning tools for modelling, searching and applying this data.

Banks already have that richness of information; they just haven't been able to exploit and leverage it to the necessary depths. Best-in-class data platforms can help to solve this issue both in terms of modernising their application layers and their data quality engine, enabling the development of a fast, fully-integrated and seamless digital ecosystem.

Change at extraordinary speed

Through the crisis, we have been working with customers to implement data modernisation programmes using a combination of methods, tools and platforms that can accelerate this transition. The uncertainty that lingers around the ongoing impacts of the crisis mandates that businesses are able to access and manage data at an increased pace, and with unparalleled levels of accuracy.

Using Cognizant's Intelligent Data Management, we've automated the core processes of business' data management using AI and ML. Automated and Smart Data Governance, Self-healing Data Quality and Smart MDM significantly reduce human intervention, resulting in the reduction of implementation and operations costs.

Working with one Financial Services customer, we built an end-to-end integration platform to enable their small business clients to apply for loans. We delivered the solution with a rapid turnaround of only three days, giving them the ability to process more than 40,000 applications in less than two weeks and make informed funding decisions to support 20,000 applications within three weeks.

For another banking customer, we implemented data modelling that enabled identification, segmentation and personalisation of credit card payment relief offers in near real-time. We delivered the optimised model within a week, helping them to provide the required immediate support to their customers during difficult and uncertain times.

The speed at which we turned these projects around highlights the level of service customers expect of banks. A sudden change of circumstances has had significant implications for businesses and individuals. With fast access to high-quality data, banks can stand out by offering the support that's needed, right when it's needed. Moving data assets and applications into a modern data platform enables them to make this their new modus operandi.

What data modernisation can really achieve

The benefits of implementing a data modernisation programme extends beyond the current situation, helping banks to lower costs and transform processes in a way that will bring lasting benefits. Moving your data assets to cloud and automating repetitive tasks or those requiring unerring accuracy (e.g. compliance and regulatory reporting) can bring game-changing cost reductions. Among our customers, we've seen organisations achieve a 40% reduction in their total cost of data, and 30-60% faster time to market due to making these changes.

The cost optimisation also applies at an employee level, allowing the removal of heavy manual processes, boosting productivity, and the avoidance of duplicated or wasted resources.

For banking management, modern data platforms allow for the information they need to be delivered at a far faster rate. Performance statistics and forecasting can be served in near-real time and in the shape and format necessary for them to make informed decisions.

At a customer level, the benefits are equally profound. Gathering customer data and being able to use it as a means for establishing context completely transforms the relationship with customers. By collating information from multiple channels and touchpoints, they can better target customers with tailored financial advice, products and services to achieve hyper-personalisation.

We've been working with our customers to identify these opportunities and realise such cost savings. With one customer in the collections space, we implemented AI applications to target collection efforts toward delinquent borrowers where there is the greatest likelihood of success, as well as identifying the best communication channel, time of day and messages for each borrower. The reduction of labour-intensive processing and an increasing success rate has brought \$10 million in annual savings.

We also worked with a company in the fraud prevention space to build a machine learning-based credit card fraud analytics platform. Its aim was to identify fraudulent patterns of data to significantly reduce the risk of false positives, which is expected to produce \$90 million in savings compared with their previous system.

In the economic environment that follows COVID-19, especially given an upsurge in online services and activity, the banks that have invested in modernising their data landscapes will be better positioned to identify areas where costs can be contained and reduced, and use their superior customer understanding to deliver a more personalised digital experience.

Gearing up for the future

As we assess the full and varied set of impacts around COVID-19, data is an essential component in meeting the needs created by the current global situation, while laying the foundation for new business models and services in the months and years following.

To compete in the post-COVID 19 era, businesses must rapidly make their data usable, accessible, and cost-effective. The faster companies update their ecosystems, the sooner they will be able to realise these benefits of AI as a key component of their data modernisation initiatives.

Business and IT executives are agreed that AI will be vital for increased efficiency, cost reduction and increased revenue. Our [research](#) showed that fast-growing financial institutions are leading the way here: 87% of executives from such companies recognise the importance of AI in their current strategies, and 93% of all executives surveyed said it would be important to their business within three years.

Modern data capabilities are available to all banking institutions, and can be delivered in a matter of weeks, not years. To realise these benefits, they must be willing to invest in a modern data platform.

Banking leaders can't wait on this; they have to make decisions now.

Cognizant

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We help you navigate the digital road



UK FRAUD LOSSES — WHAT HAPPENED IN 2019 AND WHERE ARE WE HEADED NOW?

UK Fraud Losses in 2019

UK Finance recently published “Fraud – The Facts 2020” and as usual the report was full of great data on the UK banking fraud landscape in 2019. In this blog, I’ll draw out the key trends and implications, along with potential impacts from the COVID-19 crisis in 2020.

Here are some key points from the report:

- Total unauthorised fraud is down 2 percent over 2018 at £824.8 million
- Card fraud losses is down 8 percent at £620.6 million
- E-commerce is fraud down 9 percent to £359.3 million
- Cheque fraud is up 161 percent to £53.6 million, continuing the late 2018 rise
- Unauthorised Remote Banking (ACTO) fraud is down 1 percent to £150.7 million
- Authorised Push Payment (APP) fraud is up 29 percent to £455.8 million and now makes up 36 percent of total fraud losses, over three times that of unauthorised remote banking fraud.

It’s a mixed picture of increases and decreases, but case volumes were up almost across the board, driving down average loss per case as preventions increase.

Cheque fraud continues its dramatic rise. What is particularly interesting is that it’s up across the different fraud types this year, not just counterfeits. I’ve covered this in more detail in my recent blog, as this is a trend in the U.S. and France, too.

In card fraud, losses are decreasing by double digits across many typologies, such as Europay, Mastercard and Visa (EMV) take up across the globe. In particular, counterfeit card fraud was down 21 percent in the U.S..

However, this is contrasted with Lost & Stolen losses remaining flat, but increasing as a percentage of overall

losses with cases up by 6 percent. This will likely be driven by distraction thefts and contactless fraud.

COVID-19: Fraud Impact

With the impacts of COVID-19, there will be less ability to undertake distraction thefts and to see PINs, as fewer opportunities will occur due to reduced chip and pin vs. contactless/XPays use, as well as the need to stand further apart. This may increase actual theft and violence to obtain card and PINs.

Speaking of contactless, the UK has just increased its limit from £30 to £45 (the maximum allowed under PSD2) to further reduce the need for people to physically touch card readers. We often see press articles about contactless fraud, but the reality is this is the least fraud prone type of card fraud.

Contactless fraud losses increased £1.1 million, while transactions value increased by £11.5 billion. As a percentage of transaction fell from 2.7bps to 2.5bps in 2019, this compares to a 15bps loss for e-commerce fraud and 7.5bps for all types.

The big cards fraud driver is still card-not-present (CNP), and particularly e-commerce. Even with a fall in losses, CNP was still 76 percent of card fraud, with cases increasing by 5 percent.

Cases are likely to continue, and the COVID-19 situation is already increasing fraud via CNP and will likely increase the opportunity for card and data compromises, with several seen this year e.g. from Virgin Media and Marriot.

Increased Authentication

3DS 2.2 and increased authentication will help, but this situation highlights the need to move away from clunky authentication processes.

3DS 2.2 is also likely to increase the shift of losses from merchants to issuers. What the data also shows is an Ecomm Fraud rate of 15bps, which is up from last year and well above even the

NICE • ACTIMIZE

Rob Tharle, Fraud & Authentication Subject Matter Expert, NICE Actimize EMEA, is responsible for providing thought leadership on industry trends, challenges and opportunities. Prior to joining NICE Actimize in 2019, he worked for 17 years in a number of Risk Management and Fraud Prevention roles at both Natwest/RBS and TSB. During that time, Rob gained extensive experience with the technologies and design of fraud prevention and detection systems including application fraud, Apple and Google Pay, online and mobile banking.



lowest of the PSD2 Transaction Risk Analysis (TRA) Exemptions, so not many financial services organizations will make use of this. This means slick authentication is even more important.

What is interesting here is the reduction in a number of fraud typologies with an increase in others, growing the concentration. In many cases, we can see that banks' financial crime investments are working, making the fraudsters work harder to get their money.

The numbers show that the success really relates to unauthorised fraud, with authorised fraud continuing to rise. APP fraud now makes up 36 percent of UK banking fraud, up from 30 percent in 2018. Note that this is likely understated, especially with corporates.

Remote Banking Fraud

Remote banking fraud had a slight decrease, despite a hefty 38 percent increase in cases. The interesting point here is that telephony and mobile losses increased by 7 percent and 94 percent, respectively. Mobile reflects the changing genuine usage patterns, but telephony is now at £23 million, showing that it is still a weak link.

It's important to remember that these numbers were published before there were any impacts from COVID-19, as they only run to the 31st December 2019. Seeing the trends from these numbers, combined with what we've seen in last few weeks, what do we think is going to happen?

Moving Forward

First, we've all seen the reports of a big increases in scams and authorised frauds. These have ranged from purchase frauds for things like masks and toilet rolls, to investment frauds for vaccines. We've also seen phishing and malware campaigns related to HMRC and COVID-19 maps.

It's easy to think that fraud attacks are going up across the board. However, there appears to be some nuance to this. There is more e-commerce fraud on cards, as most of the genuine spend is there and some of this is purchase scams. On the payments side, mule behaviour has dropped a bit, and therefore likely so will the unauthorised and authorised frauds. This makes sense as cashing out is harder, with many financial branches shut down or on reduced hours, and country borders closed.

Another consideration is that we could be seeing Organised Crime Groups (OCGs) sitting on the credentials or access they have captured from recent phishing and malware campaigns to use once the lockdown restrictions have eased. This could mean FSOs are deluged with attacks in just a few weeks' time. Operations teams could be overwhelmed as this is similar to a distributed denial of service attack (DDOS) as they work to get back to normal. This could result in high levels of losses.

So what can firms do to combat these trends?

- Create capacity and flexibility through automation and a single case manager
- Leverage and increase investments in authentication, including risk scoring enrolment and logins, as well as SMS OTP replacements
- Build out APP-specific models to detect APP fraud, as well as use these scores to drive dynamic in journey messaging
- Look at building inbound payment profiling in real time as liability shifts
- Optimise models for the 'new normal' and create the ability to refresh these more often
- Upgrade fraud platform capability of handling the extra data, new channels and running multiple models to detect fraud
- Build the fraud platform into a fraud hub, linking KYC, AML, application fraud and transaction fraud together to really provide customer profiles and make intelligent, risk-based decisions.

WHY USING BEHAVIOURAL BIOMETRICS IS THE BEST PATH TO PREVENTING ONLINE BANKING FRAUD

Most of us use biometrics in everyday life when we unlock our smartphones using a fingerprint or facial recognition. Biometrics are extremely helpful for authenticating people, as everyone's biometrics are unique to them, meaning it is much easier to tell with any degree of certainty that a user is who they say they are.

Physical biometrics, referring to physiological features of the human body that can be used for confirming someone's identity, can make authentication both more comprehensive and more efficient. For example, the facial recognition technology used at a lot of airports in passport control identifies passengers more accurately whilst also speeding up queuing times.

Problems with using physical biometrics for online security

The problem with using physical biometrics as part of an online security program, however, is that the person has to be physically present to be authenticated. When interacting with the online world,

each user can only be identified through their device.

This means that the device would need to have specific hardware installed such as a camera for facial recognition or a sensor to scan a fingerprint. And authentication using physical biometrics may only occur when the external conditions are correct, such as needing light in order that a camera can recognise the user's face, or when the user is not wearing extra clothing like gloves or a mask.

Additionally, physical biometrics can to an extent be captured and re-used. Many companies actually collect and store physical biometric data for all kinds of uses as well as security, for example, a casino might use facial recognition to identify and remember high-spenders in order to improve their customer experience.

Therefore, physical biometrics may only be useful in the fight against online banking fraud as part of multi-factor authentication, where it is layered with another, different method of authenticating a user for increased security.



Advantages of using behavioural biometrics for online authentication

Behavioural biometrics, on the other hand, refers to the patterns of behaviour that are completely unique to each user. Being authenticated through a device is no longer an issue, as behavioural biometrics can be used to analyse the way in which someone interacts with that device, whatever the device may be.

There are thousands of different parameters that can be analysed to construct individual profiles for every user. These parameters include the rhythm and cadence with which the user types, how they typically move the mouse, and the angle at which they hold their phone. Analysts studying someone's behavioural biometrics would even be able to tell if the user was right or left-handed.

In other words, behavioural biometrics can be analysed to construct a sort of 'cyber-DNA' for every user, by aggregating these interaction signals. The huge advantage of using behavioural biometrics for authentication is that the patterns of behaviour that make up these profiles cannot be stolen, duplicated or reused. In fact, the very act of attempting to re-create someone's behaviour patterns would be recognised as suspicious when compared to their typical profile.

Combining behavioural biometrics with deep learning to comprehensively fight fraud

buguroo has developed a comprehensive anti-fraud solution called bugFraud, combining behavioural biometrics with deep learning to dynamically create unique profiles for each user operating within a bank's system. In doing so, they can compare a user's online banking session with their entire behavioural history to find the smallest of anomalies, checking that they are who they say they are, and have not been manipulated or taken over mid-session.

This is because, whereas physical biometrics can only authenticate users at specific moments, usually at login and when completing a transaction, behavioural biometrics can continuously authenticate the user throughout their entire online session.

Deploying deep learning technology in this way means the solution is tolerant of changes in a user's pattern of behaviour or gradual changes such as the user's age, and factors them in. In fact, every time a user carries out an online banking session, the solution becomes more accurate to them.

It also negates any need for specific hardware to be installed on a user's device. This, along with the fact that bugFraud invisibly authenticates a user during their entire online session, demonstrates how the solution recognises and fulfils banks' needs apart from security, through prioritising a frictionless user experience.

Using behavioural biometrics to pinpoint fraudsters

In the same way the solution can build profiles for legitimate users, its innovative capability, Fraudster Hunter, repeats the exercise for cybercriminals, as they themselves have their own unique traits that cannot be replicated.

The tool works through link analysis, a process where the behaviour of users is placed within the context of other information, relating to the device being used, their network, and other banking sessions they have carried out in the past, and the links between components analysed for suspicious behaviour.

In this way, Fraudster Hunter can capture the cyber-DNA of fraudsters and compare their online interactions with a bank against the biometric and other contextual information the solution has gathered. Using this information, a bank's analyst will be able to differentiate between legitimate and illegitimate users on an individual basis (rather than comparing the user's behaviour to clusters of 'good' or 'bad' users), leaving little room for false positives and negatives.

This means the tool can actively track and pinpoint fraudsters already inside a bank's system, instead of simply reacting to instances of fraud, leaving the bank in a position to proactively prevent fraud at any point, including before it has even happened.

This is an important step in the evolution of an anti-fraud solution founded in behavioural biometrics. As fraudsters grow ever-more sophisticated in their techniques to manipulate users and steal money, it is necessary to find the fraudsters themselves and thereby cut fraud off at its root.



Tim Ayling,
Vice President EMEA, Buguroo

Tim is buguroo's Vice President EMEA, having joined the company in 2019, bringing twenty years of experience in the cybersecurity and anti-fraud industry. He started his career in leadership in 2003, building on technical support and system engineering knowledge to help establish Entrust Inc. in Australia, where he was made Vice President Asia Pacific in 2006.

Since returning to the UK with his family, Tim has spent time in the cybersecurity practice of KPMG, as well as held numerous leadership roles at large cybersecurity vendors, notably serving as EMEA Director of Fraud & Risk Intelligence at RSA Security and most recently as the Global Head of Fraud Prevention Solutions at Kaspersky Labs.



Alexis Segovia,
Head of FinTech Relations at IDnow

HOW FINTECHS TURN CHALLENGES INTO OPPORTUNITIES

Fintech has emerged as one of the fastest-growing sectors in the financial services industry and has radically disrupted traditional banking. However, this unprecedented success also brings about more and more regulatory requirements and challenges.

In recent years, Fintechs have achieved incredible growth and flexibility: They are able to launch quickly, adapt fast and focus on scalability. They frequently operate in more than one country from an early stage. This rapid, global growth doesn't come without challenges. Financial services are among the most heavily regulated sectors in the world, so it's not surprising that regulation has emerged as the number-one concern among governments as Fintech companies take off. As technology is integrated into financial services processes, regulatory problems for such companies have multiplied, but determining the regulatory obligations of any business can be a mammoth task.

Throughout Europe, compliance in the financial services industry is distinct from country to country and falls within a range of jurisdictions. In most countries, until a couple of years ago Fintechs were unregulated and have become fertile ground for scams and frauds. Because of the diversity of Fintech offerings, it is difficult to formulate a single and comprehensive approach to these problems. For the most part, governments have used existing regulations and, in some cases, customized them to regulate Fintech. This is an ongoing process and many Fintech business models are affected in more ways than one, specifically since Fintechs operating in more than one country must be compliant in multiple jurisdictions.

Businesses that fail to comply with AML and KYC regulations risk major regulatory fines and irreparable damage to customer relationships when something goes wrong. Hence, it is crucial to address the regulations swiftly and find solutions that integrate seamlessly into one's own business and aim to embed automation into the processes.

Regulatory challenges Fintechs must face

Digitization within the financial sector has led to a competitive market offering access to services, products, new payment services, loans and increased capital – all possible in near real-time. Thriving

innovations have also affected the rate of financial sector crime, namely a significant rise in money laundering and terrorist financing. The European Union's 5th Anti-Money Laundering Directive (AMLD 5) came into force this year, with the aim of creating greater transparency to due diligence requirements and limiting anonymity in order to combat financial crime.

For those industries that have not been subject to AML law before or entities that require updates to internal risk mitigation processes, compliance can be costly and complicated. The first requirement of risk mitigation, KYC can identify fraudsters before they can commit further financial crime.

Balancing Customer Experience with increasing AML requirements

Fintechs should always be on top of the developments in the regulatory landscape and re-evaluate the choice of their KYC provider on a regular basis. On top of regulatory compliance, ask yourself frequently if your onboarding really offers a premium customer experience compared to your competitors. Ultimately, it all comes down to the following questions:

- Are you compliant with AMLD 5 in all markets you currently offer your products and services?
- What is your current KYC solution? How is it integrated into your product or systems?
- Does the solution provide an outstanding customer experience and favours high conversion rates?
- Is it a solution that also helps your company's goals in the long run?
- Does your KYC provider cover as many countries as possible?
- Can your KYC provider be your partner in expanding to other markets?

Do you know your customer?

An increasing number of Fintechs challenge the classic banks – regardless of whether their use case focuses on payment, savings or crypto transactions, KYC and simple, comfortable digital user onboarding are becoming more and more crucial for business success.

A COMPREHENSIVE OVERVIEW OF THE REGULATOR APPROVED DIGITAL KYC PROCESS BY COUNTRY.

| Country | Agent based verification | AI based verification | Qualified Electronic Signature |
|----------------|--------------------------|-----------------------|--------------------------------|
| Austria | ✓ | | ✓ |
| Belgium | ✓ | ✓ | ✓ |
| Bulgaria | ✓ | | ✓ |
| Croatia | ✓ | | ✓ |
| Cyprus | ✓ | ✓ | ✓ |
| Czech Republic | ✓ | | ✓ |
| Denmark | n/a ¹ | n/a ¹ | ✓ |
| Estonia | ✓ | | ✓ |
| Finland | n/a ² | n/a ² | ✓ |
| France | ✓ | ✓ | ✓ |
| Germany | ✓ | | ✓ |
| Greece | ✓ | ✓ | ✓ |
| Hungary | ✓ | | ✓ |
| Iceland | ✓ | ✓ | ✓ |
| Ireland | ✓ | ✓ | ✓ |
| Italy | ✓ | | ✓ |
| Latvia | ✓ | ✓ ³ | ✓ |
| Liechtenstein | ✓ | ✓ | ✓ |
| Lithuania | ✓ | | ✓ |
| Luxembourg | ✓ | | ✓ |
| Malta | ✓ | | ✓ |
| Monaco | ✓ | | |
| Netherlands | ✓ | | ✓ |
| Norway | n/a ² | n/a ² | ✓ |
| Poland | ✓ | | ✓ |
| Portugal | ✓ | | ✓ |
| Romania | ✓ | | ✓ |
| Slovakia | ✓ | | ✓ |
| Slovenia | tbc ⁴ | tbc ⁴ | ✓ |
| Spain | ✓ | ✓ ⁵ | ✓ |
| Sweden | n/a ² | n/a ² | ✓ |
| Switzerland | ✓ | | ✓ |
| Turkey | ✓ | | |
| UAE | ✓ | | |
| United Kingdom | ✓ | ✓ | ✓ |

1. Usage of NemID for verification

2. Usage of BankID for verification

3. AI allowed if a selfie for document matching is provided

4. Usage of agent-based and AI-based verification currently under review by authorities

5. AI allowed in Spain if an additional check by an agent after the verification is included in the process

Seamless onboarding

Today's customers have wants and needs that are prompting a major rethink in all industries: They demand rapid responses and high-quality service. Against this backdrop, an integral part of any digital strategy must be enhanced customer experience. Millennials, in particular, expect financial service providers to understand their imperatives and to offer personalized, tailor-made solutions.

Opening an account in person at a physical branch is regarded as an anachronism, while the ability to bank anywhere and anytime is a given. However, delivering on this expectation is not always that simple. The corresponding digital processes must not only comply with legal requirements but also be intuitive, fast and convenient for the user. Consequently, your services should be available both online and on mobile devices. After all, nowadays transactions are increasingly finalized using mobile devices.

KYC is key

If you want to offer your customer a convenient way of opening an account via agent or AI-based identification, you must ensure that your solution covers all platforms that your customers use – from desktop to mobile, from Android to iOS. Of course, you must be compliant with the KYC requirements of your respective industry and country.

If you not only want to identify your customers, but would also like to have contracts signed online, an eSigning solution will further improve your onboarding process and leads to a frictionless customer experience without media disruption. It is possible to sign contracts in less than five minutes with a qualified electronic signature (QES) that is recognized throughout Europe and has the same legal validity as a handwritten signature.

Choose the right partner

The annual damages inflicted worldwide by Internet fraud are expected to total six billion US dollars this year. As a result, cyberfraud is one of the greatest threats to our economy and the fastest-growing field of malicious moneymaking.

Any company with digital business operations must address this challenge. It is essential to partner with an ID verification specialist you can completely trust – and who has the skills, resources and state-of-the-art technologies required to prevent even the most sophisticated fraud attempts.

To help European Fintechs overcoming their current regulatory challenges IDnow published the “Handbook FinTech Regulations 2020”. You can download for free on www.idnow.io



A portrait of Gordon McHarg, a middle-aged man with a receding hairline, wearing a light blue button-down shirt and jeans. He is standing in front of a blurred background of a modern building with many windows.

AUTOMATING THE FLOW OF DATA

Interview with Gordon McHarg, Managing director at AutoRek

Financial IT: Please describe AutoRek.

Gordon McHarg: AutoRek is a leading provider of automated financial control and data management software. Our clients span the asset management, banking and insurance sectors and include high street banks, payment platforms, start-ups and crowdfunding businesses.

The majority of our customers are high transaction volume businesses with often complex data management requirements.

Our software is a configurable rules driven platform which can be applied to diverse business scenarios including mortgage payments, Insurance premiums, ATM cash management, internal financial controls and various regulatory reporting requirements such as MIFID II and CASS (client asset protection).

Financial IT: In very general terms, what are the geographical markets that are most important to you? In relation to the businesses that are your customers, what are the most important industry verticals?

Gordon McHarg: The majority of our customers are UK Financial Services organisations. We have a number of US and global organisations as clients and a strategic objective to grow our business in the US market.

Financial IT: How important is data management and compliance for banking sector? How does AutoRek help banks and financial institutions to solve reconciliation problems?

Gordon McHarg: Data volumes are growing at almost exponential rates and regulatory demands continue to create significant strain on the industry. At the same time, market disruption from new Fintech start-ups and large multinational tech platforms like Apple and Google leave the more established financial services organisations needing to accelerate innovation. Meanwhile, the new entrants reduce the costs of operations.

The availability, quality and integrity of data within a financial services company is critical to its success. Whether it is understanding the business performance of a new product line, delivering quality services to clients or complying with regulation, a key requirement is almost always about getting data right.

AutoRek helps banks and financial institutions automate the data management process verifying the integrity and completeness of their data and processes. Automated business rules combined with workflow and escalation help our clients manage the quality of their data and mitigate the risk of inaccurate financial and regulatory reporting.

Financial IT: Please give some examples of the landmark deals signed by AutoRek recently.

Gordon McHarg: At the start of 2020 we were delighted to bring in two landmark deals with both Nationwide and Bank of England. These are two great names to add to our growing client list and we are excited to begin working with them.

In 2019 AutoRek also established a strategic partnership with Cforia Software Inc, a US-based enterprise solutions provider delivering end-to-end global order-to-cash automation. Cforia have embedded the AutoRek product into their order to cash platform supporting automation of payment allocation and cash reconciliations. Our partnership is still at an early stage. Nevertheless, having added three new global clients in the last six months it is looking very promising.

Financial IT: In your opinion, how has Covid 19 impacted the RegTech and financial industries?

Gordon McHarg: COVID19 has clearly created significant operational challenges for many financial services businesses. The FCA have been clear that they still expect organisation to comply with their regulatory obligations despite the operational challenges of remote

working. Many firms have struggled with the changeover to working from home with the first priority to minimise the impact on business as usual processes such as daily and month end financial control and reporting requirements.

Financial IT: Looking forward one year, what are the main changes that you expect to take place in the RegTech space?

Gordon McHarg: It is generally accepted that the COVID19 pandemic will change the future of work. I think this is especially true in the financial services sector: after some initial challenges, most companies are now largely operational and have adapted to cope with the impact of remote working. Organisations have now proven that the business can remain fully operational without the need for teams to be located in company offices.

Going forward, increased operational resilience will be the priority: this means ensuring that remote teams responsible for business-critical decisions and processes have access to the tools and data required to maintain compliance.

In recent years we have seen a significant shift to cloud-based solutions, and I expect this will further accelerate as a result of Covid 19.

Empowering key decision makers, finance functions, compliance or customer management teams require tools which are easy to use and support non-technical users in collating, reconciling, aggregating and analysing increasingly large and complex data. Recent developments in robotics, artificial intelligence and machine learning technologies present significant opportunity to reduce the complexity, automate manual processes, reduce the cost of compliance and accelerate decision making for our customers.



USING A SIMPLE MFA APPROACH TO COUNTERACT FRAUD DURING A PANDEMIC

As most of us are acutely aware of by now, the Coronavirus pandemic is having a global impact on the way we live our lives. Not only is the disease endangering the health of millions of individuals, it is also shutting down businesses, closing schools, and increasing our dependence on technology like never before. Whether it be working from home, communicating with family or keeping up to date with finances – technology has proved invaluable in these unprecedented times. However, as people become more reliant on the internet – cyber security becomes an even bigger issue.

For instance, banking customers are increasingly reliant on the internet and their mobile devices to carry out transactions, with research revealing that 82 percent do not feel safe visiting their bank branch during the pandemic. Ever-opportunistic, cyber criminals are taking advantage of this increased reliance on remote banking to launch attacks.

It is therefore vital that banks prepare for this surge in cybercrime and consider additional security measures to keep customer accounts safe.

Cybercrime Intensifies

One of the biggest tactics cyber criminals are utilising during the COVID-19 pandemic is phishing, with research from Barracuda Networks revealing there has been a 600 percent increase in attacks since the end of February. Research also shows cyber criminals are starting to reap the rewards from their scams, with data from National Fraud Intelligence Bureau (NFIB) revealing that cyber criminals have already netted over £1.6 million.

The most prevalent scams encourage users to hand over money and confidential information, with bank details being the 'Holy Grail' of sensitive personal data. It is critical for banks to offer their customers

– both consumers and businesses – additional security measures to ensure they can bank securely and that no unauthorised intruders are accessing their accounts. One of the most reliable ways to achieve this is through multi-factor user authentication.

Multi-factor authentication (MFA) is widely used by financial institutions and is a method of controlling access to a system or network by requiring a user to present credentials – authentication factors – in at least two different ways – for instance, via a password, biometric data or through a physical token, as a smart card or other device.

Over the past few years, strong customer authentication (SCA), which relies on the MFA principle of requiring at least two different types of authentication factors, has become a key security measure in the financial services and payments industries, mandated by Europe's revised Payment Services Directive (PSD2). Implementing SCA ensures that only authorised individuals can access an account or complete a sensitive transaction, thereby protecting users against account takeover fraud and similar attacks.

With PSD2 mandating the implementation of SCA, the industry has seen a rapid increase in providers offering authentication solutions. It's fair to say, though, that not all authentication solutions are created equal. So, what should banks look for in order to provide a secure banking experience, without over complicating transactions or excluding customers that might be less tech-savvy?

Authentication Overload

One of the most common mistakes many financial institutions make with MFA is asking customers to authenticate themselves via different methods depending on how they access their bank account. The result is a muddle of authentication techniques: biometrics

Frans Labuschagne,
UK & Ireland Manager,
Entersekt



on the banking app, challenge questions from the call centre, card swipes in-branch, and static or one-time passwords online.

This can leave customers feeling confused and left trying to remember too many pieces of information, which can encourage mistakes like using easy-to-remember passwords or using passwords across multiple accounts and platforms.

What banks should really aim to offer customers is a more streamlined authentication process, no matter what channel customers are accessing their accounts from, all while combatting fraud and satisfying regulators.

Multi-factor authentication best practices

A key element of a winning MFA solution is one that provides the utmost security while putting the customer first, enabling quick and easy authentication that does not detract from the overall banking experience. However, accurately identifying and authenticating users on remote banking channels is a complex undertaking. Not only is it subject to constant change as technology and consumer behaviour evolve, it is also regulated and enforced by governing bodies that set standards and requirements. Selecting a vendor with an eye on global regulatory trends is important as this will ensure that the authentication solution are compliant with regional regulations.

MFA solutions should be built on technology standards, offer flexibility to scale to meet future requirements, and be compatible to run seamlessly across multiple operating systems. Authentication should seamlessly integrate into the customer's digital banking experience and be built into the mobile app or web browser. This will ensure customers won't have to rely on passwords, find themselves unable to access services if they don't have a physical card reader to hand.

When it comes to evaluating the basics of an MFA solution, there are also important guidelines to remember:

- Each factor selected must be equally strong. Combining a weak factor with a strong one yields little more protection than relying on the strong one alone. A social security or national identity number, for example, may qualify as a knowledge factor, but can be obtained by fraudsters with minimal effort, precluding it as a strong factor. The same would apply to the more standard challenge questions in use today, like a mother's maiden name.
- Factors must be mutually independent, so that if one factor is compromised, it cannot typically be used to gain access to the other/s.

As cyber criminals look to cash in on the pandemic, it is critical that banks take steps to protect their customers as they become more dependent on internet and mobile banking. MFA provides a way for banks to doubly verify that accounts are being accessed by authorised individuals and not by intruders. When identifying a solution, banks should look for one that balances state-of-the-art security with a user experience fit for today's age of the customer.

Banks should keep these eight best practices for MFA implementations in mind:

1. All sensitive transactions must be multi-factor authenticated
2. The entire authentication process must take place out of band
3. All sensitive data must be encrypted in transit, end-to-end
4. Cryptographic keys and sensitive data at rest must be protected
5. All authentication responses must be digitally signed
6. Clearly display critical transaction information for verification
7. Take a layered approach for high-risk transactions
8. Adopt a consistent multi-channel approach

PHYSICAL CONFERENCES VS VIRTUAL EVENTS – EVOLVING EVENT STRATEGY IN THIS NEW WORLD



An Interview with Emily Camara, multilingual conference manager with a background in retail banking, banking technology and payment cards research.

RBR, leading provider of strategic research and consulting services, organises a series of annual banking conferences covering themes such as self-service, fintech, cybersecurity and branch transformation. We caught up with Conference Manager, Emily Camara, to find out how the global pandemic has affected the company's events strategy and to discuss what its plans are moving forward.

Financial IT: *In light of the current pandemic, many event organisers are 'going virtual' – has RBR also adopted this strategy?*

Emily Camara: Virtual events are something that RBR has been reviewing for some time now, even before the current COVID-19 situation. Of course, they have an important role to play at present when physical events are not possible. However, RBR continues to be passionate about the value of physical conferences and our event partners certainly echo this sentiment. Bringing key industry stakeholders together to share knowledge is core to our offering, and you cannot beat face-to-face interaction.

Rather than rushing to convert our conferences to virtual events (although ultimately this might have to happen), our principle strategy has been to push back our conferences to the last third of the year – this helps to reduce uncertainty and maximise participation. It goes without saying that we are working closely with our venue partners to monitor the social distancing situation and ensure that appropriate measures are put in place. We are also mindful that a large number of industry conferences have also moved to Q3 and Q4 and so we have taken the decision to co-locate two of our flagship events – Self-Service Banking Europe 2020 and BankSec 2020 – at the end of the year. This strategy has been welcomed by delegates and partners who are keen to participate in both events and already have a busy schedule planned.

Financial IT: *Do you think virtual events will continue to play an important role even after the pandemic?*

Emily Camara: I'm sure that, like RBR, most event organisers and their partners are eagerly anticipating the day when their physical events can resume. That said, it is likely that many physical events will continue with some sort of virtual element as a way of offering extra value to attendees and partners. A hybrid conference could provide delegates with a platform for engagement before and after the event,

and it would give people and companies that are unable to attend the physical event an opportunity to participate.

Financial IT: *Could you tell us a bit more about what you have in store event-wise this year?*

Emily Camara: Our first event of the year, Self-Service Banking Asia 2020, is planned to take place in Ho Chi Minh City, Vietnam on 23rd and 24th September. This event mainly focuses on self-service technology, mobile channels and fintech, but also incorporates some branch and security topics. Our first UK event of the year – Branch Transformation 2020 – is in London on 17th and 18th November. Topics include branch design, customer experience and branch strategy. We finish the year with the co-located self-service and security events, Self-Service Banking Europe 2020 and BankSec 2020, taking place in London on 9th and 10th December.

Financial IT: *RBR is well known for its high-quality agendas. How does the company ensure it stays on top of the latest trends?*

Emily Camara: As a research and consulting company, we are continually following industry developments and ensure this is reflected in our conference agendas. BankSec, for example, used to focus heavily on ATM security (gas explosions and skimming for example) – while those topics are still important and feature in the event, we have branched out to include other key security topics such as cyber, branch and other self-service security issues.

The research process involves working with banks around the world on a daily basis, meaning we know the main challenges they are facing and what topics are high up on their agendas. Indeed, many of these bank contacts present at or attend our conferences.

Financial IT: *How can readers get involved?*

Emily Camara: We are always looking to add interesting bank case studies to our agendas so we would love to hear from anyone who might be interested in presenting; we have a range of exhibition and sponsorship packages for companies which would like to promote their brand and meet potential customers; alternatively individual delegate tickets can be purchased. Feel free to contact me for more information at ec@rbrlondon.com or visit www.rbrlondon.com/conferences.



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