

Financial IT

Innovations in FinTech

REBUILDING AND REBOOTING BANKING

Anders la Cour,
Co-founder and Chief Executive
Officer, Banking Circle

CONNECTED TO OPPORTUNITY

Essam Al-Khashnam,
CEO of International
Turnkey Systems (ITS)
Group

RED HAT: FACILITATING THE MOVE TOWARDS EDGE COMPUTING – AND MUCH MORE

Nick Barcet,
Senior Director Technology Strategy,
Red Hat

Leon Muis,
Chief Business Officer,
Yolt Technology Services

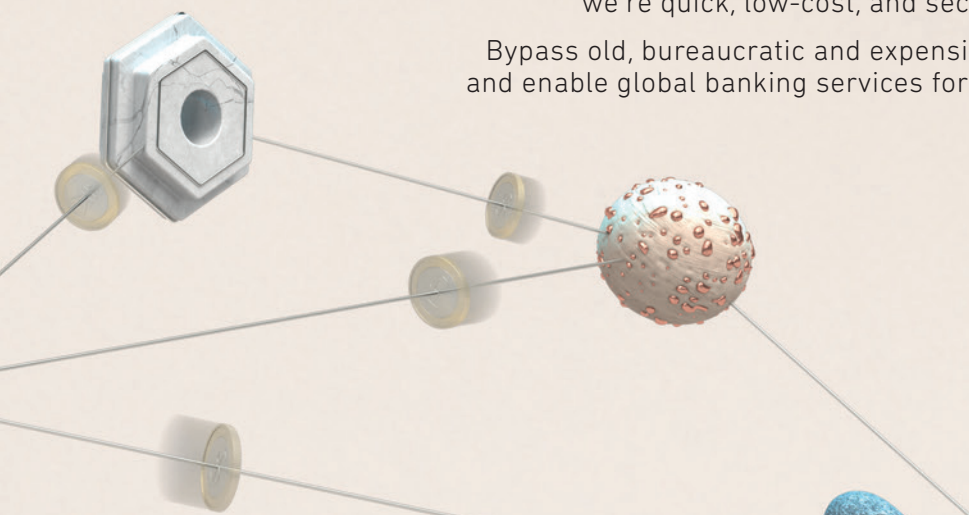
**2020 IS SET TO BE
A LANDMARK YEAR
FOR OPEN BANKING**



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THE COVID-19 CATALYST



Andrew Hutchings,
Editor-In-Chief, Financial IT

Sibos 2020 will be a virtual conference. This fact alone highlights the enormous organisational disruption that is taking place in the global economy – and not just in the financial services and IT sectors – as a result of the Covid-19 pandemic. One of the lasting legacies of the pandemic will be a shift in people's attitudes to physical location in the world. Working remotely – with colleagues, customers and suppliers – has become the norm.

It will remain the norm. As of September 2020, it is not clear that remote working has had a major and detrimental effect on the productivity of employees who are working from home rather than commuting to an office. Even if some companies have found that their teams are less efficient than previously, this calculation will be offset by the reality that the employees are effectively providing office space for free. In any case, employers' obligations to their employees mean that the former are unlikely to demand that the latter commute to an office if there is significant risk of their catching Covid-19 in over-crowded public transport.

Of the five main impacts of Covid-19 on

that part of the universe where financial services meets technology, organisational disruption was the first and the most important. Organisational disruption drives the other four impacts, but the converse is not really true. Covid-19 has brought disruption which – in turn – has accelerated trends that were already in place. Covid-19 is a catalyst.

When people transact remotely, the potential for fraud increases. This was the second of the five impacts which we discussed in the Editor-in-Chief's letter in the Summer 2020 edition of Financial IT. Experian PLC and the National Hunter Fraud Prevention Service found that, across all financial products offered in the UK, fraud rates in April this year were 33% higher than previous monthly averages. In this edition of Financial IT, one of our contributors notes that there are typically 87 million credential stuffing attacks daily in the United States.

The rise in fraud is coinciding with an e-commerce boom – the third of the main impacts. This outcome touches on many of the topics covered by contributors in this edition of Financial IT. For example, one leading payments services provider

TRENDS THAT WERE BECOMING CLEARER IN JUNE ARE NOW MOVING MORE RAPIDLY.

whose leaders are interviewed are looking for the number of customers to surge from 3 million to 6 million over the course of 2021. Another contributor notes that the hybrid cloud – which facilitates e-commerce by allowing data and applications to move between between private and public clouds – is growing in popularity. Its research found that 56% of IT leaders already use hybrid clouds: more than half of the leaders who are not yet using hybrid clouds expect to do so in the future.

Surging e-commerce is providing a boost for digital banking. This is the fourth major impact of Covid-19. One report cited in this edition of Financial IT found that weekly online spending in the UK jumped from GBP1.52 billion to GBP2.47 billion between and February and June this year. The use of banking apps rose by one-third from March to April. Over half of all UK consumers regularly use mobile money management apps. The pressure is on banks and other payments services providers to make payments cheaper and quicker – especially if they cross national boundaries. One of our contributors cites research which recently

found that 80% of retail banks and 74% of commercial banks have collaborated with external providers of financial infrastructure: a newer and faster network of correspondent banks is being built.

Three months ago, we surmised that Open Banking would start to focus on the delivery of loans, credit and other products for the liabilities side of clients' balance sheets. We remain of the view that this will be one of the lasting impacts of the Covid-19 pandemic. There are already clear signs of financial stress among businesses and households.

In this edition, one of our contributors notes that the largest 20 European banks set aside US\$28 billion for bad debt in 2020: the eight largest banks in the United States set aside over US\$40 billion.

Because of the irreversible surge in remote working, Covid-19 has grave implications for owners of office buildings and the banks that lend to them. At some stage, there will be a brutal reckoning. However, the timing and scale of that reckoning is outside the scope of Financial IT.

We wish all participants at Sibos 2020 a successful (virtual) conference.

Financial IT

Innovations in FinTech

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UnBanking the Banked

The idea of money started with rocks and moved to seashells to gold to paper notes. This has been the greatest magic illusionary trick ever. The system of money is based on our belief that it is real because the banks have conditioned us to believe it is.

They have done a good job diverting our attention to the unfortunate two billion who are unbanked. The truth is that they don't care about the unbanked except as a new source of revenue. The banks would be pleased to put a debt burden on the unbanked – many of whom earn a few hundred dollars a month or less. The banks dream about making 5% to 20% from the very people who can ill afford it.



The unbanked do not need banks. The banked do not need banks.

Unbanking the banked is about looking at how the banks have taken control of our lives and our money. The banks tempt us with easy credit and mortgages for homes, cars and other things that we could not afford. This has sentenced all of us to a lifetime of paying debt. The more credit we get the more we use. We no longer care that interest on this credit costs us 10, 20, and 30 percent. People who earn good incomes are living paycheck to paycheck just to service their debts.

They trap us like wild pigs. To catch wild pigs, you start by putting food out, the pigs come. Then you put up one side of fencing, then another side until all you need to do is close the gate. The pigs start to realize that they are trapped but more food is thrown in and they go back to eating. This is the same way banks have always treated people.

The ongoing impact of COVID-19 on people's financial lives is devastating. When before they could make payments, now they cannot. Millions globally have lost their jobs and millions more are on reduced incomes as their employers no longer have the revenues they once did. People have defaulted on their debts, causing their credit scores to take massive hits. In the future, there will be a re-scoring due to the numbers of people making them eligible to receive credit again.

How have the banks treated this? Well, let me put it this way. It is terrible when bad things happen through no fault of your own and you can count on the banks to make your life worse. Banks have increased their collection efforts everywhere they legally can. They have reduced your credit lines and closed your accounts; despite that

you are current and have never been late. They have reduced the amounts you can withdraw from the ATM and decreased the limits on what you can transfer and spend.

The funniest part is that when you question this, the bank always says that this is for your protection; as if they are concerned about you. No, it is for the bank's protection. Your financial partner has stabbed you in the back when you need them most. They lie to you to protect their profits. Worse yet, they are dictating how much, when and what you can do with your money.

Unbanking the banked is how people today can gain financial freedom to use your funds anytime you need. Unbanking will give you the freedom to send or receive payment from anywhere and without the permission from the banks. It is amazing that we have passively given away our right to the cash we earn as we exchange our time for money.

Top management at banks know that their troubles are just starting. Their focus is on how to keep our money in their banks. They are studying new ways to subtly make it more difficult for money to move. They do this because all that easy credit given out is coming back to haunt them. They know that they are in for a rough ride going forward. Of course, they are not really worried. They know that they will get bailed out by the politicians. This has been done before, courtesy of us taxpayers.

Unbanking can be done today. It's not 2008 when there were no alternatives. Today there are clear alternatives that enable us to control our hard-earned funds.

You don't have far to look for an answer. The cryptocurrency market offers a sleek solution through the digitalization of value. You have controllability of value through ownership. We were deceived into believing that we controlled our banked money. This control gives you the power to make your own unrestricted financial decisions.

Cryptocurrency offers decentralized ownership structure and unique fundraising models. This reduces geopolitical risks and banks restrictions. Cryptocurrency has become the go-to place for tech-savvy people to increase and use their wealth.

The quiet growth of digital money transmission services has begun. Many companies accept cryptocurrencies as payment for their goods and services. The future will begin the inevitable introduction of central bank digital currencies (CBDCs). They will become a familiar part of tomorrow's global financial system.

Conversely, traditional banks seem to be on their way out. They have focused on the bottom line of profitability while failing to develop the services and returns their customers want. Banks as we know them now might not exist in the future. But they too, might evolve into something different.

Good news, there's a trustless hedge in cryptocurrency. Human progress today is about capital accumulation and technology. Cryptocurrency is the coming together of both.

Unbanking the banked is the path for protecting your capital accumulation through the technology of cryptocurrency. Starting tomorrow you can be financially free.

Unbanking, let's start today!

*by Chris Principe,
Publisher, Financial IT*

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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:**


oneadvanced.com/Mainframe2020



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oneadvanced.com/modernisation

A portrait of Leon Muis, a man with short brown hair and a beard, smiling. He is wearing a dark suit jacket over a light blue and white striped shirt. The background is dark and out of focus.

Leon Muis,
Chief Business Officer,
Yolt Technology Services

**2020 IS SET TO BE
A LANDMARK YEAR
FOR OPEN BANKING**

Far from upending the progress being made towards open banking, the coronavirus pandemic may actually end up being a further spur to its adoption. Even before the crisis, open banking was growing fast this year. In the six months to January, the number of customers doubled to reach one million.

More than 200 companies now provide financial advice, accountancy services, credit rating and charitable donations, via open banking, as well as money management apps like Yolt Technology Services, which pioneered the technology.

Despite the upheaval caused by Covid-19, a study for YTS shows that firms remain committed to deploying application programming interfaces (APIs) to improve services, cut costs and boost business. In fact, half of the 1,000 professionals from banks, lenders, retailers and personal finance management firms surveyed said the crisis would make little difference to their adoption. And more than one in ten said they'd use open banking even sooner as a result.

That shouldn't be a surprise for two reasons. First, the sort of online activity that provides the foundation for open banking services has surged in recent months. Use of banking apps is estimated to have increased by a third between March and April alone. High street bank TSB saw the use of its app treble during lockdown, and more than half of UK consumers now regularly use mobile money management apps, according to a recent survey from the Open Up 2020 Challenge.

Online retail – potentially the primary user of open banking payment initiation services (PIS) – has also seen a massive boost. Average weekly online spending in the UK rose by almost £1 billion, from £1.52bn to £2.47bn between February and June. Plus, many of the new habits that consumers have learned during lockdown are expected to stick, swelling the number of users for the open banking services that businesses provide even further. For all these reasons, it's clear that demand for open banking is increasing.

The second reason we should expect to see the march toward open banking continue, though, is that businesses themselves recognise the tremendous value it can bring.

A sound investment

The YTS survey shows that professionals see value across the spectrum of open

banking services: Account information services (AIS) that provide secure access to customers' transactions and balances; payment initiation services (PIS) that enable payments to be processed directly from the account without a card or other payment service; and data enrichment services based on AIS to draw further insights from customers' income and expenditure.

Businesses are using all three extensively, and already seeing a range of benefits:

- Improving the customer experience (47%)
- Boosting efficiency (46%)
- Generating customer insights (42%)
- Reducing transaction and business costs (37%)
- Increasing revenue (33%)
- Improving transaction and data security (27%)
- Staying ahead of competitors (20%)
- Reaching new customers (11%)

The extent and type of benefits vary widely, of course, depending on the size of the business. On average, though, when asked to estimate the value of open banking to their business, respondents put it at £1.9 million. Two-thirds of firms with over 500 employees estimated its worth at between £2m and £5m a year.

Not surprisingly, the survey showed that the most common priority for businesses right now is recovering from the crisis. Almost half (49%) of those surveyed named this as the most significant challenge they faced in 2020. The other challenges identified included reducing transaction costs (47%), improving insights from customer data (44%) and optimising investments in resources and workforce (37%). Open banking has a central role to play in all of these areas – if only we'll let it.

Overcoming the barriers

The biggest hurdles to greater adoption of open banking have traditionally been the technology and consumer awareness. Thankfully, both are increasingly being overcome. Even among those who were not using open banking, only a small minority (9%) said it was because the APIs were not reliable enough. Less than a quarter thought it was too early to invest in the technology. Even a year ago, those numbers would have been much higher.

At the same time, there's still a definite need for education – and not just among consumers. We found that 23% of the firms we surveyed still think that consumers' consent to sharing their financial information is vital to open banking. Moreover, half of those who were not using open banking cited data privacy concerns – even though PIS can actually improve the security of payments by reducing the need to capture and store card details.

The good news, however, is that firms' understanding of open banking continues to grow, while changes in regulation could make it even more compelling. Allowing repeat payments could transform the uptake of PIS, for example, by eliminating the need for each payment to be authorised separately by the consumer. Extending API legislation beyond payment accounts could bring similar benefits to those using AIS and data enrichment offerings. At the moment they remain limited to mainly current accounts and some credit card accounts, which leaves a great deal of potential untapped.

Nevertheless, there is a lot that businesses can already do to promote slick, seamless digital services for customers within the open banking infrastructure that exists right now. The critical challenge for many, we found, is simply finding the right provider. Just over half of the firms we surveyed (51%) said this was their key concern.

And there's no doubt that it's a valid one. Businesses need providers with expertise and capacity to provide robust, reliable open banking services, as well as the ability to support them. At the same time, they must work with their own internal and legacy systems to integrate the new technology. The choice of provider must therefore be made very carefully, and the process closely managed.

With the demand for open banking services set to snowball as a result of the changes in consumer behaviour during the pandemic, this process needs to begin soon. In fact, businesses that want to capitalise on this technology should really start building these relationships now, without delay.



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REBUILDING AND REBOOTING BANKING

FUTUREPROOFING BANKING SOLUTIONS WITH PURPOSE-BUILT FINANCIAL INFRASTRUCTURE.



Anders la Cour,
Co-founder and Chief Executive Officer,
Banking Circle

Banking has been a tech-heavy industry for generations, but the tech outside of the industry and in other areas of the financial industry has moved on much more than within banking itself. Banks' basic architecture derived from a time when monolithic systems with an in-house server were the norm, and the best option available. Now times have changed; tech has changed; consumer and business banking requirements have changed.

Unfortunately, the design of these once-pioneering systems means that it is a significant challenge for a bank to deploy new software and apply best practices. In March and April 2020, we commissioned Magna Carta Communications to conduct a detailed industry survey and interviews to discover the attitudes towards technology and digitalisation among banks and other financial institutions across Europe. As the study took place in what became the early days of a pandemic, we also included some questions regarding business confidence in the face of impending global recession.

We found that the most confident banks were those that have already made heavy investments in their tech stack or

developed the mindset and re-aligned their financial infrastructure requirements, to make more use of third-party services and platforms to be able to respond to changing demand. It was encouraging to see that less than a third of financial institutions are now concerned about the pace of technological change in banking – dropping to 1 in 6 among commercial banks.

We also discovered that 90% of banks and financial institutions are building technology design and architecture into their business planning and that 80% of retail banks and 74% of commercial banks have already worked with infrastructure providers.

Clearly banking is standing up to accusations of being outdated and unable to adapt to meet new market requirements.

The cross border conundrum

One area in which traditional banks have struggled to compete against newer entrants is in international transfers. Using the correspondent banking network, cross border payments via incumbent

banks are too slow and too expensive. In a highly competitive, fast-paced, digital and international market delays in cash flow, and the high cost of sending and receiving funds across borders, is taking up valuable resources and ultimately limiting the growth and productivity of numerous businesses. Resolving these challenges has been on the agenda for banks and their business customers for some time, but the current COVID-induced pressure has pushed the issue higher up the list. Removing these barriers will help businesses access new opportunities and get back to profitable growth.

According to global regulators, the key to quicker and cheaper cross border payments lies in streamlining anti-money laundering checks, longer central bank opening hours and linking national systems. However, although joining-up national systems can indeed play an important role in speeding up international payments and reducing costs, this is not necessarily the quickest or most effective route.

Financial infrastructure providers deliver new technological solutions that are playing an increasingly vital part of the financial ecosystem, helping banks and payment businesses alike to improve cross border payments for their clients.

Cross border collaboration

Different countries have varying and often non-interoperable payment systems and technologies in place. As these systems are costly to alter in both resources and funds, they continue to be one of the main factors in the cross border payment challenge.

Some nations have invested heavily in new real time payment (RTP) schemes, but others are still reliant on decade old technologies for batch processing of payments. Even where countries have RTP schemes in place, these do not tend to be interoperable. Within the European Union, for example, various players have implemented different RTP schemes that do not communicate with each other. This means that in order to reach as many receivers as possible, banks or other end users have to connect to each scheme separately.

For their part, initiatives like P27 – which focus specifically on improving the cross border and national payment rails – are unlikely to work on a global scale because the challenge of ensuring

interoperability between different regional schemes would remain. And, with multiple countries involved, they may also take a long time to get off the ground. As to the regulators' suggestion about longer central bank opening hours, this will only help speed up cross border payments if banks have direct access to a large network of different local clearings.

So, what does that mean for the future of cross border payments?

A few short years ago, a lot of banks had the mentality that they could do everything themselves and didn't need help from anyone outside of the organisation. Many banks tried to overhaul their legacy infrastructure to deliver new solutions and faster cross border payments, among other improvements, but they found it too difficult. However that mindset has shifted, and banks are increasingly open to collaboration to deliver the best solutions.

During the pandemic, financial institutions have had to work together to be able to deliver new, digital solutions much more quickly, and that is a trend set to continue post-pandemic. It should also filter across borders and lead to a more joined-up global financial ecosystem where all providers are seamlessly interconnected.

Financial infrastructure providers are focused on: developing the technology to process payments directly, and to integrate to a vast network of local clearing and payments schemes. This means they are uniquely placed to give banks and payment businesses the ability to provide their customers with faster and cheaper cross border banking solutions. And all without the need for them to build their own infrastructure or correspondent banking partner network or wait for different national payment systems to be joined up.

The tech to make it happen

Central to the proposition offered by financial infrastructure providers is building a super correspondent banking network that bypasses the traditional payment rails and enables financial services providers to make payments at high speed and at low cost. Where payments cannot be processed through the proprietary network, the financial infrastructure provider connects directly to the national clearing systems to create the shortest possible route for the payments.

Through their internal processing engine, financial infrastructure providers remove one of the main complexities behind cross border payments: crossing different settlement schemes, technology layers and differing implementation. They are also providing their clients with one interface layer, enabling them to use the same taxonomy, formats and technology endpoints for all payments regardless of what national schemes the payment eventually goes through to settle. The financial infrastructure provider, rather than the financial institution, handles the complexity of choosing the best route for the payment, and converting to the format needed for that particular settlement route.

Using decoupled architecture, financial infrastructure providers can also easily update or replace individual pieces of architecture with limited impact on the rest – meaning they can quickly add more functionality and work within new geographies.

We welcome any initiatives to address the cross border payments issues that have been hampering business potential for years. But, whilst there are valiant national efforts to join them up, we don't believe there's a reason to wait. We've already got there.

Financial infrastructure players are constantly investing in the technology and building the infrastructure and connections to enable banks and payment businesses to offer cheaper and faster cross border payments to their customers.

Find out more in Banking Circle's 'Ready for the Rebuild' Re-thinking the value of digital infrastructure' white paper series, to download [here](#).



CONNECTED TO OPPORTUNITY

How ITS promotes collaboration in the time of the pandemic

What became most apparent during the global challenges brought on by Covid-19 pandemic, is the importance for businesses to remain connected to customers. The globe, which was already on the fast track towards a Digital Economy, has faced unprecedented times: financial institutions have had to leverage the full spectrum of their technological infrastructure to meet the market demands and to serve their customers effectively. The challenge to meet these changing needs is shared worldwide, and collaboration, already a key theme of the Digital Economy, remains at the forefront.

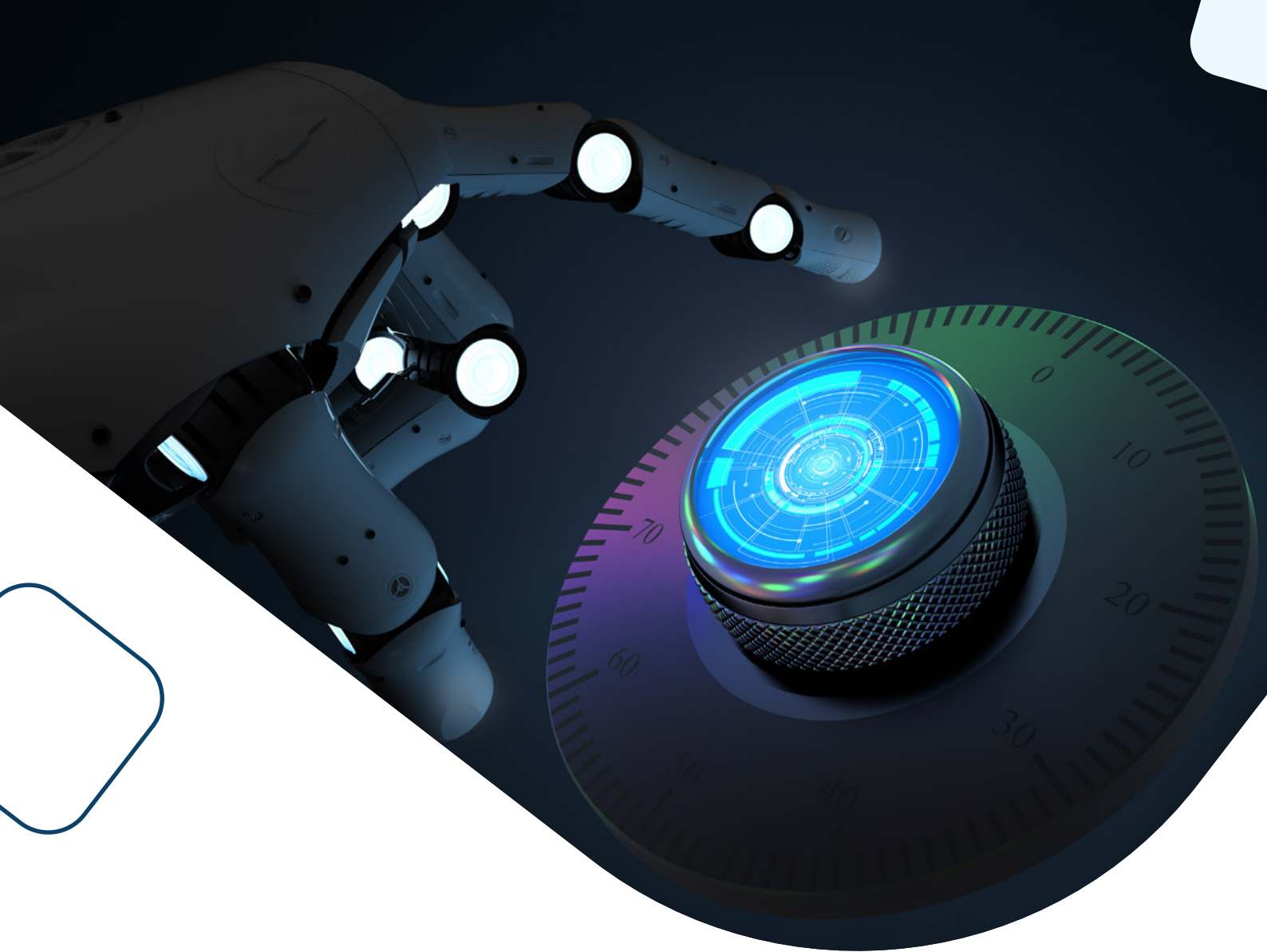
Today, businesses must collaborate in order to succeed in such a dynamic operating environment. Indeed, at International Turnkey Systems (ITS), our clients are our partners – and this philosophy drives the way we do business. During this time of challenge and change, ITS has highlighted its commitment to customers. We have adapted our offering, by providing our services with increased flexibility and cost-effectiveness. In particular, we provide the Expert Managed Services that are needed more than ever in the ‘new normal’, where complex and critical services are executed and delivered remotely. We are continuing to support our clients’ businesses as they work – across many locations – to ensure business continuity and responsiveness.

The financial industry is transforming, and ITS is committed to lead innovation and the development of enhanced products and services to support this. ETHIX NG, which is our new core banking platform, will equip organizations with the technology they need to innovate and elevate their operations. Our customers can build products with the ETHIX Platform, in order to provide a seamless customer and user experience.

The platform leverages a robust yet flexible and advanced architecture that takes advantages of the latest technologies the software industry offers. It has the capacity to immediately modernize business processes and to deliver a complete retail and corporate banking solution. ETHIX NG supports seamless collaboration between financial institutions and Fintech’s through open APIs, while also providing a structured and organized approach to data analysis and reporting. With ETHIX NG, business processes are optimized and automated, which reduces human error and repetition and improves customer responsiveness for a seamless customer journey across all potential touchpoints. More than ever, customer-centricity is key, and with ETHIX NG, our clients can take personalization and customization to a whole new level.



Essam Al-Khashnam is a distinguished industry veteran with a career that spans more than 27 years in the fields of information technology and software solutions. As CEO of ITS, Al Khashnam is defining a new vision for the Group – as he further strengthens the Company’s position as a leading provider of quality IT solutions and services for the local, regional and international banking industry. Al Khashnam holds a bachelor’s degree in Computer Engineering from the United States, and a credential in General Management from Harvard Business School.



ETHIX NEXT GENERATION

 Unlock the Potential of Fintech!

ETHIX NG by ITS is a web-based retail and corporate banking solution designed to support banks and financial institutions in the Digital Economy. The Next Generation Web Based solution addresses the challenges of regulatory and data security, whilst supporting seamless collaboration with Fintechs, achieved through an API layer that provides easy integration with internal or external systems and allows a 'plug and play' approach.

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Nick Barcet,
Senior Director Technology Strategy,
Red Hat

**Red Hat**

RED HAT: FACILITATING THE MOVE TOWARDS EDGE COMPUTING – AND MUCH MORE

Interview with Nick Barcet, Senior Director Technology Strategy, Red Hat

Financial IT: In mid-August, Red Hat announced new features in its OpenShift and Kubernetes products which facilitate a move towards edge computing. What do these new features make possible that was not possible before?

Nick Barcet: We continue to hear of requirements that are specific to edge computing. These include the need for a smaller size hardware footprint for space-constrained environments, manageability at scale, and interoperability. With these in mind we focused on a few things for our hybrid cloud technologies:

- First, we re-engineered parts of Red Hat OpenShift to reduce the minimum number of machines to deliver a fully autonomous cluster. To do this, OpenShift is able to define a cluster with both supervisor and worker nodes reducing our minimum configuration from five to three servers. Fully supported starting with OpenShift 4.5, this smaller footprint will soon have OpenShift Container Storage (OCS) support to provide collocation of a Ceph storage cluster on the same servers in a hyper-converged configuration, eliminating a discrete storage footprint on the network and in turn, reducing both acquisition costs and on-going operating costs.
- Second, while most of the target workloads that we are seeing for edge deployments are container-based, we do see some that are reliant on virtual machines. This is where OpenShift Virtualization can help. Fully supported in OpenShift 4.5 and based on the KubeVirt project, management of VMs can be done with Kubernetes, letting you streamline your toolsets

through a single platform. What this means is that there is no need to add additional APIs to maintain virtualization infrastructure. As long as you deploy your compact cluster on physical hardware, virtualization is available through the Kubernetes API.

- Third, when you deploy a large number of clusters, you need a way to centrally manage their deployment and configuration – this is where GitOps can help. A GitOps model provides a standard operating model for managing Kubernetes clusters across thousands (and potentially millions) of applications and infrastructure at the edge. It can provide a centralized status of a distributed architecture, enables the deployment of workloads based on policies, and lets you perform all types of centralized administration tasks without requiring a linear increase of people to manage the new environments.

To do this, we also announced Red Hat Advanced Cluster Management for Kubernetes. Tested to deal with thousands of clusters, and including GitOps tooling, Red Hat Advanced Cluster Management for Kubernetes provides policy-based cluster management that can centrally manage all edge clusters.

Financial IT: If an organisation wants to move to edge computing, can it do so without using Red Hat's technology? If this is the case, what is the competing technology?

Nick Barcet: Organizations that are actively pursuing extending processing to the edge are driven by wanting to provide

Nick Barcet is the Senior Director of Technology Strategy at Red Hat where his team helps decide on the future of the technologies, through constant interaction with customers. His team is currently focusing on Telco, Edge and AI/ML. Nick joined Red Hat in June 2014, as part of the acquisition of eNovance, and became the Director of Product Management for OpenStack until 2019. Nick has been working on revising the processes and organization used at Red Hat to release products to meet

the new market requirements in terms of feedback loop, velocity and operational excellence. Prior to eNovance, Nick was Ubuntu Server and Cloud Product manager at Canonical, where he participated in the definition and success of Ubuntu as a platform above and under the cloud.

Nick has been involved in Free Software, from a community and a business perspective, since 2000 working with Novell and Intel in various technical and management roles.

new, differentiated customer experiences or helping scale infrastructure resources, while having the flexibility to place applications where it makes most sense to the business.

As such, an edge strategy for any organization is likely to be evolutionary, where they can't afford not to be agile, especially when business strategies can change. Organizations looking at edge computing need assurance that the vendors they are considering do not force lock-in whereby workloads integrated with that vendor would cost too much to move.

The tools Red Hat provides unify the offerings from a wide variety of ecosystem collaborators, including hyperscale public cloud providers, hardware vendors and edge hosts. Considering the wide scope of edge computing, no single vendor is expected to provide a complete edge solution that meets the diverse needs across industries. Red Hat, along with the open source communities and our ecosystem of partners, intends to help organizations capitalize on edge computing with flexibility and freedom from fragmentation and lock-in.

It's also important to consider the impact of multi-vendor solutions on operations and development teams. Disparate tools and workflows across vendors can impact the speed at which developers need to innovate and IT teams need to operate. Red Hat OpenShift aims to provide flexibility and scalability through consistency of operations across clouds, on-premises, virtualized, and bare metal as well as at the edge.

From a developer or an integration standpoint, once you have OpenShift deployed, all your environments will look the same: hence it provides you with a broad choice for future improvements. As the edge is often about breaking the barrier between IT and operational technology (OT) teams, the edge needs to become an extension of an Open Hybrid Cloud strategy, not be a silo set aside.

Financial IT: Please provide two specific examples of companies that used Red Hat's OpenShift and Kubernetes products to move to edge computing. In these examples please mention, if possible, the benefits that would be visible to those companies' customers (e.g. faster video gaming)?

Nick Barcet: We just released our first wave of functionality for the edge on OpenShift and customers across verticals, from public sector, to health and finance, are exploring how this can support their edge strategies.

As an example, Poste Italiane, which provides citizens, businesses and the public sector across Italy with services that span banking, payments, mobile, insurance and logistics, is using Red Hat hybrid cloud technologies including OpenShift to speed up time to market and enable greater digital experiences for customers. Its plans include containerization at the edge to improve efficiency, performance and operational continuity of data and computing resources at distributed sites such as its mail sorting centres.

In the telecom sector, a number of customers globally are now defining their 5G and edge future and looking at Red Hat OpenShift as a hybrid cloud foundation. A significant benefit is the ability to deploy workloads closer to the radio antenna so that network users can access applications which require very low response time, such as VR and AR, real time automation and more. As an example, Sunrise Communications has worked with Red Hat to build a hybrid cloud-ready platform on OpenShift,

positioning it well to execute on its roadmap for cloud edge computing.

The Oil and Gas industry is rethinking its IT and OT separation, and integrators such as Schlumberger are placing big bets on OpenShift to help in these transitions. Here, major motivations include gaining economies of scale, better predictability of output, and enhanced safety.

As customers accelerate their digital transformations, we expect to see a seamless transition to OpenShift over time as it provides an extensible foundation.

Financial IT: Taking a three year view, what will be the most important impacts of edge computing?

Nick Barcet: As commercial solutions mature, we'll reach an inflection point from do-it-yourself to off-the-shelf solutions. Organizations will need a common, horizontal platform—from the core to the edge—with a consistent app development and operations experience.

Organizations seek edge computing solutions that can be managed using the same tools and processes as their centralized infrastructure. This includes automated provisioning, management, and orchestration of edge sites that have minimal (or no) IT staff.

New approaches like GitOps will help scale to tens of thousands of sites, without needing much manual intervention or increase in resources to manage them.

Edge computing is about the ability to process and store data closer to where people consume or produce it, thus avoiding unnecessary transit via busy and costly circuits, which can then be freed up to do what we really need them for. Impacts on our society will range from new applications we can't even think of right now, to energy savings, shorter time to solutions, and better understanding of the micro systems which compose our macro economy.

Financial IT: Other than the move towards edge computing, what are the mega trends that Red Hat is best placed to exploit.

Nick Barcet: In Red Hat's 2020 State of Enterprise Open Source Report, 56% of IT leaders in the financial services industry have a hybrid cloud Infrastructure today, and among those who don't, 58% plan to implement one in the next two years. Open hybrid cloud is at the heart of Red Hat's strategy, with a focus on enabling organizations to take advantage of any infrastructure and scale to any cloud, by providing a consistent, flexible platform.

Another major evolution we are seeing is around artificial intelligence (AI) and the technologies linked to data processing that are currently flourishing. Most of these are developed in open source communities and Red Hat is a company that is very well placed to nurture and funnel those projects to meet the requirements of the organizations using them, especially when they go from experimentation to production deployments. Have a look at the work we started in the Open Data Hub community for example.

In parallel, storage of data in a way that is meeting the requirements of edge computing and AI, is being driven to evolve from monolith to widely distributed systems, and Red Hat's efforts reflect this, for example in Ceph storage technologies.




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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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A close-up portrait of a middle-aged man with short brown hair, wearing black-rimmed glasses and a white collared shirt. He is smiling slightly, showing his teeth. The background is plain white.

Tim Hood is the Associate Vice President for Hyland in EMEA and a strategic technology professional with more than 20 years' experience supporting senior executives with enterprise wide digital transformation programmes. Having worked with both direct and channel customers across five continents, Tim's knowledge of the sector is both rich and diverse

PLATFORM ECOSYSTEMS – THE IDEAL ENVIRONMENT FOR DATA

To remain relevant and competitive in a disrupted and increasingly changing marketplace, the financial services industry has little choice but to capitalise on the potential of innovative technologies.

Unfortunately, too many organisations remain reliant on high-maintenance legacy systems, which compromise their ability to share information fast and effectively. This limits their speed of response and, most particularly, can have a significant impact on their service delivery. And since customer service (CX) is now often the key differentiator in the market, if you are not delivering this to the highest level, that can leave you vulnerable to nimbler, more attentive competitors.

What's the answer? To move to a platform ecosystem centred around a powerful and adaptable content services solution that draws together a wide and disparate collection of data, processes and applications into a single, connected and ever-evolving network.

Customers benefit in that they get a better front office experience and more seamless interaction because of improved back office processes. For organisations, the strategy offers the ability to react faster and more effectively to customers' needs, while safeguarding business continuity, should working practices have to change rapidly.

So, a robust content services platform joins up different applications and data sources, makes information instantly accessible, and ensures there are no gaps in the architecture through which your precious data can fall.

If the platform ecosystem has the capability to capture, manage and make accessible both structured and unstructured content in all formats – scanned paper, print stream, electronic form or email – then all the pieces can be brought together, whatever their source.

And if your platform ecosystem includes bi-directional linking, then whenever data is updated in one place, that same data is similarly and immediately modified in all other locations where it is held. This eliminates the risk of creating silos in which parallel sets of

information could evolve independently. It gives you and your staff the reassurance that everyone throughout the organisation is looking at the same thing, and what they are looking is accurate and up to date.

As a result, wherever they are, employees can access the data they need in real-time, giving them a detailed, accurate picture of the customer and their requirements, and ensuring they can answer their questions easily and confidently.

Such platform-based ecosystems are already transforming traditional organisational hierarchies and building real value in the businesses that have introduced them – as well as creating the potential for exciting and profitable new business models.

ProCredit Bank, for example, has totally reinvented its lending process for small business and corporate accounts by integrating Hyland's OnBase with its core banking system.

Not only has this given the bank's staff a 360 degree view of every process step, but it's also led to much greater effectiveness when it comes to traceability, ensuring conformity, easy and accurate calculation of KPIs, automatic document generation and the ongoing monitoring and analysis of accounts.

The real power of platform ecosystems of course comes when they are cloud-based, as this not only gives you much greater flexibility and freedom, but it also removes the IT infrastructure burden. No more system maintenance or upgrades to manage.

And when you integrate your existing line-of-business solutions, such as Salesforce or a core industry-specific application, like Guidewire's InsuranceSuite into a platform ecosystem, you also minimise any short-term disruption. The team will already be familiar with the applications and able to meet customer needs with minimal disruption to service levels. Ideally, users will be able to move effortlessly between different dedicated systems without feeling any disconnection as they do so. They will simply know that the right information is there when they need it.

If the platform you choose is low-code, then even non-technical staff have the opportunity to be involved in the design of these business processes and the reshaping of products to ensure they are appropriate and effective.

Also by introducing RAD/low code solutions like OnBase organisations can start the technological process knowing they can extend initial use cases to other processes later.

Of course, with ever wider access to what could be sensitive information, it's imperative that any platform ecosystem is protected by advanced authentication and encryption offering multiple levels of protection so data is always safeguarded – whether it's in use, in transit or at rest.

The need to introduce platform ecosystems is becoming ever more urgent, driven in part by the growing focus on customer experience that requires a wholesale transition from traditional manual and paper-based processes, to electronic ones. Additionally, as the implications of COVID-19 have come into sharp relief, changes to working practices and the need to respond rapidly and effectively will continue to accelerate.

Given the significant challenges many financial service firms have already found in trying to maintain, let alone enhance legacy systems, there is little alternative other than to move to a platform ecosystem that gives much greater control over data. With this in place, they have the ability to scale and react more quickly, to stay in tune with the needs of their customers and create the seamless experience they are looking for.

When you achieve that, you are well on your way to building a true and long-term relationship with them.

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THE BEAUTY OF SIMPLICITY AND SECURITY

Interview with Alberto Macciani,
CMO of Paysend

Financial IT: It appears that Paysend is a money transfer company for people with debit/ credit cards. Is that correct? Do both the sender and the recipient have to be signed up with Paysend?

Alberto Macciani: No. Paysend is a global payments company with a range of services to the consumer and merchant markets based on our core theme of “Pay, Hold, Send”. The B2C division offers customers the ability to access a wide range of services, including money transfer, hold balances and spend from a Paysend card. All customers using the money transfer service will use either a card (debit / credit) or a bank account to fund the transaction. The recipient does not need to be a Paysend customer. The B2B division provides a “one-stop shop” for the online SME market, enabling small merchants to open an account, obtain merchant acquiring services, make payments and other services in a single on-boarding process.

Financial IT: What was/were the main problem(s) that you sought to solve when Paysend was established in April 2017?

Alberto Macciani: The fundamental problem was to create a service for consumers and businesses to solve a range of Payments

problems – summarised as “time, cost and barriers” – in a manner that provided a viable business model from day one. We did so by creating a single technology platform that controls the entire customer experience and journey and linking that to existing payments infrastructures in such a way that we delivered the service without the use of third parties. We then had to scale up the business in a way that was fast and secure, whilst we ensured we had positive economics from the start.

Financial IT: What is the Unique Selling Proposition (USP) which gives Paysend an edge relative to other money transfer companies?

Alberto Macciani: The money transfer element of our business uses unique card to card technology which allows transfers to be done in the most secure and seamless way. We are the only market participant to offer this globally. We want to provide the simplest customer experience to our customers in a way which is fast, safe and convenient and with a global outreach.

Financial IT: In a little over two years, you have found over 2 million customers. Roughly how many

PAYSEND

Alberto Macciani,
CMO, Paysend.



customers do you expect to have in two year's time?

Alberto Macciani: We are hitting some record figures since the Covid-19 pandemic started, as customers are using digital services more frequently. Our ambition is to end 2020 above 3 million and to double that by the end of 2021: we should then keep progressing incrementally.

Financial IT: What is the main challenge to your business? Imitation by rivals? Something else?

Alberto Macciani: We see two main challenges. In both the B2C and B2B divisions it is to keep developing the technology in a way that is always at the edge and different – and to build a brand around some strong functional and emotional values. In the B2C division we want to be famous for having a great technology that can impact the life of people in a positive way. Money is not just about filling a need but mostly about connecting people and helping the society. As an example of our strategy, reducing the cost of transfers from the average 7% to 2% could liberate billions of resources to be invested in education for children.

Financial IT: How do you onboard new clients? In general terms, what is your marketing strategy?

Alberto Macciani: The onboarding process for clients is quite different for each division, but it is all done digitally through our app or web site. On the B2B side it is naturally more complex but we have developed a range of tools to make it appropriate for the SME market, where many businesses are sole traders. The B2C onboarding process uses the same principles – simplicity, ease of use, speed – so that it is just part of a customer's first transaction with us. Our marketing strategy utilises a very efficient model based on three drivers. First, the use of big data to understand exactly the needs and intent of customers and how to reach them with the right offer. Second the use of data and insights to profile our customers with the right message in the right moment and then using their positive feedback to build organic traffic (we have over 11,000 reviews on Trust Pilot with excellent scores). Third, building of meaningful content that can be amplified by media and that can provide strong amplification of our key messages.

Italian, living in London. I joined Paysend at the beginning of 2019 after 20 years managing consumer goods for Unilever as Vice President for the Household Care business. Passionate about marketing and branding, joined Paysend with the ambition to create a new Brand in Fintech able to link technology with a seamless customer experience and a positive impact on money education. Using the most advanced digital technology Paysend is creating a new customer experience model that makes pay, hold and send money simple and smart. Thanks to big data and the latest market research techniques, Paysend is building a new standard for Fintech products able to understand customer profile as well as their intent, so to create affiliation and engagement. My job is to create a state of the art Brand vision, innovation pipeline and teamwork which can support a fast business growth and the creation of a valuable Brand. At Paysend we call this money for the future.

www.paysend.com

Evgenia (Jane) Loginova,
Co-Founder and Co-CEO of Radar Payments,
BPC

Jane has co-founded Radar Payments, the new paytech launched by BPC group. At Radar Payments, she is focusing on creating value for fintechs, acquirers, issuers that need to go to market faster or respond to critical market needs. Jane carries multiple hats, she is also Senior Vice-President, Chief Commercial Officer at BPC, globally responsible for strategy, marketing and sales. She is successfully leading the technology company through the rapidly changing landscape of payments and banking.

Prior to joining Radar Payments and the BPC group, Jane held Executive Director roles at Goldman Sachs. She graduated in Management from the London School of Economics and is based in London.





PROVIDING 'WHITE LABEL' FINANCIAL INFRASTRUCTURE

WHERE DOES A COMPETITIVE EDGE COME FROM?

Interview with Evgenia (Jane) Loginova, Co-Founder and Co-CEO of Radar Payments by BPC

Financial IT: Jane, could you please tell us about Radar Payments by BPC.

Jane Loginova: Radar Payments can usefully be described as a provider of white label payment services. We cover the end-to-end payment value chain from acquiring, issuing, processing to emerging payments, such as virtual cards and wallets. Our actual and target clients include second-tier banks, especially those that have outsourced their payments operations to larger banks in their markets and that need to keep up with the pace of innovation. We also work with payment services providers (PSPs), neo-banks and Fintechs that have big ambitions to become unicorns and that need the best technology and service to help them scale up fast. We do also serve smaller fintechs that need a readily available platform to get to market.

We started our operations about 18 months ago and as we belong to BPC Banking Solutions, an established privately held banking and payment company headquartered in Switzerland, we were fortunate enough to inherit their SmartVista platform, a proven and

resilient platform, which gives us the power to serve organisations of all sizes and to accompany our clients in their rapid phase of growth.

Financial IT: Does that mean that you are a provider of payments infrastructure?

Jane Loginova: That would be a correct, but incomplete, description of our business. Our clients work with us because we offer them a competitive advantage beyond traditional payment processing. Our aim is to act as a payment-as-a-service platform. Our value added services can help launch a neobank in the cloud in a short time, fast track a fintech that wants to venture into commerce and payments without the need to build a new platform from scratch and offer unparalleled features that take their inspiration from our experiences worldwide.

If our clients want to use modular services from our core payments platform, be it for fraud prevention, prepaid card issuing or others, there are several ways that they can do that. In the platform-as-a-service (PaaS) model, the clients operate the infrastructure

that we provide in the cloud and which they access. In the software-as-a-service (SaaS) model, we operate and develop the infrastructure. The clients pay as they use the technology. From the clients' point of view, they are spared the massive upfront investment that would otherwise be needed to build their own infrastructure. Alternatively, the clients can outsource all their payments processing to us. This model is becoming more and more popular in the European Union, where many clients are concerned about the ever-rising regulatory requirements: in this case, we are assuming the burden of compliance. It is also popular among fintech and neobanks that need to go to market faster and with a reliable and trustworthy partner.

Financial IT: As everyone knows, payments services are increasingly becoming commoditised. Pressure on prices and profits is relentless – in a downwards direction. Surely that is a problem for you?

Jane Loginova: We counter that problem in different ways. On the one hand,

prices are coming down which benefit customers and that is the most important, making payments more affordable for all is a good thing. When it comes to our revenue model, cost reduction does not mean less business activities for us. Our model is based on long-term pay-as-you-grow partnerships. Therefore, although prices are coming down, our volumes are going up and we grow alongside our clients.

On the other hand, digital transformation is an infinite game, it will last for years and new experiences will keep changing the way we pay as technology advances. Therefore it is essential for us to keep bringing value added services and new payment experiences to the market. We can support Buy Now Pay Later commerce, fraud management, loyalty programs, billing & invoicing, the KYC and customer onboarding requirements that our clients face and transport and ticketing systems in taxis, metro, train and buses. And as data is a core component to every digital business, we can help our clients with deep data analytics.

And last where we see strong demand is also for our knowledge, we have built a strong team of industry experts allowing us to offer a wide range of advisory services, from supporting clients in better preventing fraud, taking inspiration from our worldwide exposure, to how to keep ahead of new regulatory standards or help in defining new value propositions for a launch.

In short, we take the pain out of payments for our clients. This leaves them free to focus on the aspects of their businesses that are most important to them. For many of those clients, what really matters is their customers' own experience.

Financial IT: Can you quantify the size of your business?

Jane Loginova: Given how rapidly we are growing, that is quite difficult. Currently our clients operate in 90 countries worldwide and we process 390 million daily payments transactions for them. The norm has been for us to achieve a two-fold year on year increase in revenues.

There are several drivers of this growth. We are constantly winning new clients. Another is that the clients

themselves are often new and rapidly expanding enterprises. Further, the pain of payments is increasing – revenues are being squeezed, and regulatory costs are increasing. Many actual or potential clients want to be in e-commerce or new financial services, but are very happy to pass the headaches on to us.

Financial IT: You're not the only alternative that they have, though. The provision of payments infrastructure is a competitive business, is it not?

Jane Loginova: We are in a value game and the advantage we offer brings direct business benefits to our clients. We believe that we have a competitive edge, and that the clients are experiencing it.

For example, our white label approach makes it possible for our clients to offer new services, quickly, efficiently and as their own. We remain 'off the radar', if I may say; we empower them and let their brand shine at the forefront to serve their merchants with the best possible payment experience. We adopt strong ethics and we do not compete with them; we solely focus on serving financial institutions, fintechs and payment enablers.

Financial institutions get access to a proven, scalable, resilient mission-critical system means that we can ensure that our platform addresses all new issues, such as increased regulations, as they arise and can ensure uninterrupted business and operations. We offer security, which is important at a time that fraud and cybercrime are growing. Perhaps most importantly, our solutions are scalable. Our clients know that we can cope if their businesses expand by an order of magnitude.

We also aggregate the best innovation from over 90 countries. Our deep understanding of local payment contexts, worldwide makes it easy for us to take a financial institution or fintechs into new territories. There are many markets where others do not venture into. In contrast, we have ready end points to most markets globally, including markets still in development, which makes it possible to scale up and expand worldwide faster in untapped markets.

Financial IT: What has been the impact of the Covid-19 pandemic on your business?

Jane Loginova: As has been widely documented, including here in Financial IT, the pandemic accelerated a number of trends that were already well established. In particular order, those trends include: greater digitalisation, a surge in e-commerce, rising contactless payments and surging fraud. We have been able to help our clients to deal with the acceleration of each of these trends. That, we believe, is one of the reasons why our own business has been expanding so rapidly through 2020.

Financial IT: How do you think your business will be different in three years time?

Jane Loginova: The main trends in the payments services industry will not stop when the Covid-19 pandemic is somehow brought under control. It is far less important to be in the same location than it was previously for people and organizations who are transacting business. Digitalisation will continue to rise. We think that, in many countries, there has yet to be a surge in digital transactions with governments, including payments. We are well placed to benefit from the growth. In 2023, our revenues should represent a significant part of our group's business; we should be a much larger company and one that is more diverse in terms of our client base.

Radar Payments by BPC believes in a world where clients, merchants, PSPs, banks – all chain partners alike benefit from ultimate choice to fit their requirements, cost effectively, efficiently and securely delivered.

Radar Payments also believes that merchants and niche payment providers should not be distracted by administrative tasks, trying to keep up with the newest payment methods, or latest compliance standards, or the demand for ever-faster or instant payments.

Radar Payments detects and offers to its clients payment choices, plus continuous compliance, security, and low-cost operational excellence. The company stands out in offering added value, developed for and with its clients.

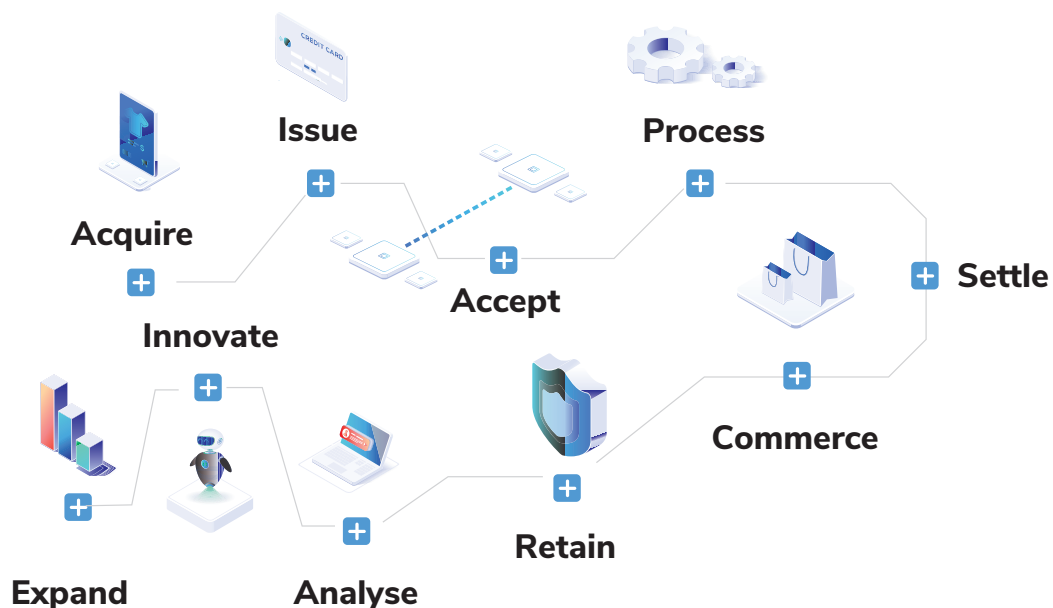


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Meet Radar Payments – white label excellence for any payment enabler. We run, scale, de-risk and innovate your platform so you can focus on your business and clients.



White Label Excellence for Fintechs, PSPs, Banks, Acquirers, Issuers





DELIVERING PAYMENTS TO SMES IN PRACTICE

WHAT HAS BEEN THE IMPACT
OF THE COVID-19 PANDEMIC?

An interview with Laurent Descout, CEO and Co-Founder of Neo

Financial IT: Please introduce Neo.

Laurent Descout: Neo is a platform that brings all the functions required from a treasury, payment, cash flow and FX execution system into one place. Rather than relying on a stack of siloed plug-ins and systems working on top of each other, which increases operational risk, we offer access to all of these critical functions through a single platform.

We had envisioned a system like Neo for many years, but our journey began in late 2016 when we received our seed funding. Since then, we have become one of the first Fintechs to be regulated in dealing derivatives and to offer real-time FX pricing to hedge exposure. We established several partnerships along the way and developed many features and services that, up until now, have been unavailable to SMEs at a reasonable cost. The latest of these is our multi-currency accounts, which enables clients to make and receive payments in over 30 currencies.

We are serving over 100 clients from our offices in London, Cambridge and Barcelona, and have ambitions to grow our headcount, clientele and the services we offer over the coming years.

Financial IT: What is the USP (Unique Selling Proposition) of Neo? What makes it different from other providers in the UK and globally?

Laurent Descout: For SMEs, there is no clear solution when it comes to international payments and treasury management. Treasurers today are subject to multiple pain points, with the majority unable to access the banking services they need with speed and efficiency.

Opening a truly international account that lets you operate in any currency out of one single IBAN is not easily accessible to corporates and when it is available, there is hassle with the opening process and the outrageous fees that come with it.

There are no readily available automated solutions that provide small and medium-sized businesses with everything in one place – cash flow, payments, bank accounts, FX trading and analytics. Neo provides corporate treasurers with a one-stop shop for all their international treasury functions – bringing a facility only previously

available to large institutions to the masses.

Neo comes with an all-in-one solution. There is nothing to install, no consulting, and no painful integration. You simply open your account, and everything comes with it.

Our service is also part of the value for the client. All clients have a dedicated account manager who is responsive and clears most of the doubts or questions in hours not weeks.

Financial IT: Please name your competitors and geographic footprint. Please name your first founders or strategic JV partners.

Laurent Descout: Neo was founded by a team of fintech, banking, FX, payments and treasury experts. As individuals, we are serial investors, market experts and entrepreneurs. As a team, we shared a unified vision which is now becoming a reality due to our collective efforts.

As CEO, I previously co-founded and grew Kantox. My other co-founders and senior colleagues also worked at leading European banks, fintech companies and consultancies.

They include: former GreySpark Partners Director Ian Yates, who is our CTO; our Head of Product, Emmanuel Anton; our Head of Legal, Nuria Molet; and FX market expert Matthew Pilling.

We are targeting clients across Europe, including the UK from where roughly 40% of our clients originate.

In addition to securing the necessary regulatory approvals, we have established strategic partnerships with SWIFT, 360T, BPIfrance, EBA Clearing just to name a few.

Financial IT: Who are your primary clients? What is the total number of clients?

Laurent Descout: Neo applies to any corporates of any size. However, our key demographic at this moment is SMEs as there is no clear, all-encompassing solution for their treasury requirements at a reasonable cost.

For example, when it comes to international payments, the majority of SMEs are unable to access the international banking services that they require due to high costs and a lack of availability. SMEs are often required to have multiple different accounts for

each currency, many of which operate in silos. As a result, they are unable to view their cash flow in real-time and lack full financial visibility across their business.

This is translated into their FX needs as well. When exchanging currencies, SMEs are often reliant on banks to execute and exchange their currency orders resulting in long lead times and high commissions.

We also see a growing demand from clients whose banks are no longer willing to serve them in Europe. Specifically, we have seen excellent client take up within asset managers, funds and fund administrators, along with clients from the energy and commodities space which is another key sector for us.

Financial IT: Neo is a new entrant to the UK market. What is most attractive for you in the UK fintech space, especially in the time of Covid-19 pandemic?

Laurent Descout: Although our multi-currency account service is newly launched, we have been operating in the UK for over a year with a large portion of our clients based here.

For us, the pandemic has been a significant opportunity because corporate treasurers realised there was all of a sudden a need to work differently, take stock of their operations and reassess how they manage their businesses better.

Treasurers, like everyone else, were forced into an unprecedented situation where they had to manage cash and international payments from suppliers and customers at a time of significant uncertainty and instability – all while working remotely.

The benefit of Neo is that our platform is accessible from any location with full security protocols. Having the ability to work from one system, one account, and monitor your operations from one screen greatly improves security, as well as providing the digital tools required for this new way of working.

Being based in Barcelona but with offices in both London and Cambridge, we are a part of the growing European Fintech space. The UK is a natural playground for Neo, since our technology is 100% “Made in the UK” – and it is where 60% of our staff are located. It allows us to have a unique broader reach not only with our clients

but with the talented team we have working at Neo.

Financial IT: *Does Neo have a full banking licence? Name the authority that regulates your business. Are funds covered by deposit insurance and investors compensation schemes?*

Laurent Descout: Neo is the first fintech that is dually regulated. We hold a MiFID II license for derivatives dealing granted by the Comisión Nacional del Mercado de Valores, the Spanish government agency responsible for the financial regulation of the securities markets. We also have a PSD2 license from the Bank of Spain, for payment activities.

This dual set-up is what allows us to gather all hedging and cash management activities under one single platform, which is normally siloed. This translates into a frictionless approach for our clients.

Being MiFID 2 regulated offers a guarantee to clients that their money is secure with Neo. Scrutiny on regulated firms is way higher than those of payment companies and we are eligible for the investment guarantee fund. We are also EPC and SWIFT members.

Financial IT: *What are your core product offerings for business customers? What are the differentiating features of your platform? What are your product costs? Do you offer a free current account switch service?*

Laurent Descout: We recently announced the launch of our new international multi-currency account service. It provides users with fully registered International Bank Account Numbers (IBANs) from which they can complete payments in over 30 currencies. It also allows corporate treasurers to freely navigate between different currency-denominated accounts from a single dashboard.

We also offer access to real-time cash management, tracking of payments, personalised data and detailed analytics. This complements the other services we offer, such as FX execution capabilities for spot, forwards, swaps and options in up to 80 currencies, and real-time cash-flow management.

Currently, treasurers are accustomed to paying sizeable commissions and

rates that are significantly higher than interbank rates. Neo charges average trading fees between 0.05% and 0.25%. This compares to a typical rate of 1% to 3% charged by many banks.

The proprietary core technology of the platform provides a full work environment for clients with features such as the unlimited history of operations, customisable blotters to perform post-execution management, rate and payment alerts, comprehensive document centre where all clients' documents are stored, and finally omnichannel access: laptop, tablet and smartphone.

All of this is underpinned by the latest security protocols, such as multi-channel two-factor authentication and four-eyes checks. Individuals' security access can be tailored according to their job function, while senior managers retain granular permissions to control the features their team members can access.

All actions on the platform are logged and stored with RSA-2048 standard encryption. It also provides a complete audit trail of all activity with continuous backups.

Financial IT: *Please briefly describe a new client onboarding process.*

Laurent Descout: Our client onboarding process is extremely simple and efficient. From signing with us, we can have a client up and running within 48 hours. This includes the completion of security KYC checks, full integration into our cloud-based system and a 30 minute walkthrough session with the client.

Financial IT: *What is your customer growth and business strategy?*

Laurent Descout: Our client base has grown by 150% throughout Q3.

The events of 2020 have highlighted to treasurers the importance of having remote access to a secure, comprehensive and cost-effective treasury management system, but this was what we envisioned when my co-founders and I set up Neo.

We have seen a spike in interest and sign-ups from the UK and Europe. These regions were central to our growth strategy, so in many ways, our business and product roadmap remains unchanged.

In the short-term, our focus is on onboarding more clients and improving the products and services we offer. Longer-term, this is a clear opportunity and gap in the market for a cost-effective, one-stop-shop treasury management system and we believe we can fill that gap.

Financial IT: *How long is it before we have a Fintech solution that enables governments to extend credit to literally millions of small businesses – either through conventional banking systems or through lending platforms – in a matter of days?*

Laurent Descout: The pandemic has demonstrated that using traditional banks as the only transmission channel for public financing was not the way to reach a massive number of businesses in a very short time. This was repeated in all western European countries. Bank systems were simply not ready for this while several lending places had all it takes to do it, for example, request forms were ready to collect loan requests and risk algorithm were ready to analyse eligibility.

Unfortunately, the refinancing lines were not opened to them since those were legally reserved for banking institutions. This generated lots of frustration from the borrowers and from the lenders who felt they could help the economy but were not allowed to. Some countries changed their laws to allow lending platforms to distribute, France is one example, but others did not, such as Spain who kept the privilege of lending for banks even when they were clearly collapsed and not answering. This is a clear example where regulation has gone way behind technology to the detriment of the real economy. On the positive side this will help in raising awareness that alternative lenders clearly serve the economy and therefore, we can foresee some openings in that space.



3 WAYS FOR FINANCIAL INSTITUTIONS TO BUILD TRUST WITH CUSTOMERS

Are you doing everything you can to build current and future trust with your customers?

Hyland, a leading content services provider, produces expertly tailored solutions for financial institutions. With OnBase, Hyland's enterprise information platform, financial institutions can both streamline processes and provide better services to customers.

Here are three ways an OnBase deployment can optimize technology stacks and build trust — immediately and in the future.

1 ONBASE OPTIMIZES YOUR CURRENT IT STACK, SO EVERYTHING IS IN ONE PLACE, WITH ONE VIEW

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- Access for customers at any time, anywhere
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- Customers enjoy more responsive, meaningful interactions with your team

2 ONBASE IMPROVES AND AUTOMATES THE LENDING PROCESS

OnBase automates how data is organised, from its entry to your financial institution through to storage, accessibility and security. With OnBase, your institution can:

- Create low-code and configurable workflows to ensure process efficiency and employee accountability
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- Make application processes more fluid and less tedious with eforms on websites and apps

3 ONBASE MANAGES RISK AND COMPLIANCE ACROSS THE LOAN LIFECYCLE

Hyland's loan document tracking solution manages the complete lifecycle of a loan and all of the corresponding documents from a single application. Additionally, it:

- Provides a visual interface to quickly see loan workflow, compliance and risk analysis
- Provides a complete view of the prospect pipeline
- Centralises everything through the core systems employees use every day

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PARTNERING WITH FINANCIERS,
PARTNERING WITH SELLERS

Interview with Vahe Ovasapyan, Vice President, Digital Finance at Ozon Group

Financial IT: Please introduce Ozon.Invest and its offerings in the e-commerce and fintech spaces. What was the need for Ozon to launch in the Russian market?

Vahe Ovasapyan: Ozon is Russia's leading e-commerce platform, which is often referred to as "Russia's Amazon." It came into existence as the country's first online book seller and has grown to offer more than 6 million SKUs across various product categories, ranging from books, apparel and electronics to automotive goods, fresh food and toys. Ozon's marketplace partners account for more than 85% of our assortment as of June 30, 2020 and we continue to expand.

To us, ensuring that our customers and sellers can find what they need within our ecosystem is part and parcel of what we do. Marketplace platforms are a relatively new phenomenon for Russia, so hundreds of small and medium-sized businesses (SMEs) are just getting to know this format. Creating a fintech arm to provide these businesses -- the sellers on Ozon -- with all the tools to fully leverage our platform and grow their businesses seemed like the natural next step in the evolution of our ecosystem.

In April 2019, we launched Ozon.Invest based on a platform-to-business (P2B) financing model but have since shifted our focus to business-to-business (B2B) lending. The aim of the exercise is to support our sellers' ambitions to grow and develop their operations, while giving them the tools to do so without leaving the Ozon ecosystem.

Ozon's sellers can apply for financing directly on our platform and use their products, stored at our warehouses, as collateral for the loans. Our financial services partners also benefit, as they get introduced to hundreds of SMEs, effectively expanding their reach. In addition, Ozon knows its sellers well. We provide information on the borrowers to our financial services partners, allowing for more accurate scoring.

Papa Finance and Simple Finance, both of which specialize in micro-finance, became our first partners at Ozon.Invest. Most recently, we have also partnered with Otkritie, one of Russia's ten largest lenders, as the need for financing among the sellers has increased. We see interest from other

major lenders in Russia in joining our platform.

The size of an average loan at Ozon.Invest is currently 1.5 million rubles (GBP14,766). We see great demand from Russia's lenders to join our B2B platform.

Financial IT: Roughly how quickly is your business growing? What are the main drivers of the growth?

Vahe Ovasapyan: Trust in the Ozon brand and our technology, as well as the demand for financing from small and medium-sized businesses (SMEs) are fuelling the expansion of Ozon.Invest. We are at an early stage of development of our B2B platform and are already seeing great growth rates.

Our lending platform has become a lifeline for many businesses during the pandemic. In April, the number of loan applications increased 30% compared with the previous month.

It's also worth noting that the number of financing applications from our sellers has doubled after Otkritie joined our platform.

Financial IT: What impact has the Covid-19 pandemic had on your business? Are the main trends that prevailed prior to the pandemic still in place?

Vahe Ovasapyan: In 2018, Morgan Stanley identified Russia at "the last major emerging market without a dominant online player." The battle for e-commerce market share has intensified in the last few years, as Ozon has continued to further improve its infrastructure to serve customers across Russia's 11 time zones.

We've seen our investment in logistics pay off, as Ozon was able to provide great customer service even as sales rose to a record high in the 2Q20 amid the pandemic. [Ozon's Gross Merchandise Value (GMV) surged 188% year-on-year to RUB 45.8 billion in Q2 of 2020.]

The Covid-19 pandemic has accelerated Russia's move towards e-commerce: this in turn fuelled the need for businesses, including those selling their products on Ozon, to expand their online distribution channels.

We saw a record 500 sellers join Ozon Marketplace in a single day in March, followed by increased demand for Ozon.Invest services in April and in May. After we partnered with Otkritie in August

(2020), we saw the demand for financing double the following month.

Financial IT: Who is the competition? What is the X factor that gives Ozon.Invest the competitive edge?

Vahe Ovasapyan: Our brand recognition in our market, as well as our user-friendly technology, provides us with a competitive advantage. We have built this product with Ozon sellers in mind, making it easy for them to access financing without leaving our platform. We also make this process simpler for banks, who get additional information on the sellers, helping these lenders score their risks appropriately.

Ozon sellers can apply for financing without leaving our platform and use their merchandise stored at our warehouses as collateral for the loans. Our financial services partners also benefit from the additional tools provided by Ozon, helping them score credit risks more accurately.

Financial IT: What are your business and marketing strategies?

Vahe Ovasapyan: We are working on building new partnerships to further expand our product range and provide more choices for our more than 13,000 active sellers, ranging from small businesses to large retail chains. Partnering with Otkritie Bank, one of Russia's ten largest lenders, is part of this strategy. We also see demand for joining our platform from other financial institutions, wishing to gain access to a new SME audience as well as tools to have better visibility of the inner workings of these SMEs.

Financial IT: In your opinion, what trends should we expect in the fintech space in near future?

Vahe Ovasapyan: We believe in the future development of marketplaces that will provide fintech products to both buyers and sellers on the platform. At the moment, we plan to continue to focus on loan facilities for the sellers, further customizing them to the specific needs of online players, as we increase our presence in payment services in the B2B space.



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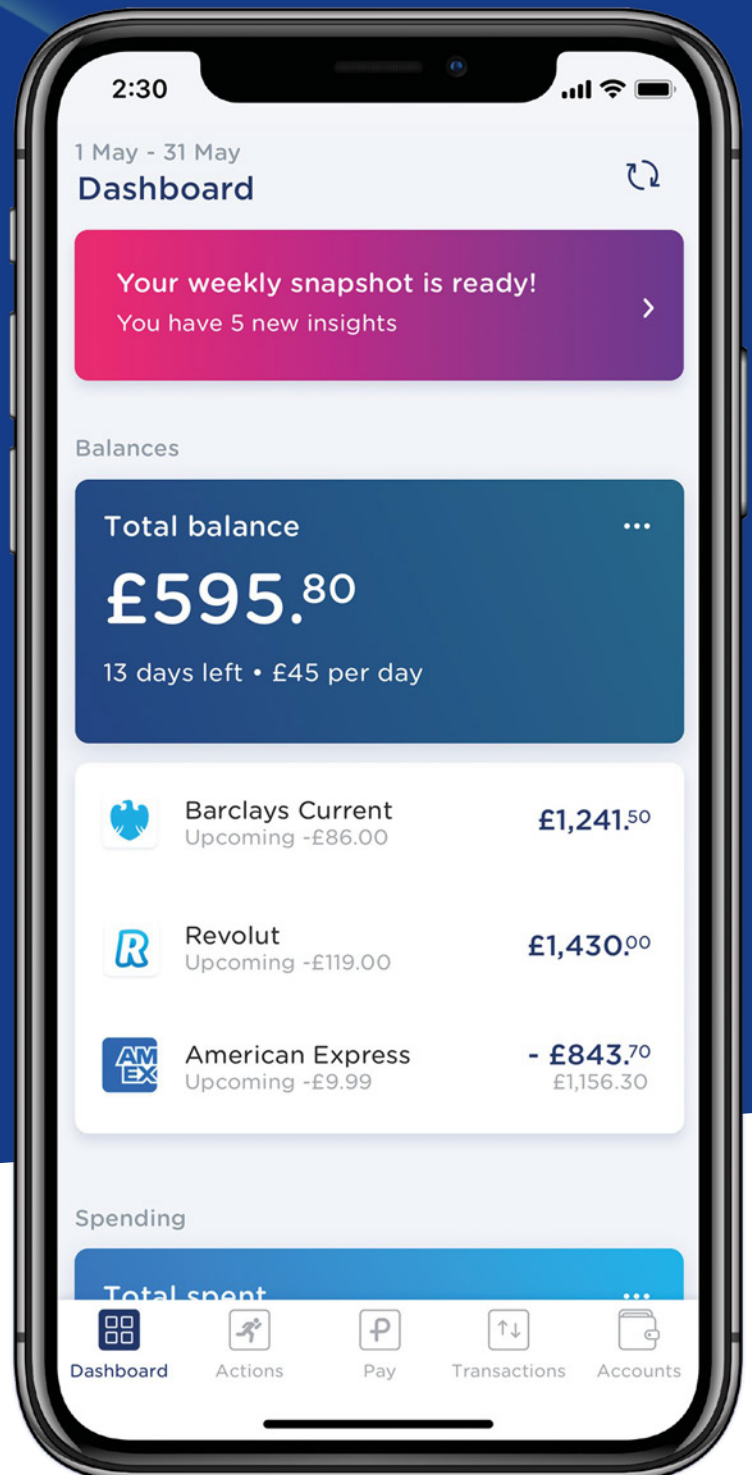
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CREDENTIAL STUFFING: REVISITING HOW WE MANAGE FRAUD AND CYBER POST-COVID

With all the COVID-19 headlines, it's easy to miss the latest news on the old fraud favourite: credential stuffing. A recent survey by Atlas VPN showed the U.S. experiences 87 million credential stuffing attacks per day. What can we do to fight back?

What is credential stuffing?

As complex passwords are difficult to remember, users often reuse credentials across different websites. This means that any data breach could pose a risk for your organisation's site. The attack takes the stolen credentials (username/email and password) and using automated tools, attempts to login to many accounts. The tools will try to mimic normal user behaviour and come from multiple IP addresses.

Without multi-factor authentication (MFA) in place, accounts can be breached and used for social engineering attacks or account takeover.

As we have seen with Zelle, fraudsters try to bypass MFA by enrolling apps and using social engineering or SIM swapping to get around this requirement. This can be exacerbated by aggregator apps and

bots, so it's important to separate out the requests and use MFA at registration.

Where banks have tools in place to detect this, it means customers are locked out of their accounts. When banks don't have these tools, customers likely become victims of frauds.

Credential stuffing clearly creates a problem for consumers and banks alike. Consumers lose funds, which banks need to refund. But the problem is larger than this, as consumers and businesses lose confidence in new technologies, which can ideally save them money or time. This type of scam also adds to the cost of the financial ecosystem.

With more digital users than ever, and new channels to access accounts and make payments such as virtual assistants like Alexa and chatbots, and real-time payments, now is the time to revisit how to secure accounts from credential stuffing attacks and subsequent account takeovers.

Protecting Your Customers from Credential Stuffing

We are starting to see the need for fusion between cyber and fraud, and credential stuffing is one reason why. By bringing

elements of each discipline together as part of a holistic response to customer security and fraud prevention, we can see important improvements in detection and prevention

This work needs to start with password policies and user education, all while assuming most users will continue their poor security habits. As an organisation, ensure you have sensible password strategies in place to hygiene out the most common passwords. The "123456" password is still used where it is allowed. Provide users with advice on how to set strong passwords and recommend using a password manager.

Password advice from the UK's intelligence service, GCHQ, recommends against prompting regular password changing, as this can lead to even weaker password use. In addition, make sure your error messages don't assist attackers by divulging if a password is wrong but a username is correct.

Next, integrate your authentication and fraud profiling together, scoring enrolments and logins as well as payments. This might be enrolment to Zelle, a bank app, digital wallet, FinTech or even an accountancy service. By feeding in all the

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Rob Tharle,
Fraud & Authentication Industry Expert,
NICE Actimize EMEA



relevant events, such as enrolments and logins from all channels, normal customer patterns and profiles can be built. This allows for more friction, weighted to the risk of the event at hand. Doing this means that MFA can be directly linked to the level of risk, increasing security while allowing genuine customers through. This also means that high-risk attacks can be blocked at an earlier stage, rather than just creating more alerts.

Once that's complete, enrich your fraud profiling system with data and intelligence, including credentials from internal and external intelligence sources. This can be expanded with additional relevant data and events, such as unsuccessful logins and password resets, or known bad IP addresses and devices.

The sharing of known bad data/intel in either closed or open networks, such as through collective intelligence, is gaining traction to work against the Organised Crime Groups (OCGs) that operate against financial services organisations (FSOs).

This can be boosted by:

- Seed linked analysis to find fraud networks
- Providing the ability to hygiene through the customer lifecycle,

preventing taking on or keeping known fraudsters by name or device. From a password point of view, this helps protect customers by preventing them from using weak passwords and force resetting passwords used in a leak with their username or email.

As ever, the customer is key here. Improved customer messaging could also be useful, such as notifications of new device logins, changes of details and also unsuccessful login attempts. With unsuccessful login messages, make sure that they include the information the customer needs to understand the issue, such as time and location data, or if they just typed the password incorrectly. Otherwise you may increase calls to your fraud line.

Another practice is to treat traffic from different channels in appropriate ways and keep them separate, such as blocking bots and scripts from human-only channels. For channels where automation is expected, such as an aggregator service, make sure these have an appropriate registration service. By then sharing data from the channels on failed logins and creating entity profiles

around IP addresses and other data, high risk scenarios can be detected and dealt with efficiently within the fraud system. For example, this could include alerts created when high levels of activity from an IP address are detected. This then allows for the use of existing interdiction, automation and communication.

Employing these actions can help drive a more holistic approach to fighting credential stuffing. This means that credentials and customer logins are blocked where required, but genuine customer can go about their business.

The recent announcement by the U.S. Federal Reserve with its FraudClassifier Model, splits fraud into authorized and unauthorized fraud. By taking the approaches above, this helps reduce account takeover, part of the unauthorized fraud category, lowering losses for FSOs and reducing the impact on genuine customers.

Credential stuffing may not make the headlines as much as scams like business email compromise, but it is impacting FSOs and customers. By bringing together cyber and fraud, we can take the necessary steps to manage this fraud more effectively.

EVOLVE POS TO KEEP SHOPPERS IN STORE

Queuing up to pay must be the least popular part of shopping isn't it? That's why innovations in payment play such a key role in efforts to rejuvenate physical or 'brick-and-mortar' retail. While we bemoan the demise of retail outlets, particularly as a result of the Covid-19 lockdown, what we are seeing are great, inventive omnichannel ideas that are so interesting you would have to invent retail outlets if they didn't already exist.

So, people hate the checkout queue, but that doesn't mean they don't like going shopping. Retailers know this, and understand the need to modernise. When customers leave home, they are looking forward to an experience, to treating themselves, and this doesn't include spending time on anachronistic, time-consuming procedures like paying.

Retailers responded to the growth in digitalisation and its impact on their industry in a variety of ways. They attempted to make the POS more attractive but this was often limited to marginal facelifts and as eCommerce growth was detrimental to physical retail sales, optimising sales staff and cashiers often took priority over customer orientation and customer loyalty. As a result, department stores even today still focus too much on placing goods on a shelf and waiting for consumers to discover them and take them to the checkout.

Tapping into customer emotions

Which begs the question – if a customer already knows exactly what they want, what suits them and what quality they can expect from a retailer, why should they go the extra mile to visit the store, unless they know that they will have a great experience? In a great shop, spending money should be fun, presentation of products should be inspiring and shop staff should be available to advise. As for payment, that should, at the very least, be uncomplicated.

After all, the range of goods on offer offline and online is identical, so the shopping experience along with the price has become the singular differentiating factor. It's no longer sufficient for a store to carry a brand and make the full range of that brand's current product line available. Shopping must stimulate the reward system in the brain from first seeing a product, touching it and trying it, through to paying for it and if that takes too long or involves walking to another location, enjoyment instantly evaporates.

When customers largely paid with cash, the central cash desks of long-established clothing stores were often located around the edge of the sales floor near to the offices where safes were located to store cash until it could be safely transported to the bank. This design exists in many stores today, and moves customers away from the goods that they have been browsing amongst and inevitably into a queue.

Bringing payment to the customer

The Apple Store is a good example of how the payment process is evolving and combining smartly with sales advice. The cash register now exists only virtually as an app on the employee's iOS mobile device; the point of sale is also the point of payment, with the receipt being emailed rather than printed out.

German retail group, Otto, has a pilot store called "Fashion Connect" in which customers use a smartphone app to establish a connection to the shop's IT system at the entrance. Each item of clothing is only available once in one size in the freely accessible part of the store and is not intended to be tried on or bought. Instead, the shopper scans the labels of the goods they want to try on with a mobile phone and reserves one of the dressing rooms. A shop assistant fetches the goods in the selected size from the warehouse, hangs them up for a free fitting and informs the customer by text that they are ready. Unsure customers can request a consultant's viewpoint or have different items brought to them. There is then a choice when it comes to payment – at the card terminal, at a cashier or directly in the app via PayPal.

Modern payment methods such as contactless or by phone, support a new, easier payment process in stores. Studies have shown that if a customer holds their mobile phone or card up to the POS terminal without having to enter a PIN, they can clear the cash register in just eleven seconds. This is why biometric authentication on a mobile phone is attractive to retailers and consumers because it minimises time spent securing payment, and smartphone-supported payment methods such as Apple Pay which can be combined with self-scanning are increasingly being used by time-poor shoppers.

The message is clear, customers still want to shop, but to keep it fresh, relevant and 'experiential' retailers need to minimise friction. Change at the POS is a great place to start.



Nick Sonnex is Vice President Sales International of the global Payment Service Provider Computop – the payment people. He began with Computop in 2014 in the Technical Support department. His career in payment started in sales at Commidea, a gateway that was later bought by Verifone, where he was involved in the early adoption of Chip & PIN, contactless payments and the first version of 3D Secure with various merchants. After an interlude working with local councils, high risk and online retailers at paypoint.net, he then became a Product Manager at HTEC, an ACI Postillion user, providing a range of card payment terminals to petrol stations and convenience stores, before joining Computop in the UK. Here he was responsible for supporting the UK's merchants, then for project management, for example with eShopWorld, and finally became Team Leader of the Project Management team in the Merchant Services department, looking after international and complex projects such as DeLijn (Mass Transit), AMEX and Amway. As VP Sales he is in Computop's International Department where he combines his passion for sales with the technical background he has acquired during his career.

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STAYING AHEAD IN A SHIFTING PAYMENTS LANDSCAPE

The fast-paced payments landscape is a tricky environment for financial institutions and corporates to navigate. Whether it's grappling with compliance and regulation; enriching and leveraging data; or implementing innovative technologies, banks and businesses need all the help they can muster to stay ahead of the competition. Easier said than done, right?

Bottomline's Ed Adshead-Grant, General Manager and Director of Payments, and Clive Hodges, Director of Business Development, share their thoughts.

In any industry or business, it's essential to adapt and innovate to fast-track ahead of competitors. It's even more important given customer expectations, dealing with an unexpected pandemic, avoiding fraud and financial crime, and tackling a payment whirlwind. Given this backdrop, we explore the business case and barriers around payment innovation.

Long considered a commodity, perhaps, payments are the essential item at the heart of commerce. Once defined by specific banking relationships and infrastructures, the new world of Open Banking and Third-Party Providers (TPPs)

has shifted this definition. Unquestionably, the need for better control, visibility, and efficiency, are all aspects supporting this shift. Going forward, the new world of open banking means that payments won't necessarily come via banks.

Beyond Open Banking, we're seeing a convergence of standards like the introduction of ISO20022, both of which will help to reduce costs – across a myriad of payment types – in various ecosystems. Hodges comments, *“By buttoning down standards and opening up data, traditional banks may face tougher competition and could lose the grip they've previously enjoyed.”*

Weave in consumer and corporate expectations, which are fuelling the move towards Real-Time Payments, and PIS payments (where businesses initiate payments directly from the customer's bank account – with their permission, but without the need to use a credit or debit card), and the challenges faced by card payments networks and traditional banks become apparent.

The tidal wave of innovation is long overdue, considering the historic inertia around payments. Still used today, cheques were first written in 1659. Bacs was

introduced in 1968. SWIFT commenced in 1973. And over a decade ago, Faster Payments launched in 2008.

“We're moving into an era of open systems driven by secure cloud, mobile and API technology,” comments Adshead-Grant. His first suggestion for banking innovation is to collaborate. *“Share ideas, share investment, and create a situation where fintechs, banks and corporates are truly working hand in hand.”* Gone are the days where one party owns the customer experience, making this kind of co-operation and focus vital.

Adshead-Grant also suggests appointing a payments guru – whether internal or external – who can source, vet and propose the best of payments insights, opportunities and solutions for your business. Given the sensitives around moving and managing money, it really does need that level of expertise and scrutiny.

For example, real-time payments present endless opportunities for some and significant challenges for others. Just as corporates and consumers are changing how they purchase items in their daily lives, so too are they expecting to pick and choose the banking bits that suit them



Clive Hodges,
Strategic Business Development,
Bottomline Technologies

With over 25 years' experience in the banking products and payments innovations, Clive is responsible for evaluating the market 12-24 months out, looking to create growth opportunities for Bottomline's payments segment in EMEA. He was instrumental in helping create and drive egg banking, and has held Operations Director positions at both Santander and Nationwide Building Society, where he was accountable for managing and driving growth in some of the largest Card and Mortgage portfolios in the EU. Clive typically looks at innovations in and outside financial services and determines how these will best support valued customers.



Ed Adshead-Grant,
General Manager, Payments & Cash Management,
Bottomline Technologies

With over 20 years' experience in the payments sector, Ed is responsible for driving the strategic development and execution of the payments business segment for the EMEA line of business. Having worked at leading IT software and service companies for projects in over 30 countries, Ed has held a number of global strategy, product and client management roles with PwC, First Data Corporation, Pepper Consultants and Hewlett-Packard. Ed is passionate about helping financial institutions and corporates to better power and protect their payments and financial messaging.

best. *"Traditional banks no longer own the full financials for a corporate or consumer,"* says Hodges. *"And because new players typically don't have a slice of the traditional banking revenues, they have to create new revenue streams by meeting these needs. Hence fierce competition."*

So, how are regulation mandates and industry directives shaping innovation?

Adshead-Grant comments *"This may sound odd to some, but I see regulation as a positive in certain market structures. Regulators drive good practice, embrace new standards, co-ordinate different parties, push adoption and endeavour to avoid fragmentation in the marketplace. They ensure consumers win, and businesses remain healthy and competitive."* That said, their drive for innovation can be daunting. This year's [Business Payments Barometer](#) indicates that 58% of decision-makers expressed themselves as overwhelmed by the new regulations and how to accommodate them. Fortunately, APIs are standardised in the UK, so interoperability is easily achieved between different parties. Unlike other markets, such as the USA, which results in a very different position and journey.

Hodges adds *"This standardisation lowers the cost barrier to entry, encouraging new participants. As these different markets begin embracing a more open banking environment, it means traditional banks can't afford to stand still."*

Reflecting on what's blocking innovation, a few factors are emphasised. First is legacy technology. Second is a legacy mindset. Adshead-Grant says *"If the board room is hearing things about atomised APIs and it still sounds like a science project, then they've really got to get their heads around the future API economy and how payments will innovate at an even faster pace."* What works today won't work tomorrow. Inertia now will hinder a bank's digital transformation journey and leave them choking in the dust.

So, how can organisations overcome the barriers to payments modernisation?

Bandwidth. Money. Human capital. Many banks and corporates have made the decision to outsource elements of their operation already. *"That way, fintechs can help act as incubators for innovation if you*

like, while supporting their mainstream operations," comments Adshead-Grant. *"This collaborative approach works well, resulting in new solutions and propositions for them to test."* Concerning spend, banks benefit from the many initiatives and roadmap innovations that outsourced partners are working on, making adoption easier and more cost-effective. As to human capital, it's having the know-how to explore opportunities and avoid risks, which is most valuable.

"SaaS offerings help banks shift from the legacy world to a new, enriched one, without changing backend systems," says Hodges. *"Moreover, having access to an expanse of enriched data and being able to analyse it correctly opens up a world of opportunity previously not explored."*

For traditional banks looking to modernize their payments, collaboration may be a pivotal path in their digital transformation journey. Together, developing best of breed solutions, driving innovation, and increasing speed to market, are all synergistic outcomes that enable banks to better serve their customers. Turns out it might be easier done than said after all.



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SMART SPENDING IS THE KEY TO A RAPID CRISIS RECOVERY

Over the past six months, finance departments have played an even more integral role than usual in keeping businesses running. However, rather than a well-deserved break, they must soldier on and overcome new challenges – such as six more months of restrictions – as businesses attempt to begin their recovery.

Exactly what the next six to twelve months have in store remains unclear, so businesses must continue to rely on their finance team to remain agile and stay out of the red. This means keeping a keen eye on cash flow – and not just to ensure that there's money in the bank. By observing cash flow, finance teams can continuously reveal opportunities for streamlining the business and even identify potential growth areas.

When it comes to supervising cash flow, every business needs a smart finance system. Effective and automated spend management enables businesses to maintain a close eye on precisely where money is leaving the business. For businesses without such a system, there has never been a more important time to adopt one.

Balancing oversight and insight

Finance departments must strike a fine balance when it comes to spending controls. On the one hand, they must enable employees to spend without unnecessary red tape to ensure that the business is as nimble as possible and that employees are able to focus on their work instead of chasing approvals and receipts. On the other hand, the department must exercise control over spending to ensure that it is appropriate and constructive to the business' sustainability.

Fortunately, the ample real-time information provided by intelligent finance software provides finance departments with all of the tools they need to understand and limit spending – all they

need to do is use them to control spending without impeding the business's growth.

Delegating spending

As companies grow, there is a tendency to accrue bureaucratic procedures and red tape, especially when it comes to financial processes. These cautious policies may be intended to keep the company coffers secure, but in reality, they mostly place an unnecessary burden on employees at every level of the business and slow everything down.

But businesses have options. Rather than reimbursing staff for business spending and messing around with paper receipts, organisations must be able to easily delegate spending powers to employees, contractors and anyone else who needs to spend on the company's behalf in order to do their jobs. Prepaid card systems, for example, are subject to the finance team's real-time oversight, as well as a customisable budget and set of rules on acceptable categories to spend on for each cardholder.

Details in the data

Controlling spending is about more than just determining what individuals and groups can use company funds for – it's also about controlling, gathering and generating value from spending data. Traditional receipt hoarding expense methods do not lend themselves to prompt analysis of the data for a variety of reasons, but modern solutions make it extremely straightforward.

Knowing where money is leaving the business will be critical as companies attempt to navigate the narrow path between over-

Darren Upson,
VP for Small Business,
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Darren Upson, VP for Small Business at Soldo. Darren has over 20 years' experience helping B2B businesses grow. Prior to joining Soldo, he was responsible for increasing the Xero subscriber base in the UK from 83,000 to over 250,000 subscribers as revenues quadrupled in under 3 years. In his current role, Darren is responsible for scaling the Soldo SMB customer base across Europe.



and under-spending as they recover from the initial shock of the coronavirus. Legacy finance systems and irregular employee spending habits create a data vacuum, often fragmenting data across multiple silos including bank accounts, accounting software, and paper receipts. This data is hard to access and even harder to reconcile into a useful format, so it goes to waste.

The solution is to adopt modern spend management techniques which automatically track every penny that leaves the company account and compile the data into a singular database visible in real-time – enabling finance teams to make better decisions to help drive profitability. Smart spend systems can be integrated with business accounting software such as Xero so every single payment and transaction can be leveraged for the good of the business in terms of identifying patterns, losses and opportunities.

For instance, the finance team can review data to identify areas where money is leaving the business unnecessarily – such as multiple people paying for individual software licenses when a single company license may be cheaper. This allows the company to eliminate waste and ensures that there will be funds available for necessary expenditures in the future.

Directing the company toward growth

Finance departments, with the ability to notice trends, opportunities and issues, will play one of the most vital roles in advising businesses through this challenging time. They must be maximally alert and nimble, ready to interpret signs of change and adjust the company's course in the case of developments such as a second wave of the coronavirus.

Even the most dedicated finance team has a limited number of hours in their workday. By adopting modern tools that streamline and automate repetitive processes, the finance team can spend less time on administrative tasks and more on oversight – managing the balance between freedom and control in spending – as well as other high-value tasks like analysis and offering strategic advice. Many finance teams have already at least started to evolve their roles into an advisory capacity – and those that haven't need to do so quickly.

If not done already, now is the time to review their finance tech stack and consider how it could evolve and be more efficient for the good of the business.

The road to recovery

Businesses face a long road to recovery, and the UK Prime Minister's recent announcement reinforced that we are all in this for the long term. Finance teams will have to deal with many more bumps in the road. To give their businesses a fighting chance they must consider how technology can best be used to minimise the administrative burden on employees and give them a maximum of freedom while maintaining control over both the funds and the data that spending creates. By doing so, businesses will have the flexibility they need to meet future challenges, the control they need to avoid problems, and the insights they need to seize opportunities.



WHAT DOES THE WIRECARD FALLOUT MEAN FOR THE FUTURE OF PAYMENT SECURITY?



Nikhita Hyett,
MD, Europe,
BlueSnap

The Wirecard AG's collapse in June is having a ripple effect on the regulations and structures needed to support reliable online payment systems, teaching merchants about the importance of having multiple backups for payment security.

When German fintech company Wirecard filed for insolvency in June, the fallout temporarily took down several payment services. Retailers, fintechs and consumers were at the frontline of the impact and were unable to make or receive payments, or in some cases even access their own money, at a time when the fragility of business interactions was peaking due to Covid-19.

The risks of operating without a payment backup

The Wirecard case highlights the risks to merchants of relying on a single bank for their payments processes. Having a backup is not a new concept as most retail companies have experienced acquirer outages in the past, but the incident exposed the lack of alternative payment options that many businesses, including UK fintechs and consumers, have access to in their existing payments set-up.

This situation is exacerbated when combined with the current economic uncertainty, unsteady revenue forecasts and the dwindling use of cash. In our emerging cashless society, the constant ability to process payments is crucial for merchants of all sizes, from market stalls, to mobile businesses like builders and painters, to independent shops, and of course, for high street chains.

The value of multi-acquiring

Until recent times, smaller merchants simply could not afford the resource needed to manage a variety of contracts, banks, and markets, as well as the complex and time-consuming nature of the technology behind this function. Unless you were Amazon, you

weren't going to multi-acquire. But this is no longer the case. It is now accessible and affordable for businesses of all sizes to connect to an ecosystem of different banks, giving them the ability to move between different payment options seamlessly.

With the technical complexities removed, having access to more than one bank – known as having multiple failovers or multi-acquiring – should become standard practice. If (or when) a business needs to offer alternative payment methods to customers, the necessary response procedure can be automated to support their entire payments ecosystem, without any heavy lifting on the business's part.

Getting ahead of future regulatory changes

Having a failover also brings stability from a regulatory perspective. Disruptive events such as the Wirecard outage inevitably mean that regulators look more closely at how current standards have contributed to such a damaging environment, and what they can do to prevent it from happening again. At the time of writing this post, the financial sector awaits the next wave of investigations into German financial regulator BaFin, and there is a keen interest in what this will mean for the future of our industry. A further, separate investigation into Germany's supervision of Wirecard by the European Securities and Markets Authority could also help to fast-track necessary changes in the sector.

However the chips fall during these investigations, it's incredibly likely that we will see stricter regulation around the requirement to have a failover or backup come into play in the near future. Those who put these processes in place now will set their businesses in good stead as the economy starts to revive in a post-pandemic world. Having multiple backups ensures that businesses can always take payments and certainty, of any kind, is worth its weight in gold right now.




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A portrait of Jan Bellens, a middle-aged man with short brown hair and blue eyes, smiling. He is wearing a dark suit, a white shirt, and a blue patterned tie. The background is a blurred, warm-toned interior.

Jan Bellens,
EY Global Banking & Capital Markets
Sector Leader

FIVE THINGS WE LEARNED FROM BANKS' FIRST HALF RESULTS

It goes without saying that 2020 has been a challenging year for banks. Based on detailed financial metrics* that EY tracks for the consumer, corporate & commercial and investment banking divisions of some of the world's largest banks, here are five learnings from the first half yearly results:

Provisions hit profitability for lending businesses

The size of provisions in the second quarter of 2020 grabbed the headlines. [The largest 20 European banks set aside \\$28b for bad debts, while the largest eight US banks set aside more than \\$40b.](#)

On a bank by banks basis, provisions varied widely, according to the sectoral and geographic composition of loan books, as well as their own economic forecasts, but across the board, they had a significant impact on what were formerly the engines of profitability for large banks.

Median return on equity (ROE) for the largest consumer banking businesses was down more than seven percentage points from the first half of 2019, at 7.8% – a big hit for a segment that has consistently delivered double digit returns in recent years. Overall, consumer loan growth was flat across the first half, while credit card spending has declined markedly in recent months. For corporate, commercial and SME divisions, which have delivered solid returns over 10% in recent times, median ROE for the first half was dragged into negative territory (-1.4%).

The largest banks remain well-positioned to absorb asset quality challenges. Nevertheless, the extent of eventual losses remains unclear, especially where governments have (partially) underwritten emergency lending. All eyes will be on second half 2020 results to see how things evolve.

Universal banks benefited from an investment banking bounce

Investment banking results benefited from a spike in trading revenues. European investment banking divisions were even able to break the double-digit ROE barrier for the first time since 2010, with median ROE hitting 10% – though they still lag their US counterparts.

Sales and trading revenues at the largest investment banks grew by more than a

third due to higher volatility and increased client activity. Fixed Income, Currencies and Commodities (FICC) was the star, posting the highest first half revenues since 2011. There were also strong increases in underwriting as cash-poor firms sought additional financing – although market uncertainty drove a decline in advisory revenues.

Despite the positive first half, management at many investment banks acknowledged it is unlikely to be sustainable and client activity may dissipate.

Being a challenger can be challenging

The Ant Financial IPO shows how successful some new financial players can be, but the wider challenger sector globally has had mixed fortunes. In Europe particularly, some challengers have been hit by a combination of a 'flight to safety', a decline in funding for FinTechs, and low (or negative) profitability, often due to low lending volumes. On the other side of the Atlantic, some challengers have successfully grown their customers base thanks to their digital first / no contact offerings.

A new Prudential Regulatory Authority consultation on the UK Challenger sector observes that many 'new banks have underestimated the development required to become a successful and established bank.'

Certainly, the European experience raises a question for challengers – is it enough to offer better, more digital experiences to a small customer base, or do you need to fundamentally rethink products and services to achieve sustained success? The current crisis has also put the spotlight back on balance sheet strength as a key enabler to banks' resilience. Some challengers are now looking to lending pacts to put their balance sheets to work.

Costs have been saved – but there's more to do

One-off costs during COVID crisis saw investment bank staff costs increase 10.4%, but the numbers were better for lending businesses. For example, consumer banking business' costs declined reflecting reduced headcount and lower marketing and advertising spend.

Some of these savings may only be temporary, but with revenue growth

challenges likely to impact banks' profitability over the near-term, cost remains the main lever to manage profitability. The last six months have highlighted the need for agility in bank operations and focused attention on structural cost reduction, including investment in technology to support efficiency, property optimization (including branch networks following changed customer behavior), and reduced travel budgets.

It's time to gear up for transformation

At the start of the pandemic it seemed possible banks would pause their transformation programs. The message from the second quarter is that transformation is firmly back at the top of the agenda. The pandemic has demonstrated the need to invest in technology and embed agility and scalability in business models. Particular attention is now being focused on some of the most paper-intensive parts of banks, with high degrees of manual intervention – such as trade finance. Key to success will be prioritizing areas of focus and taking a modular approach to transformation.

Reduced investor pressure (many banks have been discouraged from paying dividends) has created a window of opportunity for banks to accelerate transformation and come out of the crisis stronger than ever.

The views reflected in this article are my own and do not necessarily reflect the views of the global EY organization or its member firms.

EY maintains proprietary benchmarks that assess global banks' performance at group, regional, and business division level (including consumer, commercial and SME, investment banking businesses). With over 70K data points, these assets inform EY's unique perspectives on the sector and help us bring strong benchmarking capability to our clients. These benchmarks have now been expanded to include some challenger banks.





HOW TO ENSURE THAT AI SYSTEMS ARE FAIR, INCLUSIVE AND ACCESSIBLE

We're undergoing a significant shift towards an algorithmic economy, where an increasing number of outcomes in our personal lives are dependent on an algorithm.

Yet, as AI is applied in far more diverse ways than ever before, it's become clear that in many cases the technology develops characteristics that are unfair, leading to biases in decision-making when presented with a group of data. The news of the UK exams algorithm is the most recent example in 2020, yet similar discrimination is happening everyday through automatically declined CVs, rejected loans, or inflated insurance prices.

To make sure that AI systems provide everyone with equal opportunity and accessibility, this bias needs to be minimised, if not entirely eradicated. But, solving this problem is no easy feat. To avoid these cases of bias in the future, we need to develop a definition of fairness that can both measure the fairness of existing systems, as well as mitigate a system's bias going forward.

What causes this bias to creep into AI?

Machine learning relies on patterns that are typically found in historical data, and

this can cause issues when these patterns are based on pre-existing bias within these groups of data.

For example, a machine learning model can incorporate biases found in data during training, leading to all following outcomes that the model produces being based on distorted reasoning. If a machine is taught to develop outcomes unfairly, it will apply this learning to every relevant problem it faces.

But in other cases, the data may not be biased, but rather lacking in representation from a minority group. If a machine learning model is basing its learning on data that doesn't accurately represent reality, then it will inevitably produce biased results. This was the case for the discontinued Amazon recruitment engine, where due to the disproportionate number of men working in the industry, the algorithm reportedly downgraded graduates of two all-women's colleges and resumes that included the word "women's", such as "women's chess club captain".

How does this bias have real-world impact?

Just as any type of bias, biases in machine learning and AI can have incredibly harmful

real-world impacts. Most machine learning is employed to reach faster, and importantly more accurate, data-based outcomes, and these outcomes in turn can inform decision making in vital industries.

For instance, digital identity verification technologies are having to overcome the challenges of bias in facial recognition software. This has arisen due to the fact that many solutions have been trained on disproportionately caucasian data sets. Without efforts on behalf of the provider to remove this bias, services that use identity verification – from financial services to healthcare providers – might adversely impact certain users. For instance, the solution might deny a legitimate attempt from a user to verify themselves, or the software might have a higher false acceptance rate and leave businesses and individuals more susceptible to fraud. As many of the industries using these systems are essential, it's vital that we remove this bias to ensure that their services are equally secure and accessible for everyone.

To remove this bias, however, we need to give the software a clear definition of 'fair', but the question arises as to how a machine without any concept of morality can be taught this.

Mohan Mahadevan,
VP of Research at Onfido

Mohan Mahadevan is VP of Research at Onfido. Mohan was the former Head of Computer Vision and Machine Learning for Robotics at Amazon and previously also led research efforts at KLA-Tencor. He is an expert in computer vision, machine learning, AI, data and model interpretability. Mohan has over 15 patents in areas spanning optical architectures, algorithms, system design, automation, robotics and packaging technologies. At Onfido, he leads a team of specialist machine learning scientists and engineers, based out of London.



Defining 'fair'

AI and machine learning systems run on quantified data, meaning that if we want them to act fairly, we need to mathematically define what this means.

In data scenarios that deal with grouped data, we need to teach the model group fairness. This involves defining equality with respect to a vast array of data, ensuring that equal opportunity in a wider demographic is promoted, whilst the rate of false rejection is equalised and defined as the percentage of rejected legitimate applicants.

If we look at demographic parity with reference to a job application, the likelihood of any legitimate candidate in a group of interest in getting the job should be equal, no matter what demographic they come from. In this instance, we can teach systems to look at data in a more inquisitive way, measuring the expected differences between different groups and outputting the same probability for both.

However, the downside of promoting this type of fairness is that it can lead to inaccuracy in data classification. To tackle this, parameters need to be introduced that handle the trade-off between accuracy and fairness to reach the least compromised

outcome. There is also the option of processing the data at different stages, for example decorrelating the features and the sensitive information before training, to minimise any bias introduced.

Training 'fair'

To go down this route of decorrelating sensitive information from the data, it's possible to use an encoder-decoder architecture that projects the original data to a learned fair space. This space could remove the sensitive information, whilst maintaining the relevant information to maintain accuracy in classification.

Another possible route is to use an adversarial network, which involves having two competing networks, one that aims to classify data well, and another which predicts variables produced by sensitive data. This can give representations that achieve fairness, moving the data away from a clustered model and towards a more indistinguishable and balanced model.

Another approach is to use a Sandbox to train the algorithm on new data sets. For example, we took part in the Information Commissioner's Office (ICO) Privacy Sandbox to systematically measure and

mitigate algorithmic bias in our artificial intelligence technology, with a particular focus on racial and other data related bias effects in our biometric facial recognition technology. The team re-architected the algorithm from scratch and used new ways to sample data to train the model, focusing on sampling our training dataset in a way that is balanced across demographics to reduce differences in performance. As a result, consistency of False Acceptance Rates across all ethnicities significantly improved: it represented a 10x improvement from the previous algorithm version, and a 60x false acceptance improvement for users in the "Africa" category.

Mitigating bias is essential to machine learning

There's no question that machine learning is becoming more and more involved in our everyday lives, but to make it function successfully on a wider scale, it is essential that the results it produces are fair and unbiased. Whether at the data, training, or retraining stages, this bias must be removed in order to provide all demographics with equal opportunity and accessibility.



Roy Shilo,
Head of commercial finance, Bank Leumi UK

HOW TECH IS WEATHERING THE COVID-19 STORM

The COVID-19 pandemic has caused widespread disruption to both economies and supply chains, resulting in businesses across the spectrum being forced to question their survival. No industry has been exempt, yet the technology sector is on track to emerge from the crisis in good health. Roy Shilo, Head of Commercial Finance at Leumi UK, explains.

From maintaining important relationships to ensuring the operational continuity of businesses around the globe, technology has enabled society to function even during the darkest hours of the Coronavirus pandemic. Our reliance on tech has undeniably deepened, and in turn, the sector has had to adapt faster than any other – allowing it to flourish amidst economic and societal turmoil.

Certainly, seeing people and businesses through months of uncertainty and accommodating the needs of an increasingly tech-reliant society has meant an abundance of opportunities for tech investors and entrepreneurs. This trend is likely to continue as the events of the past six months will lead to a long-term shift in the role technology plays in our lives moving forward.

The pre-pandemic industry

The COVID-19 pandemic capped a sustained period of growth among tech businesses – which previously saw global investment funding in the sector sitting at around half a trillion dollars. It seemed no cost was too high, with investors willing to break the bank in order to back the next big development. Yet despite investment coming to a temporary standstill, equity markets have quickly emerged as resilient and valuations of smaller technology companies have started to rise alongside an increasing demand for services that will help people adapt to the current climate.

Of course, names such as Facebook, Apple, Amazon, Netflix, Google and Microsoft (FAANGM) are largely to thank for the exceptional rebound stock markets saw at the

end of April following several weeks of extreme turmoil. This is unsurprising given their prominence in the recovery from the global economic crisis (GEC) and the fact that these companies now occupy more than a 25% share of the total [S&P 500](#). It is worth noting that this monopolisation of the sector could soon come to an end as tech giants Facebook, Amazon, Apple and Google face a series of enquiries into their business practices and the power they hold in the market. The effect this could have remains to be seen, but is certainly one to watch out for as the sector continues to strengthen.

Paving the way

While it is impossible to predict the way the world will look once we finally emerge from the Coronavirus pandemic, one thing is certain: businesses will continue to rely on technology as society repairs itself, with governments remaining mindful that this may not be a one-off occurrence. Indeed, as Yifat Oron, CEO of LeumiTech, notes, by nature, the tech sector is future-focused, and with a future looking very different to anything we may have prior imagined, the technology of tomorrow must continue to adapt at a rapid pace.

Unsurprisingly, certain sectors have seen more growth than others over recent months. Health, biotech, edtech, digitalisation, collaboration tools and cyber have been developing at lightning speed, facilitating remote working while at the same time ensuring people have access to necessary goods and services – such as medicine and education – and are able to maintain their social lives through applications such as Zoom.

Businesses have been forced to adapt to countless changes since the start of the pandemic, with online marketing efforts filling the void left by cancelled events and conferences. Central to such strategy has been upgrading websites to boost businesses' online presence, which has seen digital agencies rethink their strategies and product offering in

order to keep pace with the growing demands of clients. In turn, the value of digital marketing providers such as Wix has continued to soar.

Failing to keep pace

Despite the positive news for tech, some sectors have inevitably faced difficulties during the pandemic, and tech start-ups globally have been forced to lay off more than 69,000 employees. Unsurprisingly, given the firm restrictions imposed on movement at both national and international levels, areas such as transportation, finance, travel and retail have been among the hardest hit.

Notably, Uber has announced almost 7,000 job cuts and the closure of 45 offices worldwide. Meanwhile, as the travel industry continues to founder, Airbnb has resorted to cutting around 1,900 jobs, while TripAdvisor reduced staff by 900 employees – amounting to a quarter of their total workforce. While it's likely that these sectors will bounce back quickly once the virus is contained and international travel restrictions are lifted, it is important to note that new technology will play a crucial role in keeping these industries afloat between now and then.

The COVID-19 pandemic will inevitably paralyse economies for longer than initially anticipated, and moving forward, the role of technology will continue to present new opportunities for investors. As such, long-term investment in innovation will become central to the recovery of the global economy, signalling a positive future for much of the industry.

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Jeni Bloomfield.
Research Analyst at RBR

GOING CARDLESS

Cardless withdrawals at the ATM improve the customer experience

Contactless is a byword for convenience, with tap-and-go payments becoming a mainstay of low-value retail payments. Yet contactless technology is not confined to point-of-sale terminals. Recent years have seen increasing interest in the use of contactless technology at ATMs, allowing certain transactions to be made without inserting a payment card. At some ATMs, not even a card is needed, relying instead on a mobile phone.

ATMs offering these cardless transactions, particularly cardless withdrawals, have become increasingly common in a number of markets worldwide. According to a new report by strategic research and consulting firm RBR, Global ATM Market and Forecasts to 2025, the number of ATMs able to offer cardless withdrawals rose by 26% in 2019, while overall ATM numbers fell.

Convenience drives the increase in ATMs offering cardless transactions

In the USA the number of ATMs offering cardless withdrawals more than tripled in 2019. This drive for cardless withdrawals was largely targeted at mobile phone owners as mobile payments have gained in popularity. Some ATM deployers also found cardless technology to be a secure alternative to the costly migration to EMV compliance, with the bonus of being convenient for customers.

Convenience and security stood behind the increase in ATMs offering cardless withdrawals worldwide. Apart from the USA,

particularly strong growth in the numbers of ATMs offering cardless withdrawals was witnessed in Russia and several Asia-Pacific markets. Cardless withdrawals improve ATM security in some markets by eliminating the risk of card skimming. Additionally, the service can remove the need to carry a payment card, and reduces the time spent at an ATM, improving customer experience.

Withdrawals are not the only cardless transaction that can be made at the ATM. Bill payments, transfers and cash deposits are examples of others, although withdrawals remain by far the more common cardless service.

Cardless technology makes headway in new markets

There are various ways in which a customer can make a cardless transaction. Some ATMs are equipped with NFC and QR code readers. Others require the customer to scan an on-screen QR code with their mobile phones or allow withdrawals via a one-time PIN, whilst some make use of biometric identification.

2019 heralded a landmark year for cardless technology at ATMs as several markets adopted NFC or QR code readers for the first time. In Canada, two major banks began a rollout of ATMs equipped with NFC readers, though cardless transactions are not yet offered there. Meanwhile in China, ATMs equipped with QR code readers were introduced for the first time by ICBC. Other deployers in China typically provide cardless withdrawals at ATMs by displaying an on-screen QR code which customers then scan.

NFC readers are already available at around half of Spanish ATMs, while QR

code readers are provided by 29% of the country's ATMs. Yet here too, 2019 marked a milestone; in February, CaixaBank began a biometric ATM pilot, becoming the world's first bank to offer cash withdrawals via facial recognition. By October 2019 the bank reported that 80% of customers who were offered facial recognition as an alternative to entering a PIN chose to use it.

COVID-19 spurs innovation at the ATM

Interest in cardless technology at ATMs has continued to grow in 2020, stimulated by concerns about the transmission of coronavirus. In Spain, CaixaBank's rollout of biometric ATMs has gained heightened relevance and elsewhere ATM operators have been investigating ways to deliver vital services whilst mitigating the risk of transmission. In India, AGS Transact, which manages around 72,000 ATMs on behalf of banks, has recently developed and tested a 'touchless' ATM solution. This uses on-screen QR codes to allow the customer to withdraw cash without even touching the machine's screen or keypad.

In the long term, the number of ATMs that offer cardless transactions is likely to increase as ATM deployers seek to improve customer experience at the ATM. The rollout of ATMs equipped with NFC readers in Canada points to interest in contactless technology at ATMs even in a market not yet offering cardless transactions. While some markets offer little room for expansion, such as Turkey where cardless withdrawals are almost ubiquitous, others provide ample opportunity for deployers to invest in cardless solutions.

Authorized fraud is arguably the more pervasive and persistent financial crime challenge facing global businesses.

Did you know...

- In a recent survey, the Association for Financial Professionals found that for **six in 10** of all frauds investigated, BEC was the most common type of fraud members experienced.
- In the UK, authorized frauds against non-personal customers totaled **£138 million** with CEO fraud being **£16 million** – and these numbers are probably under reported*.
- The FBI estimates worldwide losses due to BEC at more than **\$26 billion USD** over the past three years

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*Source:

<https://www.trendmicro.com/vinfo/us/security/news/cyber-attacks/unusual-ceo-fraud-via-deepfake-audio-steals-us-243-000-from-u-k-company>

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