


Financial IT

Innovations in FinTech



Andrey Yashunsky,
Arnon Shibolet,
Co-CEOs of Prytek

BUILDING ECOSYSTEMS, ADDING VALUE

**THE HIGH RISK
AND HIGH COST
OF CORRESPONDENT
BANK DE-RISKING**

Mitch Trehan,
UK Head of Compliance & MLRO,
Banking Circle

**HOW AI
IS DRIVING THE FIGHT
AGAINST MONEY
LAUNDERING**

Jason Vinson,
Senior Product Management
Director, X-Sight | NICE Actimize

**ISLAMIC BANKING
TAKING OFF**

Hany Ramadan,
Director – Products,
ITS Group

Unique Investment Asset Class

We build service businesses and combine them with technology we build and source, in order to provide our clients with smart and innovative solutions and to increase profit margins. The Prytek Group is divided into a Corporate Arm – which comprises of controlled companies and an Investment Arm – in which we hold minority stakes in 25 technology companies, that acts as the Corporate VC arm of the Group.

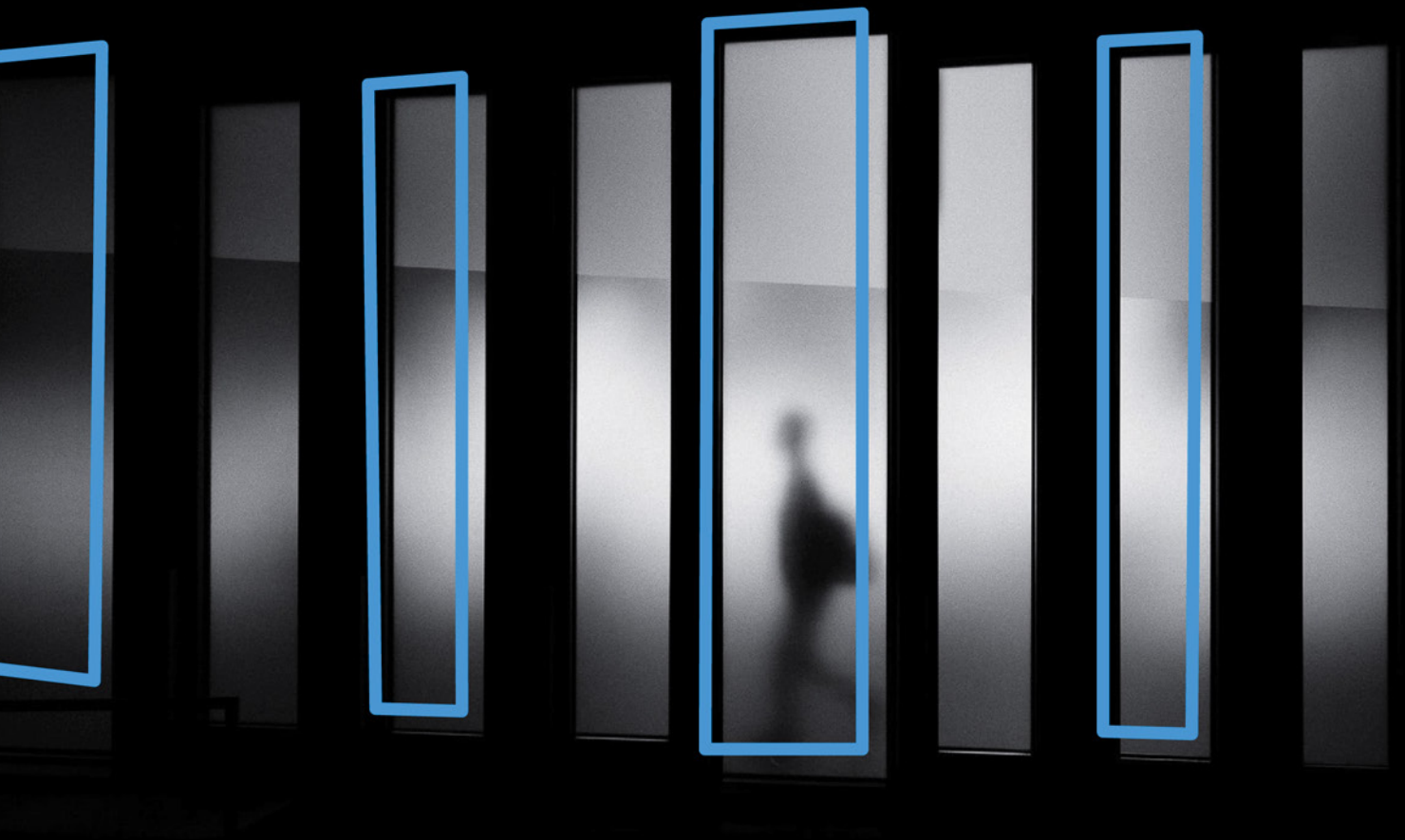
The goal of the Corporate Arm is to generate long term value, and stable cash flow with a long-term investment horizon, while the Investment Arm is to develop products for the Corporate Arm and generate equity value growth by increasing the start-ups' valuations. Prytek seeks to drive meaningful impact in each sector it operates by building value chains within the Group, where each company adds a new entrepreneur and complementary solution into the ecosystem. Prytek focuses on several industry sectors including Financial Services, Cyber & Tech Education and Human Resources.

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TOWARDS THE SUNNY UPLANDS



Andrew Hutchings,
Editor-In-Chief, Financial IT

As is usual for a year-end edition of *Financial IT*, many of our contributors discuss what is likely to happen in the coming year or so, taking a positive view.

One contributor, for instance, argues that businesses and financial institutions are on their way towards “hyper-automation”. This is a destination that is difficult to define exactly.

Nevertheless, some of the statistics from the recent past show what the journey is likely to be like. According to a report from consultant McKinsey that is cited by the contributor, the average business in Europe, the Middle East and Africa (EMEA) underwent seven years’ worth of digital transformation in calendar 2020. That year alone saw a 19% rise in eCommerce. The number of contactless MasterCard payments increased by 40%. One survey found that 95% of the financial services workers interviewed had worked from home at some stage since the beginning of the Covid-19 pandemic.

The excitement is not confined to big consultancies and large, well established businesses. Another contributor to this edition of *Financial IT* points out that, among small “Covidpreneurs”, an Application Marketplace is emerging. This means that business functions which would previously have been handled by in-person interactions, or on personal computers, are now taking place through apps on the mobile devices of the business owners.

Technology has further empowered consumers and will continue to do so. One survey found that over 40% of US home buyers in 2020 completed their entire home loan application online. Meanwhile, online retailers are no longer constrained by what merchandise they have in stock. If a customer orders something that is not in stock, the retailer can purchase that item from another supplier, add a small mark-up, and make delivery. The metaphorical aisles of the supermarket have become endless.

As ever, most operational problems which face financial institutions are seen as opportunities for solutions. We live in a world where there are simply not enough cyber-security professionals to meet the needs of financial (and non-financial) companies. One of our contributors is looking to create a series of eco-systems – spanning technology, education/training and human resources (HR) – that will address the issue over the coming years.

Don't forget the financial markets...

All of this optimism is at odds with the air of caution which has pervaded the Editor-in-Chief's and Publisher's letters in recent editions of *Financial IT*.

In September, for instance, I commented on three major sources of risk. One could be described as “stagflation”. At a time that supply constraints have caused sharp rises in the prices of a number of goods and services, there have been signs that economic activity is slowing down – both in the United States and globally.

Meanwhile, the geopolitical situation has deteriorated. Right now, a good example is the (apparently) very frank discussions between US President Joe Biden and Russian President

FINANCIAL SERVICES AND TECHNOLOGY COMPANIES CAN LOOK FORWARD TO A BRIGHT FUTURE. THEY NEED TO GET THROUGH 2022 FIRST.

Vladimir Putin over the security and future of Ukraine. In September, the mainstream media was focused on the Aukus alliance between Australia, the UK and the United States in response to Chinese expansionism.

The third major issue is financial repression. Through quantitative easing (QE), the Federal Reserve – and other central banks – are creating money in order to buy bonds. Although much of the new money created is tied up in commercial banks' claims on the central banks, it raises the likelihood of serious inflation in the medium term. In addition, QE forces bond prices up and bond yields down. Financial institutions which are required to hold large quantities of bonds – such as banks, pension plans and insurance companies – are forced to invest in assets that are providing negative real (i.e. after inflation) yields.

Our publisher Chris Principe discussed the implications of what he calls “Bubblenomics”. Some hard numbers confirm that the bubble in financial asset prices is, indeed, of epic proportions. Currently, stocks in the NASDAQ composite are trading at nearly 5.7 times sales. By way of contrast, the corresponding figure was just over 1.0 times in early 2009 – in the wake of the Global Financial Crisis. In the last 20 years, the previous peak in the price-to-sales ratio was just under 5.0 times in late 2005.

2022: a challenging year for many

Bubbles can deflate slowly. More commonly, though, they burst. It is virtually impossible to envisage that the world will get through 2022 without a brutal sell-off of stocks in major markets and an increase in volatility. Depending on the policy responses of central banks and governments, there may well be a major crisis in bond and currency markets as well.

This will be traumatic for many financial institutions and, indeed, companies that are operating in the real economy, too. It may complicate efforts by technology companies to raise funds that they need.

However, a financial crisis will likely accelerate the speed of change – as surviving institutions seek ways to improve their customers experiences', to meet regulators' requirements and to operate more efficiently.

In the darkest days of the coming year, it will be important to remember that the sunny uplands – where collaboration at the intersection of financial services and technology produces good outcomes – are not far away.

We wish all subscribers, advertisers and contributors the best for the festive season.

*Andrew Hutchings,
Editor-in-Chief, Financial IT*

Financial IT

Innovations in FinTech

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BUILDING ECOSYSTEMS, ADDING VALUE

Interview with Andrey Yashunsky, and Arnon Shibolet, Co-CEOs of Prytek

Financial IT: How would you describe Prytek in a few sentences?

Andrey Yashunsky: Founded in 2017, Prytek is already a substantial provider of Business Operations Services and a technology investor. As of the end of November 2021, we have invested over \$375 million in companies and technologies globally. We have over 250 clients and operate from eight locations around the world. Since late 2019, our business has trebled by many metrics. In terms of our clients, we are focusing on financial services/ FinTech, cyber & technology education, and Human Resources (HR).

Financial IT: Great. So, what are the problems of clients to which you provide solutions?

Andrey Yashunsky: One certainty about business in general and financial services in particular is that demands of regulators are increasing. Compliance matters more than ever before. Cyber-security matters more than ever before. These are aspects which businesses must get right. Being able to satisfy regulators – and offer smart innovative solutions – is a source of competitive advantage.

For our clients, though, the handling of compliance or the management of cyber-security are not core activities. Our clients' intellectual property (IP), or unique selling proposition (USP) always resides in some other activity. It is much more efficient for our clients to outsource these issues and to obtain the solutions from a company that clearly has an advantage in these areas.

That's where we help. Our core business – Business Operating Platform as a Service (BOPaaS) – revolves around providing those solutions.

Financial IT: What makes you different from other suppliers of outsourced solutions?

Arnon Shibolet: There are several aspects that I would highlight.

Firstly, we provide the solutions from within our own organisation – which means with our own people and our own technology. Finding the technology is the role of our Corporate Venture Capital arm. We have conducted a transaction (usually an investment or acquisition of some kind) about once per two weeks on average since we were established. We have successfully executed literally hundreds of deals and have access to a very large number of cutting-edge technologies.

Second, we emphasise length and depth in our relationships. When we deal with Bank X or Company Y, we want to provide them with infrastructure for 10 or 20 years. We are not in the business of providing short-term solutions for one-off problems. When we buy a technology company, we usually retain that company's leadership: we bind them to us by issuing them with shares in Prytek in return for shares in their own business.

Because of the diversity of the businesses that we have acquired, we can offer a very wide range of solutions. In the financial services industry, for instance, we offer outsourced Business Operations services, technology solutions and consulting through our Delta Capital business.

Financial IT: Where does education fit into all this?

Andrey Yashunsky: Quantifying the demand and supply of cyber-security services, in the United States and globally, is difficult. However, the

one certainty is that there are not yet enough properly trained cyber-security professionals to meet the needs of the coming five-to-ten years. The market estimates the demand to be of about 3.5 million jobs that cannot be filled.

This is a big issue for our BOPaaS activities, because many of our clients look to us for solutions to their cyber-security training problems. Our ThriveDX business offers companies – and through universities – training across several key areas. Those areas include cyber-security, of course, as well as other relevant digital skills.

Financial IT: What about Human Resources (HR)?

Arnon Shibolet: As discussed, the concept of BOPaaS involves our provision of essential infrastructure – over the (very) long-term to our clients. That means that it is not enough for us to educate key people: we need to be sure that they are managed, promoted and incentivized properly.

That is the *raison d'être* of Hirewell, Prytek's US-based talent acquisition solutions firm. Whether our clients are involved with finance/ accounting, real estate, sales, digital marketing or technology, we can help them. That is true whether our clients want temporary/ interim staff or permanent and (very) senior people.

Hirewell's competitive edge comes from the acquisition and use of information. It uses artificial intelligence (AI) to read literally thousands of curricula vitae (CVs) and LinkedIn profiles (along with other sources) and to extract key insights – all without human intervention.

This means that, if a client comes to us with specific HR needs, we can quickly

Andrey Yashunsky,
Arnon Shibolet,
Co-CEOs,
Prytek



identify who in the world are the best candidates to interview.

Once the candidates are placed, we maintain contact and closely follow them (and/or help them) in their development.

The relationship with each candidate grows over the long-term because of the two-way flow of information and insights between us and them.

If they need further training, say, or additional assistants, we are in an ideal position to help.

Conversely, they are well positioned to give us information about the organisation that they are working for and conditions in the industry in question.

We offer Hirewell's technology to other recruiting and HR management companies. However, we retain ownership of the information about the candidates.

Financial IT: Tell us about Prytek's structure and funding.

Andrey Yashunsky: We describe Prytek as a "Corporate Investment Group". Specifically, that means that we are currently a private, unlisted corporation. Our shareholders are family offices and other institutional investors who have faith in our vision and the patience to support our long-term development.

As mentioned, some of our acquisitions – and the retention of key staff – are undertaken with stock. It is vitally important to us that the people who join us share our vision and commitment to long-term growth.

In relation to our funding, I would highlight two developments.

One of these developments took place at the end of November 2021. We secured commitment for investment of \$107m from affiliates of investment group Davidson Kempner Capital Management. This money will support our continued growth. A representative of Davidson Kempner will join our Board of Directors and Investment Committee.

The second development, which is likely to happen at some point in 2022, is that we will undertake an Initial Public Offering (IPO) on a major stock exchange. That will achieve several things: There will be greater transparency and liquidity for the investors who have supported us since Prytek was established in 2017. It will be possible for retail investors to participate in the new ventures with which we are involved.

Financial IT: Does that mean that you will be providing retail investors with access to private technology deals?

Arnon Shibolet: Strictly speaking, that is true. However, it is more useful to explain what we do (and to answer the previous question) by clarifying what Prytek is not.

Since we are a corporation, our business model differs from that of a typical VC or PE fund in several important ways. A fund must bear in mind the short-to-medium term internal rate of return (IRR) requirements of its (almost invariably institutional) investors.

If, for instance, a VC fund needs to sell an investment in order to hit a particular IRR target, then it will do so. We are not under that kind of pressure. We only rarely make sales, and then only of very minor and non-strategic assets. When we make an investment, we plan to literally continue owning that operation forever.

Further, a VC fund usually tends to focus on (near-) start-up acquisitions. Our businesses do indeed include start-ups. However, they also include substantial operations which are generating sales and earnings. Put another way, we have the advantage of being able to build and scale up businesses with a very long-term horizon and we have a much more diversified portfolio.

Financial IT: Does that mean that we should think of Prytek as a technology-focused conglomerate?

Arnon Shibolet: That is not correct, either.

A successful conglomerate is usually a holding company that invests in an array of underlying businesses. Sometimes the shareholders in the conglomerate benefit because an investment is made at an opportune time (for instance, in the middle of a bear market or a market correction). Sometimes the shareholders benefit because of changes (such as new management or a rationalisation) that are imposed on the subsidiary company. Sometimes shareholders benefit because of positive trends (e.g. strong and profitable growth) in one or more subsidiaries.

For a conglomerate, the norm is for each of the various subsidiaries to operate independently of each other. This is also true of a lot of VC and private equity (PE) funds, incidentally.

We are radically different in that we buy and operate technology-related businesses which will contribute to the development of

a flourishing ecosystem over the long-term. Each of the businesses that we acquire benefits from being a part of Prytek and adds a component to the ecosystem.

That means that the value of the whole is greater than the sum of the parts. That applies to Prytek itself. It also applies to our various businesses in the different areas in which they operate.

In a nutshell, then, our vision is to build ecosystems and, in doing so, to unleash the value that is created by having several companies working in collaboration toward one goal.

Financial IT: If that is your vision, what is the "X Factor" which will enable you to realise that vision, both following the forthcoming IPO and through the medium-to-long term?

Andrey Yashunsky: The "X Factor" derives in part from the originality of the vision. As mentioned, we see the companies that we acquire not as investments in their own right, but as elements of vibrant and growing ecosystems. The ecosystems are always evolving, thanks in part to cross-selling of services and thanks in part to the intelligence that we are receiving through our network.

We do not know of other organisations that have a similar strategy to Prytek's.

That may be because the vision is very ambitious. The vision is of a large swathe of finance and technology being an ecosystem – and of Prytek being a preeminent force within that ecosystem.

The lack of similar companies may also be because the vision is difficult to execute successfully. Obviously, to realise the vision, we have to identify large numbers of potential acquisitions and then to carry out the right deals in the right way and at the right price.

Finally, we have in place relationships with investors who provide the funding that enable us to thrive and to grow. Access to funding will be improved even further in the near future through the IPO.

Financial IT: Thank you both very much.

Prytek combines top-tier managed services companies and leading proprietary technology under one roof via a decentralized organizational structure.

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Stephen Lemon,
VP, Partners & Enterprise,
Currencycloud

Fintech start-ups are full of aspirations to strike it big and transform their categories. Putting these dreams into practice, however, can be a shock. Whether they are an Insurtech, an embedded banking service or a Neobank, many fall at an early hurdle when they have to start putting together the compliance frameworks and capital needed to operate. It doesn't have to be like this, however. Rather than starting from scratch, Fintechs can take advantage of existing expertise and operational nous through partnerships.

Businesses can get to market quickly by accessing an existing ecosystem of pre-integrated partners and using their services through third-party platforms such as our own. Through this they can achieve what they want in weeks rather than months or years. This also means that initial build costs are much more cost-effective and are typically a fraction of what it would be to start from scratch by themselves.

All scaling businesses have one principal thing in common in the digital age: they need to evolve quickly in line with their customers' rapidly changing needs. It can therefore be beneficial for Fintechs to use the services of an established provider that

HOW PARTNERSHIPS CAN POWER SCALING FINTECHS

understands what they need at every part of their growth story. An effective partnered solution does not only consider where a scaling Fintech is at now, but also where it is going to be in the future. Today a Fintech might not need to do much more than store money for its customers, but in the not-too-distant future it might want to offer them named accounts.

For start-ups starting out it's a marathon, not a sprint

The genesis of most Fintechs is seeing an existing problem in financial services and setting out to fix it. It's the typical origin story of many Fintechs out there: they saw an everyday challenge faced by the customer and offered them something more suited to their needs than incumbent brands. Classic examples include punitive fees when sending money to family in other countries, or the costly ATM charges when on holiday. However, the road to success – or failure – is often a lot more complicated.

Starting out, a Fintech might boil their revolutionary idea down to an MVP (Minimum Viable Product – or Minimum Viable PowerPoint in some instances...) and go off to raise the seed money to fund it. The problem is that at this point, most Fintechs will stall or end up in a holding pattern. To get past this obstacle, they need to find a bank and some form of compliance solution that will allow them to offer their services.

This means they need experienced people, clear policies, and processes in place. If this is not in place, they can find that things suddenly grind to a halt. Months, even years, can go by spending a lot of money before they've even launched their first product, won one customer, or invested in a marketing campaign. The very essence of being a Fintech: moving fast, being agile, and spending little, can feel frustratingly out of reach.

Picking partners

For Fintechs relying on their own expertise across all aspects of building a financial product, service or solution, the task can look insurmountable. However, the truth is that they don't have to go it alone – there are a whole host of companies out there who they can partner with to overcome these stumbling blocks.

However, not all providers are the same. Fintechs must perform some due diligence

to ensure that they are not just smoke and mirrors., Furthermore, they also want to guarantee that, even if someone can support them functionally, they are also the right cultural fit for their business.

A snapshot of the 'Complexity Tax'

Once a Fintech has selected the partners that it wants to work with, it needs to build the mechanism to piece them all together. This forms what is commonly known as the 'Complexity Tax', or the various operational layers in financial technology. Here, every partner is no doubt a subject matter expert in what they do. However, it's doubtful that they'll fully understand what other partners in the chain are doing. That means Fintechs need to quickly develop a complete picture of what all providers offer, where there's overlap, where there are gaps, and how this all comes together to enhance the Minimum Viable Product (MVP).

This is all just for the basic happy customer experience path, which comes long before most ambitious and scaling Fintechs have thought about exception handling, fault tolerance or iterations for a better user-experience. Suddenly the vendor swimlane diagram that ambitious founders were putting together looks more like a modern-day Jackson Pollock painting, and many face the temptation of doing their own thing.

There is another way much more effective way, however. In this scenario, there are partners that already understand the issues a young Fintech faces who come together to create best-in-class solutions before our intrepid founders even realise they need them.

There is an ecosystem of providers who already understand one another's' businesses – specifically the people, the products and services on offer. This allows founders to turn up to a marketplace of organisations – some already possessing pre-built, customisable integrations with one other. This means they can quickly assemble their MVPs and leverage the experience these companies have so that they don't need to reinvent the wheel every time.

This strips away the Complexity Tax, and thereby ensures that products or services are sitting on the best tech infrastructure, freeing up Fintech leaders to focus on the most strategically important aspects of their businesses.

Plug and play banking


The good news is that Fintechs don't have to make an either/or decision as to whose services to access to grow, to comply with regulations, and to stay competitive. In one integration, Fintechs can now access all these services and more, and rapidly get to market. Many can even build their own truly bespoke transactional bank without even having a banking license.

With this in mind, we have launched our own partnership ecosystem – Currencycloud Fuse. This is a partnership ecosystem through which aspirational Fintechs can scale and flex, helping them to get up and running quickly without the costly and time-consuming experience of doing it themselves. By entering our ecosystem of partners, Fintechs can run many of their processes through Currencycloud via an existing integration or a referral. Having access to these organisations puts founders in the driving seat and provides them with the freedom to make tweaks or bold leaps as they grow, and their customers' needs change.

Currencycloud Fuse is a ready-made network of best-in-breed organizations who work collaboratively, transforming the way payments and banking work. There are no hurdles to leap and importantly no endless red tape to wade through. Whichever of the established organizations a Fintech chooses to partner with, leaders can sleep soundly knowing that the relationship is backed by Currencycloud's robust regulation and compliance processes.

We have cultivated an ecosystem of leaders in their respective fields. For payments, we partner with Visa, GPS, Dwolla, Moov, Tribe, Carta Worldwide and Enfuze. For Banking, Fintechs can choose Mambu or Radius Bank. For professional services there's Accenture, ComplyAdvantage, and Elixirr. For card issuing there's Transact Payments LTD. These businesses – and their knowhow – are all part of the Currencycloud Fuse ecosystem, and we look forward to this initiative the next generation of game changing Fintech talent.



A portrait of Richard Tomusk, a man with short brown hair and blue eyes, wearing a brown herringbone blazer over a blue and white striped button-down shirt. He is standing in an office environment with a blurred background showing a hallway and a door.

Richard Tomusk,
Product Owner, API Lifecycle,
SWIFT

**UNLOCK
THE VALUE OF APIS
IN YOUR BUSINESS**

Application Programming Interfaces (APIs) are the enablers of today's digital data and transaction services. These small software interfaces are everywhere online, powering billions of transactions, from getting the weather report to booking a cab to checking a bank account. They work by exposing contracts on how other applications can communicate with them and exchange data.

In financial services, an early role for APIs was to make open banking a reality. Regulators in many jurisdictions required banks to expose APIs, so third parties could access data on behalf of data owners to deliver new services and broaden customer choice. Financial institutions quickly recognised the potential for APIs to deliver the next generation of on demand, instant financial services, by dynamically connecting applications and partners across transaction chains. Today, financial APIs are booming, especially in retail and corporate transaction services, and a new wave of industry transformation is underway.

At SWIFT, we invested early in our capability to offer connectivity and services via APIs to our community, starting with real-time tracking of SWIFT gpi payments in 2017. Since then, we have continued to expand our platform and services and collaborate with our members and third parties, resulting in more than 2 billion API calls to our services last year. For example, financial institutions can use SWIFT APIs to give their corporate customers immediate access to key information such as account balances, the status of international payments or confirmation of counterparty details.

As adoption of APIs across financial services gathers momentum, financial institutions are considering how best to use them to deliver value for customers, where to invest for return and how to integrate APIs with their existing infrastructures. But what does it take to be successful? Here are some tips and strategies that you can use within your organisation.

Know the market

With any technology change, market acceptance is critical to success. In financial services, the maturity of API adoption varies across sectors and geographies and understanding this will ensure products and solutions are correctly positioned. So for example, today an API-based payment initiation service might gain acceptance more quickly than a product targeting the securities

back office environment, simply because of the level of maturity of API use and real-time processing in those domains.

It is important to question what tangible improvement any proposed new product will bring to the user too. APIs offer unique value: on demand, granular data and the capability to customise. Will moving a service from messaging to APIs transform the user experience? If not, the investment may be better placed elsewhere.

Focus on standards

APIs are all about interoperability. Industry standard architectures (REST, aSync, gRPC, GraphQL) and data formats (JSON and XML) enable this at the technical level, but business standards and definitions are also essential. If there are differences in the way institutions describe and apply data elements (account data, for example), it will be harder and more expensive to consume services, because customisation is required for each provider. From the outset, the SWIFT community has worked to define data models for standardised APIs based on the international ISO 20022 standard, which, via our platform, provide a single channel to multiple providers.

Standardised processes and data will also provide huge efficiencies and opportunities when migrating to and scaling up an API-driven enterprise architecture, which is the future direction of travel for many financial institutions. Application functionality exposed through standardised APIs can be re-used within the organisation for solving internal challenges or for building new and innovative client offerings. This means that an organisation's API investment can reap exponential benefits.

Be open, be proactive

Unlocking the value of APIs involves a cultural change that may be counter-intuitive for many financial institutions: They must accept that they are no longer in sole control of the end-user experience, but instead provide the building blocks that others use to tailor that experience. Embracing open standards, active partnering and co-creation are the skills needed to bring the best user experience to customers in any chosen sector. This will likely include seeking out non-traditional partners.

SWIFT standardised APIs are co-created with our community and trusted third parties. Recently, we have collaborated with banks,

corporates and technology providers to develop a standardised API, supported by a community rulebook and real-time SLAs, that gives corporates visibility of their cash positions with all their banks from their own systems. We are working in the same way to co-create APIs for securities and trade finance applications.

We support community members working on their own APIs and partner with third parties outside the SWIFT community who provide API solutions that add value for our community. All SWIFT, community and trusted third-party APIs are accessible via our open, two-sided platform where participants can expose, consume, use and re-use APIs. The goal is to create new user experiences that reach and benefit as many customers as possible.

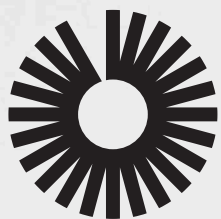
"Eat your own dog food"

Using your own APIs is as important as listening to users and partners. This will quickly show how well they work in the real world and whether the fundamental design is successful. Beyond this, it will become clear how adaptable the design is and where else it could be used both internally and externally. "Eating your own dog food" is a step on the road to defining a future API architecture for your institution.

Today's customers expect enquiries and transactions to be handled instantly, and in a way that fits their world. APIs are the route to delivering this next generation of banking services. While every institution will make the journey at its own pace, depending on markets, customers and current infrastructure, now is the time to get involved and set a clear strategy for transformation.

Looking to get started? Check out the [SWIFT developer portal](#), an open environment where users can browse, test and develop APIs safely.





**BANKING
CIRCLE**

Mitch Trehan,
UK Head of Compliance
& MLRO,
Banking Circle

**THE HIGH RISK
AND HIGH COST
OF CORRESPONDENT
BANK DE-RISKING**

Traditional banks have been protecting themselves from risk for decades. They have been withdrawing from markets and regions, as well as de-risking existing customers. However, de-risking activity has been intensified significantly in the wake of the 2008 financial crisis and the resulting shift in regulator focus. In 2012, when HSBC paid US authorities US\$1.9bn in a money laundering settlement, other correspondent banks were quick to rapidly de-risk in order to protect themselves from a similar fine.

Such drastic de-risking action has left smaller banks, FinTechs and payments businesses, as well as their customers, without correspondent banking partners or access to cross border payment solutions. This is creating fundamental threats for smaller financial institutions, whether banks or non-bank financial institutions (NBFIs), and it could have global and societal implications for generations to come.

Investigating the issues

Banking Circle recently commissioned new research into the ongoing issue of de-risking as well as how well the existing correspondent banking solution serves banks, NBFIs and their customers.

The research involved 700 Cash Managers and Corporate Treasurers of Tier 2 and 3 banks, NBFIs and FinTechs that serve businesses and individuals across Europe. The study found that Tier 2 and Tier 3 banks as well as NBFIs have faced increasing costs from their growing network of correspondent banking partners throughout the past decade.

Despite the number of correspondent banks around the world having fallen by 22% in the same period, more than three in four (77%) respondents reported having more relationships now than they did ten years ago. Perhaps this is in response to de-risking – banks and NBFIs need to spread the risk of being left without a provider, and therefore have relationships with more banks to help ensure they can continue providing the same solutions to their customers.

Most respondents feel they have too many banking relationships and 80% have seen correspondent banking costs rise in the same period. Clearly something needs to be fixed, an alternative must be found.

While most have had to take on additional banking relationships to remain competitive and keep serving diverse customer requirements, many report that they had found themselves let go by their banks – some with less than two months' notice. Much of the time, the reasons given for ending the relationship included no longer meeting eligibility criteria (61% of those who were let go by their bank). Banks and NBFIs found that having fewer relationships has led to difficulties offering international payments, and costs have risen still further.

The falling number of correspondent banks around the world has led to fewer options available to smaller banks and NBFIs, less competition in the market and nothing to challenge the rising costs of cross border payments. Many smaller banks and NBFIs have been forced to withdraw cross border payment products. As a result, businesses, individuals and even entire regions in the developing world have found themselves more financially excluded than ever.

Catalyst for de-risking

In the wake of the 2008 financial crisis, the political agenda shifted and so too did the agenda of the financial regulators. Rather than working alongside banks to combat financial crime, the regulators changed focus, beginning to see the banks as more of a target.

Banks were effectively forced to de-risk or introduce measures to protect themselves. They found it far quicker and easier to remove clients or entire sectors and regions that sat beyond their new risk appetite, than to carefully assess the risk of each account individually. This risk-evading action left smaller banks, NBFIs and FinTechs without correspondent banking partners – leading to financial exclusion for many of their customers.

Emerging markets that desperately need economic support represent higher risks and higher costs, meaning risk-averse banks have been quick to pull out of these regions. Without correspondent banking relationships in place, the financial institutions serving these regions quickly feel the impact.

Our research showed that 3 in 4 banks and NBFIs believe a lack of access to fairly

priced correspondent banking partners has been a significant factor in the loss of customers. This loss inevitably leads to remittance volumes and profits falling.

Looking to the future

A solution must be found to overcome these challenges, helping increase financial inclusion among businesses and consumers around the world. Less than half of the respondents to the Banking Circle study believe there are any good alternatives to traditional cross border payments, and 71% feel that an alternative would benefit the global economy.

The truth is, there is no 'real' alternative at all. Access to cross border payments requires a bank at the top of the chain, with direct access to clearing. There is no getting around this fact, so instead we need to take a new approach to correspondent banking, and that is just what Banking Circle is doing.

We are taking on a job that very few banks want to tackle – investing in integrating a vast network of local clearing and payments schemes to build a unique super-correspondent banking network.

Avoiding a sector or region that appears high risk may be the quick-win option, but this can easily exclude customers and impede the progress of businesses that could be highly valuable to the economy. Even the highest risk emerging market can include customers that are low risk.

Through an external partner like Banking Circle, even the smallest banks and NBFIs can capitalise on the opportunities, connecting to clearing via the Banking Circle payment rails, rather than the outdated and expensive traditional correspondent banking network. In this way, they can provide their business customers with secure, lower cost cross border payments,

Banking Circle is a fully licenced next generation payments bank that is designed to meet the global banking and payments needs of banks and NBFIs. Through a single API, we connect banks, NBFIs and FinTechs to the world's major currencies, enabling them to move funds efficiently – delivering fast, low-cost payments to their customers.

Learn more about Banking Circle at www.bankingcircle.com

¹ Source: https://www.bis.org/cpmi/paysysinfo/corr_bank_data/corr_bank_data_commentary_2008.htm

HOW AI IS DRIVING THE FIGHT AGAINST MONEY LAUNDERING



Jason Vinson,
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Jason Vinson is the Head of Platform which enables all capabilities across the NICE Actimize portfolio. Jason has 18 years of experience in both product management and technology, and 15 years of experience in FinTech, focusing on financial crime and compliance. He is an alumni from Clemson University where he studied computer science.

Money laundering is a consistent problem plaguing society. It funds the worst elements of humanity, facilitating terrorist and criminal activities around the globe.

By its very nature, money laundering is a complex problem to quantify. However, the [United Nations Office on Drugs and Crime](#) estimates the annual figure at 2 to 5 percent of global GDP. That's \$800 billion to \$2 trillion achieved by illicit means and becoming "legitimate" in the global financial system every year.

Given the scale of the problem, it makes sense that there is a sizable industry devoted to monitoring and identifying money laundering-based schemes. The Anti-Money Laundering (AML) software market alone is expected to reach \$1.77 billion by 2023.

However, given that [90 percent](#) of laundered money remains undetected and AML activities recover only [0.1 percent](#) of illegally gained funds, AML as an industry needs to do better. In addition, over [95 percent](#) of system-generated money laundering alerts are false positives, and the cost of AML compliance for both the USA and Canada reached [\\$31.5 billion](#) in 2019. Advanced software solutions which detect suspicious behavior accurately and recover laundered money are beginning

to make a massive difference within worldwide financial institutions.

The truth is, the combination of a complex and fast-moving financial world and sophisticated bad actors means that differentiating between legitimate and illegitimate money is a daunting challenge. As a result, authorities and criminals find themselves in a technological arms race to develop new and improved strategies to catch and evade one another.

However, with the advent of AI and the rapid improvement we've seen in machine learning algorithms, the "good" side might have a new weapon to help them in this fight: expert features that identify complex patterns within a large pool of data.

What is Artificial Intelligence?

While the phrase "artificial intelligence" is thrown around a lot, what exactly is AI? AI is a broad term used to describe technology that performs human-like tasks. AI machines can adjust based on new inputs and, from them, learn to improve their performance. A critical concept within AI is machine learning. When discussing AI technology for fighting financial crime, what we are talking about is machine learning. Machine learning algorithms can

find complex patterns in vast amounts of data in ways that humans could not.

Compared to conventional algorithms, machine learning's performance is constantly self-improving. It can also make predictions or decisions from the dataset without a human explicitly programming it to do so. Users can create machine learning algorithms with data containing many types of financial crime, fraud, for example. With enough examples of fraud, the algorithm builds a model of what fraud looks like. Then by feeding the algorithm new datasets, it can find new instances of fraud.

This unique process is what makes machine learning ideal for catching financial crime.

Expert Features: The Building Blocks of AI

Expert features were first developed for fraud detection. They show a path from traditional analysis to a more intelligent machine learning approach.

Fraud detection contains four steps: data, rules, action, and alert. First, data refers to both receiving and analyzing the data. Rules are then applied to the data. Next, actions are determined based on the outcome from these rules, e.g., should this transaction be allowed to pass? In the final step, the system alerts based on the answer to the question, "is this suspicious, and does this require investigation?"

Statistical metrics or features define the rules applied to the data. For example, they could include the number of payees, average transaction volume, and value. These features form a baseline that defines normal/expected activity. Deviation from the baseline produces scores. Enough anomalous scores raise an alert for suspicious activity.

Financial organizations have had some success detecting fraud using this approach. However, criminals can game the system by exploring the natural boundaries of the rules. Criminals are thinking, "How much can I deviate from the norm without triggering an alert?" Staying ahead of criminals requires improved analytics and the implementation of savvy, more intelligent rules. This is precisely what expert features are.

A good metaphor when thinking about expert features is crossing a traffic intersection. You look left and right; how

many cars do you see? In this analogy, the number of vehicles is a basic feature or statistical metric for evaluating whether it is safe to cross.

Consider a traffic light instead; this is an example of an expert feature. It has intelligence built into it, understanding how the intersection works and how to optimize traffic flow. When you arrive at the intersection, the traffic light provides meaningful information to influence your decision whether to cross or not.

The difference between a traffic light and expert features is that you are not privy to how a traffic light determines its output. With expert features, you get a clear explanation of the calculations that go into its recommendation.

Introducing machine learning models to the rules applied to financial data allows for a malleable approach. Rather than a rigid traditional approach, you gain agility with user feedback and criminal behavior, improving how the model creates alerts. This produces much more accurate results and reduces the high level of false positives seen in traditional analysis.

The Benefits of a Feature-Centric Approach for AML

While there is some overlap between fraud and AML, fraud has to move quickly and requires detection in real-time. AML requires a deeper level of scrutiny. There needs to be lineage and evidence to ensure regulatory transparency.

Money laundering is typically not a single event. Instead, it involves multiple transactions to mask the source of the funds. So how does this money move through a complex system, and can we find indicators for potential criminal activity?

A better approach for AML is not whether a pattern exists in the data but rather – how risky is this pattern? Also, with the successive nature of money laundering, is this pattern occurring in conjunction with another pattern that compounds the level of suspicion?

AML investigators use statistical metrics that include average daily activity, total cash in for a given period, max cash in for a given period, and the volume of cash in for a given period.

Typologies in AML produce expert features that, combined with machine learning, can provide a more nuanced indication of the overall risk present.

Examples could be structuring for a given period, rapid in-out, rapid in-out recurring, and high-risk anomaly.

These all have intelligence inherently baked into them that can fuel a model, improving AML alert accuracy significantly. By considering the context of a customer's behavior and activity, we can substantially improve the identification of suspicious behavior. Thus, reducing false positives while still stopping laundered money from slipping through the cracks.

An AML feature-centric approach provides several key benefits. Expert features are measurable attributes that are clear in their calculation, reducing concerns around lineage, evidence and justifying actions to regulators. Expert features also provide better effectiveness across multiple models. They can inform future models, so you don't have to start from scratch for a new typology or risk assessment. The model can constantly add new features to supplement your AML approach.

The value of features can be shared across different models to vary how risk is interpreted within the system. In addition to that, a feature-centric approach provides support for model feedback and performance tracking. Governance at the feature level means the model is traceable and explainable. Because this approach is compatible with regulatory compliance, you can follow the data within the expert feature and delete it if legally required.

Using a machine learning, feature-centric approach in AML provides a more nuanced and accurate assessment of the risks present within a financial system. For example, with expert features, you can use intelligent money laundering traffic lights. But instead of just green, amber, and red, you get an entire spectrum of colors, each clearly explained to inform your decisions better.

Expert features provide financial organizations the help they need to detect suspicious behavior, ensuring significantly less illicit funds make it into the hands of criminals.

NICE - ACTIMIZE

ISLAMIC BANKING TAKING OFF

In other parts of the world, such as Sub-Saharan Africa, Islamic finance is just beginning to take off. Here it represents about 1.5% of the global Islamic finance industry but with the world's fastest-growing population, 80% of people unbanked, and 16% of the world's Muslims, opportunities seem endless for Islamic financiers. South Africa pioneered the trend decades ago with the first African branch of Bahraini Bank Al Baraka back in 1989. Kenya has Sharia-compliant banks, several conventional banks offering Islamic products as east Africa's largest economy, and Kenya and Nigeria are positioning themselves as the region's Islamic banking hub in West Africa.

Islamic Finance in Pandemic time

The Coronavirus pandemic has had an immense impact on the global economy, however, two segments, in particular daily wage laborers and Small and Medium Enterprises (SMEs), have been the hardest hit. With SMEs being the backbone of the economy, the world's economy is suffering, and it is looking to Islamic Finance to help reduce the damage caused by the crisis and aid in economic recovery post-COVID-19 due to its ethos of ethical finance and because of its financial instruments, such as Qardh-Al-Hasan, Zakat, Waqf and Social Sukuk, that are tailor made for crises and pandemic-like situations such as COVID-19.

Islamic Fintech is set to be a key driver for financial inclusion and digitizing of Islamic finance in the coming decade. In October 2019, just a few months before The World Health Organization declared the COVID-19 outbreak a "Public Health Emergency of International Concern", there were 130 Islamic Fintechs across the world. In March 2021, the Global Islamic Fintech Report 2021 revealed that

this had grown to 241 Islamic Fintechs now operating globally with the growth of Islamic Fintechs projected to hit \$128 billion by 2025.

Bright Future

The Crisis has showcased the true potential for Islamic Fintech, not only to improve traditional financial services and enhance financial inclusion but to enhance standardization, streamline processes, reduce costs and boost transparency, making Islamic financial instruments more competitive concerning conventional forms and Islamic financial services industry a key player in the recovery of the globe's economy in the post COVID19 era.

Rich History

With more than 30 years of experience in Banking and Financial systems, ITS continues to invest in a fully Shari'ah-compliant solution that is designed to meet the needs of today's Islamic banking and financial industry whilst solving the challenges of tomorrow. In the era of fickle financial facts; the era of financial crisis, pandemics and rapid re-regulation to adapt with these inconsistencies, the era where the huge population of unbanked consumers are obliged to join financial institutions with more and more fluctuating needs, the competition became surly and the future of any financial organization will be determined only by the level of its eagerness. The eagerness to maintain and acquire a wider consumer base, the eagerness to be flexible enough for re-regulation and to be proactive to face any crisis. Nowadays it became a necessity not a luxury to have a system that can support you, a system that is flexible, matching new technological trends, adapting with huge volumes of consumers and transactions and with

considerable costs as well; and here it comes ETHIX-NG.

ETHIX-NG – A partner for the new era!

ETHIX-NG is the new flagship digital solution from ITS that leverages Artificial Intelligence, Machine learning and Big Data to modernize business processes and deliver a complete banking and financial solution. Featuring a Web-based, Omni-Channel and Cloud Hosting capabilities along with Unified Service Layer and API Management embedded tool, ETHIX-NG is your correct partner for the digital era.

Considering nowadays challenges, ETHIX-NG is designed to be flexible enough to adapt easily and quickly with any regulation change, with high time to market for the new business requirements and trends with its ready-made rich business library. Its flexible implementation approaches over public, private or hybrid could, aligns with both the regulatory and cost of ownership considerations.

With Neo-Banks, Open Banking and other Fintech trends and regulations in mind, ETHIX-NG included a sophisticated API layer to guarantee the dynamic integration with internal and external systems besides considering all in-use financial standards among out of the box integration suite.



Hany Ramadan,
Director – Products,
ITS Group



NEW TECHNOLOGIES IMPROVE CUSTOMER EXPERIENCE IN THE BRANCH



Jeni Bloomfield.
Research Analyst at RBR

A common thread links branches across diverse markets and banks: the importance of the customer. The customer is the heart of branch banking and so banks strive to maintain customer happiness. RBR's report Branch Transformation 2021 reveals trends in customer behaviour and the ways in which banks respond, from investing in self-service devices to implanting new branch designs, all with the goal of improving the customer experience.

Customers move towards self-service

A notable trend across the markets in RBR's report is the rising demand for self-service. Transactions which would traditionally be performed at the teller counter are increasingly undertaken at self-service devices such as ATMs instead. To cater to this changing behaviour, many banks provide a range of self-service device, such as ATMs and automated deposit terminals (ADTs) which allow customers to deposit cash or even cheques.

Customers are interested in performing both cash and non-cash transactions away from the teller. Non-cash transactions

include account opening, balance enquiries, card issuance and bill payments among others. Some of transactions, such as balance enquiries, are widely found at ATMs but others are offered at specialised non-cash kiosks.

Non-cash kiosks were found in the majority of markets at the end of 2020, making them among the most common of branch technologies. Saudi Arabia's Al-Rajhi Bank, for instance, deploys kiosks which allow customers to pay bills, update their mobile phone number and even print cheque books. Meanwhile, in Turkey virtually all Kuveyt Türk branches which cater to retail banking customers feature instant card-issuance terminals. By offering a range of self-service devices, banks allow customers more flexibility in the branch and this can reduce the time spent waiting in queues.

After-hours access creates convenient branches

People lead busy lives and so a key aspect of a good customer experience is the ability to access the service needed at a time convenient to the customer. Because of this, many banks strive to make their self-service devices accessible after

branch hours. One of the simplest ways to do this is to locate the terminal through the branch wall for 24-hour access. Many people are familiar with through-the-wall ATMs, but even non-cash kiosks can be deployed in this way. SBI in India, for instance, provides through-the-wall passbook printing kiosks.

Some self-service devices are located in dedicated self-service lobbies, which offer more privacy and security than a through-the-wall machine. This makes creation of these spaces the cornerstone of branch transformation schemes for many banks. Société Générale in France has been remodelling its branches to include self-service spaces open from 6am to 10pm. Some of the bank's branches even have lobbies open round the clock for store owners and individuals who finish work late at night and need to make cash and cheque deposits. In this way, after-hours access makes the branch a convenient space for all.

Personalised service grows in demand

Another key trend identified by RBR's report is the growing demand for personalised services. Customers are used to tailored experiences for online shopping and streaming services, and this expectation increasingly extends to banks. This has influenced many banks' branch transformation schemes.

One way in which banks aim to offer personalised services is through creating stronger relationships between staff and customers. The shift towards self-service helps with this goal. As more transactions are performed at self-service devices,

tellers are left with more time to field complicated queries and learn their customers' quirks and habits.

To heighten the development of customer-staff bonds, some banks have introduced open-plan layouts in some of their branches. These branches – which see the removal of bulletproof glass and teller counters – let customers and staff engage more easily and create a friendlier atmosphere. Some banks in Russia are even moving towards a deskless model, with staff-customer interactions taking place side-by-side in informal seating areas. The use of tablets is especially important in open-plan branches as they enable staff to move freely and assist the customer from anywhere in the branch.

It is important, however, to balance customer and staff convenience with safety. In some markets, such as South Africa, banks have reinstated fixed teller positions with bulletproof glass, as the open-plan layout had too many security risks. Customers can even find visibly secure branches reassuring. This highlights that the answer to improving customer experience can vary, as what is suitable for one market or bank is not necessarily appropriate for another.

Technology mitigates in-branch crowding

One thing most people have in common is the desire to save time and so the reduction of queues and in-branch crowding is another measure favoured by banks to improve the customer experience. The provision of self-service channels is key as it gives customers alternatives to queuing at the teller

counter, but other technologies are also employed to shorten queues. Self-service appointment scheduling, for instance, is available at self-service terminals in over half of the markets surveyed in RBR's report. Electronic queue management systems are also common.

Banks use a variety of methods to direct customers to the relevant person or zone, thereby reducing crowding in the branch. Russian banks are increasingly using kiosks to enhance their electronic queue management systems by encouraging the customers to add additional information about their query; this enables customers to be directed to a suitable member of staff or a self-service device. Other banks favour interactive signage which allows customers to self-direct to the correct area of the branch. Some even make use of welcome robots in to perform this function, such as China's Bank of Communications in its flagship branches.

Continued adaptability is key

Reducing crowding has become an especially important issue owing to the COVID-19 pandemic. Concerns about the transmission of the virus shifted customer focus to hygiene and placed new relevance on technologies such as self-service appointment scheduling, which help to mitigate in-branch crowding. This highlights that as customer needs and preferences develop, branches must continue to develop alongside them.

For more information about Branch Transformation 2021 and RBR's other research, please visit www.rbrlondon.com/research

FUTURE GAZING: WHAT WILL 2022 HOLD FOR THE PAYMENTS INDUSTRY?

As 2021 comes to a close, it's time to look forward to 2022 and what's in store for the payments industry.

The sector is poised for many exciting developments, everything from crypto, contactless payments, SoftPoS, and the growing application marketplace.

Crypto acceptance will become simpler and more widespread

The acceptance of cryptocurrencies will become easier and more widespread than ever in 2022, as merchants seek to capitalise on the crypto boom.

We've already seen countries like Venezuela and El Salvador move to adopt crypto as legal tender. Meanwhile, in the US, there are signs that regulators are becoming more comfortable with digital currencies, as they rapidly begin to establish an oversight framework. If a leading world government, like the US, came out in favour of crypto adoption, it could pave the way for widespread acceptance and, with the technology to support this already freely available, this should be incredibly straightforward. Therefore, with the mobile infrastructure becoming more prevalent in the market, it makes the acceptance of crypto much

easier. Whereas, this would be much more difficult to implement on a traditional terminal hardware estate.

As with every year, it's vital that merchants stay ahead of the curve by enabling customers to purchase goods and services via the payment options they want to use. Most recently, the focus has been on e-commerce with firms racing to adopt new settlement options, from online payment platforms to Buy Now Pay Later. Likewise, merchants have worked to grow their customer base by developing cross-border capabilities, enabling them to accept payments from key international growth markets – especially in the Asia Pacific. Crypto is the next frontier in this trend and will be a key differentiator for merchants over the next 12 months.

Rise of the application marketplace

The expectations of what a business will look like in 2022 have changed fundamentally. With the rise of 'covidpreneurs' over the last 18 months, there's been a global surge in sole traders who are choosing more fulfilling employment over a steady paycheck.

This shift in the makeup of the global economy is driving the rise of





Brad Hyett,
CEO, phos

an ‘application marketplace’, whereby business functions are increasingly moving onto the mobile devices of business owners. Meaning, these new market entrepreneurs are increasingly running their business out of a tablet or mobile device, rather than traditional PCs and other legacy systems.

A series of mobile devices will become the core hardware estate for businesses across a range of verticals. For example, in the transport sector, taxis are now using tablets to run in-ride advertisements as well as accept contactless payments. These all-in-one solutions are powered by software point of sale (SoftPoS) technology, streamlining hardware estate to deliver more functions on fewer devices. This reduces costs for merchants by helping them sell more while also offering a cheaper alternative to traditional payment terminals.

Get ready for ‘endless aisles’

With the pandemic driving demand for better integration of physical and digital retail, mobile devices present a huge opportunity for retailers in 2022.

This could see the rise of ‘endless aisles’ over the next 12 months, whereby merchants no longer have to stock every size and colour of a product in store. Instead, retailers can use mobile devices to order out of stock items for delivery to the customer, as well as take payments on the same phone or tablet. By harnessing mobile commerce as an extension of the in-store experience, retailers can begin to bridge the gap between e-commerce and the high street next year.

Customers will also start to experience faster delivery times as a result of the increased competition generated by the boom in online shopping. And retailers will increasingly offer alternative payment options such as ‘payment on delivery’ in order to mitigate checkout abandonment and attract customers looking for convenience.

iOS adoption could drive SoftPoS growth

One of the biggest challenges to the widespread adoption of software point of sale (SoftPoS), the technology that enables merchants to accept card payments directly on their phone or mobile device,

is that it’s not currently supported by iOS operating systems.

However, Apple’s acquisition of SoftPoS startup Mobeewave last year signals that the tech giant is aware of the growing requirement for this technology and is actively looking at how to address this demand in the market. This appetite is only going to grow as consumers continue to turn their back on cash in favour of contactless payments. It’s likely we’ll hear more on Apple’s plans in 2022 and this could open the floodgates to the softPoS opportunity over the next 12 months, with wide ranging implications for merchants, banks and their customers.

Contactless spending will continue to grow – and will have little impact on fraud

The rise in the UK’s contactless spending limit to £100 in October shows the shift to a cashless society isn’t slowing down anytime soon. When regulatory changes like this come into effect, they quickly accelerate widespread behaviour change among consumers. As people begin to get more comfortable using contactless for high value transactions, traditional methods like chip and pin will soon be replaced. Likewise, consumers may be encouraged to make bank transfers for larger purchases to receive banking benefits and promotions.

While the new regulation has sparked concerns around payment security, increasing the contactless limit is unlikely to materially change the risk of fraud. Fraudulent activity tends to occur at a much lower transaction level, before ramping up to higher levels, to avoid detection. If consumers want to protect themselves, the most important thing they can do is pay close attention to their bank statements and regularly monitor for suspicious activity.

Moreover, consumer protection against fraud is particularly robust as liabilities sit with the banks and card schemes, ensuring the customer’s transactions are always secure.

What’s next?

The pandemic had a significant impact on the fintech industry this year, as seen with the accelerated growth of contactless payments. As the global economy goes into a recovery phase in 2022, the innovative fintech sector will continue to evolve and adapt to any market pressures that may arise next year.



Damien Cahill,
COO & Co-founder, Vyne



2022: THE YEAR FOR THE CARDLESS ECONOMY

If one thing has become evident in 2021, it's that consumers are increasingly demanding easier ways to pay for goods and services. In fact, since the outbreak of COVID-19, one-third of British consumers have experimented with trying a new payment method.

Over the past year, we have seen a continued increase in adoption of payments through open banking. According to the open banking impact report, 7.5 to 8.5% of digitally-enabled consumers who buy or sell products online are now active users of at least one open banking service, compared to 5 to 6% in December 2020. Perhaps what is even more significant is that 83% of these users intend to continue to use these services.

Inflexible, costly and time-consuming

While there are several reasons why consumers are searching for alternative payment options, a large part is that traditional card payment methods are inflexible, costly, and time-consuming. Consumers today favour seamless and quick options.

Filling out multiple forms at online checkout can cause frustration. Making payments using a customisable account-to-account option eliminates the need to fill out endless details and allows for payments in as little as three clicks.

Consumer values are more important than ever

Customers are increasingly turning their backs on businesses that go against what they stand for. We believe that 2022 will be the year of consumer exodus for businesses that don't truly understand their audiences' beliefs and ensure they align with them.

More than three in five consumers say it's more important for companies to behave in an environmentally friendly way compared to before the COVID-19 pandemic. This demonstrates that customers are becoming more aware of their carbon footprint and actively seeking to buy and consume goods through conscious channels. Merchants need to take this demand seriously by implementing more sustainable payment methods.

With an increasing focus on the environment, we predict that companies in both the fintech and retail sectors will offer more cardless initiatives in 2022. Open banking is a more eco-friendly alternative to using traditional cards because it uses less infrastructure and does away with the need for plastic cards.

In addition to environmental values, as more consumers shop online, consumers also want better security online. This will prove invaluable to open banking with 79% of online shoppers indicating that they would be open to trying new payment technologies if they perceived them to be safe.

Account-to-account payments are far more secure than card-based payment systems. This is because every payment is authorised by the consumer, meaning no card details can be lost or stolen. Refunds are also made safer, with open banking pay-outs guaranteeing funds are returned to the initial payer's account.

Convenience is also essential. Consumers today demand and have higher attrition rates. Almost two-third of UK shoppers said that they would stop an online purchase if it had a complicated checkout process. Those that choose to align with consumer values by offering environmentally-friendly, secure and convenient payment options will reap the benefits.

Merchants are tired of high-cost card fees

In light of the recent news that Amazon will stop accepting Visa credit cards from January, 2022 may see more payment strikes. Additional businesses may agree that the cost of accepting card payments is too big of an obstacle when striving to provide the best prices for customers. As such, they may simply abandon them all together.

By switching to open banking, merchants can move money between bank accounts in real time, bypassing the card networks and their associated fees, reducing costs.

New rules bring new opportunities

As if 2022 wasn't already looking positive enough for the open banking industry, the FCA has truly set an optimistic tone for the year ahead. The recent announcement of the removal of the 90-day reauthorisation requirement will remove a key barrier to long-term use of open banking services.

Scrapping the 90-day rule will make it easier for consumers and businesses to remain connected with their chosen third-party providers for longer, offering significant opportunity for an improved open banking user experience. Another step forward in the downfall of card payments, indicating that 2022 may truly be the year for the cardless economy.

It will be wise to make the shift now and scrap the expensive, slow and cumbersome card system. Businesses have much to gain by incentivising consumers to choose newer, more convenient and smarter methods of payment.

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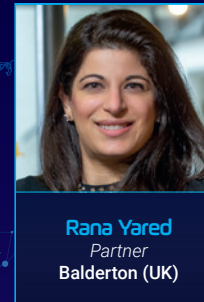
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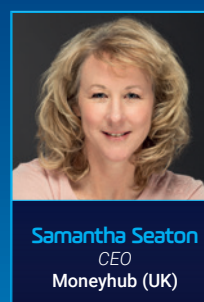
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SEEDS OF CHANGE: WHAT DIGITAL TRENDS FROM THE PANDEMIC MEAN FOR FINANCIAL SERVICES IN 2022

It's a difficult time to be a trends forecaster. If I learned anything from lockdown in 2020-21, it's that predictions can go off faster than a badly baked banana bread.

We've seen 18 months of unprecedented change inside and outside the Financial Services industry. Changes that included, for example, [95% or more](#) of Financial Services office workers in the US switching to working from home during the crisis, a [40% rise](#) in contactless MasterCard payments globally, and an increase in global eCommerce of [19%](#) in 2020 alone.

Big questions need bigger answers

A recent [McKinsey report](#) reveals that the average EMEA business underwent the equivalent of seven years of digital transformation in 2020 alone. Behind the scenes of these changes, businesses in every industry were forced to answer a series of questions at an incredible pace:

How can we ensure a real-time flow of data to decision-makers? How can we assist customers whose lives have flipped upside down? How do we equip our employees to work remotely? How can we do all this at hyper-speed and within budgets?

Almost two years on from the beginning of the pandemic, what's becoming apparent is that the answers given to these questions were in fact the seeds of something much bigger. The responses of businesses have produced the green shoots of much longer-term transformation – a move to new era of hyper-automation.

That's what our first-ever trends report – [‘Integration and the Digital Road to Recovery’](#) – has uncovered: the journey from market shift, to response and long-term impact, with insights from companies including gohenry and Wayfair.

Based on our findings drawn from anonymised integration data from more than 2,000 Jitterbit customers, I have three digital predictions for the financial services sector.

Our analysis discovered:

- The eCommerce pivot, with customers shopping for both essentials and lockdown luxuries online, prompted a spike in eCommerce integration solutions investment (up by 99%) as businesses tried to keep pace.
- Employees were crucial to keeping the show on the road. The need to support a remote workforce with updated communication platforms and employee portals – underpinned by seamless onboarding – resulted in a 72% increase in spending on [Employee Experience 360](#).
- Improving operations through optimization and automation was the response of many to the structural challenges presented by the ‘new normal’. Spend on [Product 360](#) jumped by 26%, while there was a double-digit increase in investment in integration for large ERP systems.
- Not everything received an investment boost: spending on integrations to support the Customer Experience actually dropped by 15%. Don't be misled though; a pressing need for continuity in serving customers meant overall investment in Customer Experience remained high.

When being pulled in different directions by demands, it's often better to do a few things well. In our view, that's what happened throughout the first year and a half of the pandemic. Under the unique circumstances of lockdown, the need to ensure business effectiveness (eCommerce and employee experience) trumped the requirement for the speed and features that come with customer experience.

1. The need for speed

Over the course of the next year and heading into 2023, [Gartner predicts](#) that 40% of the large enterprises will move to an enterprise business capability strategy, away from monolith vendor strategies. This strategy opens up the possibility of personalised ERPs, which use various point systems, to build completely unique

Steve Sichtman,
VP for Multichannel Development in EMEA at Jitterbit

Steve Sichtman responsible for growth and expansion across the region. Steve joined Jitterbit in 2019 after having sold his HR Tech company in 2018.

Steve started his career at one of the foremost Dutch Consulting & Corporate Finance agencies where he ended up leading the Change Management practice as Managing Partner.

As one of the authors of the Dutch National Research on Change Management and author of the book "The Blue Chip Manager", Steve has multiple publications on his record.

Steve is engaged in multiple supervisory board and advisory roles in Higher Education and Not-for-profit organizations and is counsel to several Dutch startups.



ERP setups that are flexible and more cost-effective for financial service companies – and open up new ways to differentiate in the delivery of products and services to the customer. We expect to see more financial service businesses implementing domain-driven architecture, to set themselves up for speed of development, easy connectivity, and interchangeable systems.

2. The customer (and employee) is king

In our new, ever more digital landscape, where customers are more savvy and spoiled for choice, companies will need a clear point of differentiation to survive, let alone succeed. Delivering a best-in-class customer experience remains essential to companies providing financial services.

2022 is lining up to be a year of continuous innovation, using technology to create integrated, multi-channel experiences, and to enable the successful flow of data required for hyper-personalized customer experiences. The pace of transformation set during 2020 has set a new expectation of what is possible within organisations and this is driving yet more need for hyper-automation within the enterprise.

While customer experience has been a much discussed aspect of the last 18 months of digital transformation in financial services, we believe that the less discussed but equally important employee experience will remain a focus in 2022. The widespread adoption of platforms like Hopin, Zoom and MS Teams was just the tip of the iceberg in terms of integrating remote workers. Our report found that investment in an integrated Employee Experience during 2020 increased by 72% to support new communication channels, employee portals, HR solutions and enable seamless onboarding.

Now as we hopefully move into a post-pandemic phase, companies need to continue to innovate around the employee experience. With a [quarter of all financial services staff](#) wanting to continue to work from home and many now returning to the office,

companies need to design new automation flows that enable a hybrid and agile workforce.

3. Hyper-automation requires low or no code

Trends emerging in 2021 suggest speed and effectiveness in relation to product, service, and employee experience are going to become even more crucial in 2022. The sheer number of platforms, software solutions and technologies in play and the speed of deployment required mean manual integration is no longer an option for financial service companies looking to keep ahead.

We expect to see the adoption of no-code and low-code platforms become even more crucial in delivering and managing automations within the business. Equally, companies are refocusing on microservices as a way to innovate even faster. Our customer data from 2021 indicates that microservices – the use of small, independently deployable components to build larger applications – will become a major focus of IT investment in financial services within the next 12 months as more and more companies realise it as one of the keys to success in this new era of hyper-automation.

The trends from the past 18 months suggest the benchmark for continuous and agile business transformation has been reset. To succeed in future, financial services will need to automate new processes and workflows across their business at hyper speed to deliver ever more digital customer solutions while managing more distributed workforces.



MOBILE ONBOARDING HAS AN ABANDONMENT PROBLEM. RETAILERS NEED TO FIX IT OR FAIL IN 2022.

Retailers will be riding high this week after the start of another bumper holiday shopping season. According to Adobe Analytics, e-commerce sales in the US hit [\\$10.7bn on Cyber Monday](#)—the biggest online shopping day of the year—with 39.7% of online sales coming through smartphones, up 8.4% year-on-year.

But businesses that only look at the numbers are at risk of missing the bigger picture. A survey by Signicat revealed that [6 out of 10 customers](#) will walk away from frustrating onboarding experiences. While sales have gone up, customer tolerance for bad customer experience has plummeted—leaving brands at risk of losing out on 60% of their potential revenue in an instant.

What's happened? As well as realising their spending power, consumers are becoming ever more expectant of hyperspeed experiences: instant load times, fast and intuitive search, and, first of all, seamless and speedy onboarding

and sign-in processes. These expectations are coupled with a better understanding of the power of choice. The choice to walk away. The choice to choose another brand.

It's a paradigm shift and one that companies need to get their heads around fast. Retailers looking to build future-proof customer experiences must start by taking the pain out of customer onboarding. They need to leave behind the habit of outsourcing manual authentication processes to their customers via clunky and slow one-time passcodes (OTPs). It's the only way they'll deal with the abandonment issues associated with onboarding and customer experience.

This requirement for better, smarter authentication technology is only going to become more pressing in 2022, with three transformational shifts on the horizon that will make smooth onboarding essential if businesses want to make it to another holiday shopping season.

1. The mobile e-commerce boom will continue; and so will the rising need for digital identifiers

The pandemic has clearly accelerated e-commerce more broadly. Released last March, Adobe's [Digital Economy Index: Covid 19 Report](#) revealed that online shopping in the US was boosted by \$183 billion from March 2020 to February 2021.

But what's interesting to me is that smartphones are now doing a lot of the heavy lifting in this department, with m-commerce experiencing a similar boom that will continue next year.

E-commerce app installs and consumer spending rose by 48% and 55% globally between January and July of 2021 respectively ([AppsFlyer](#)). In the US, we'll see continued growth, with m-commerce predicted to nearly double its share of total retail sales between 2020 and 2025, according to [eMarketer](#).

The same company predicts by 2024, we'll see [\\$4.5 trillion](#) spent globally on retail via



Boku Inc., (AIM: BOKU), the world's leading provider of mobile payment and identity solutions, and French mobile services providers SFR, Orange and Bouygues Telecom, today announced that they have signed a partnership to launch mobile identity products aimed at protecting consumers against cyber-hacks, account takeover attacks, SIM swap attacks, and other forms of digital fraud. Boku Identity provides the solutions to connect and verify companies' customers' identities and to keep them safe. We help organisations recognise people for who they are. It may seem like a small thing, but then so do stars when you look up at them in the sky. Up close, it's a different picture.

Stuart Neal,
General Manager for Identity, Boku Inc

Stuart Neal is General Manager for Identity at Boku Inc. He joined the company in 2011 from Barclaycard, where he was responsible for growing their merchant acquiring division - the second largest in Europe. He is a prominent figure in the European payments market, with specific expertise in deploying innovative payment solutions, such as the roll out of NFC capability in the UK. To date, he has worked with data-intensive companies ranging from GSK to Barclays, as well as Featurespace. From healthcare to banking, ntech and mobile identity, Stuart has seen how crucial developing our understanding and management of personal identity is - both on and offline.



smartphones. Can you imagine the number of OTP requests sent as consumers make \$4.5 trillion worth of transactions? Or even worse, think of the revenue lost when these clunky onboarding processes slow down or deter purchases.

In 2022, companies should embrace ready-and-waiting solutions like seamless, invisible, and automatic authentication via pre-existing mobile network technology that speeds up onboarding—and protects their bottom line.

2. In the age of Hyperautomation, OTPs will become redundant

Gartner has predicted that 2022 will be the year of hyperautomation, with [85% of companies](#) increasing or sustaining their investment in automating anything they can for improved efficiency, efficacy, and business agility—and automating onboarding processes is absolutely part of that.

Companies can't say they haven't been warned. In 2019, Gartner's vice president analyst Ant Allan predicted that by the end of 2022, 60% of large enterprises and 90% of midsize enterprises will have implemented passwordless methods in more than 50% of use cases.

Improved solutions will keep employees happy, too. Rocketlane's

[State of Onboarding 2022](#) report, which surveyed over 100 customer onboarding professionals, underlined the impact of inefficient onboarding methodologies. They found that onboarding teams are slowed down by the need for multiple tools to do their job, and more than half (54%) think the customer experience they provide is average.

The report adds that 56.1% of respondents have set improving customer experience during onboarding as their no. 1 goal for next year. If there's an internal desire for seamless onboarding and authentication, and the technology exists to make it happen, then why would a company choose a solution that's looking increasingly outdated?

3. The metaverse will transform identity in the realm of customer engagement

It's not just customer experience IRL or on mobile that companies will have to contend with in 2022.

The metaverse—the alternative world that digitally mimics our own and combines a whole host of innovations ranging from AR, AI, and crypto—is going to be a prime focus for big technology companies, so the time is now to define and design what your metaverse customer journey will look like.

Commerce was a key topic in Mark Zuckerberg's [metaverse presentation](#) at Facebook Connect 2021. Speaking alongside the Facebook founder, Vishal Shah, Meta's VP of Metaverse, promised the metaverse would "remove many of the physical constraints we see on commerce today and make entirely new businesses possible."

How that works exactly is unclear at the moment, but MasterCard, in [a paper from this year](#), painted a pretty good picture of what might happen. In the report, they describe a vision where two friends meet in a digital park and start to discuss—and design—a totally brand new pair of sneakers.

The description goes on: "as the digital images float by, she details the style, allowing your AI assistant to fine-tune your selection". Once the friend is happy, she buys both a physical and an NFT version of the shoes "with a gesture".

It all sounds wonderfully utopian. That is until the avatars are forced to stand around in their VR park while they wait for OTPs to manually verify themselves and complete the onboarding process—that's if they don't log off beforehand.

Seamless onboarding is both a real world, and soon to be virtual, reality. Make sure 2022 is the year your company realises it.

THE SOURCE, STRENGTH AND SCOPE OF CLOUD-CENTRIC SUSTAINABILITY



Alessandro Chimera,
Director of Digitalisation Strategy,
TIBCO

Digital technologies stemming from inherently integrated cloud-native backbones with a deep level of integration and systems intelligence can help us put the compute-quotient of world operations into carbon-neutral status and further help wider enterprise goals to achieve the same milestone – TIBCO director of digitalisation strategy Alessandro Chimera points to some of the key change factors now coming to the fore.

The urgency, responsibility and breadth of our need to achieve more sustainable operational models around the globe is both manifold in nature and massive in its enormity. Nations, enterprises, groups, collectives, families and individuals all share a now thankfully more-widespread realisation that climate change is real and carbon emissions need to reach a carbon-neutral status as soon as possible.

Although there are few overnight fixes to change the way we live and work, the use of cloud technologies and new approaches to deeply integrated digital data services can turn things around more quickly than previously thought achievable.

Throughout the pandemic, we have all understood the notion of fundamental

change in new ways; we can now take that appreciation for dynamism based on digital platforms forward and help build better enterprise work systems for everyone.

Cloud carbon on many levels

As we now look to collectively lower our carbon footprints, we can examine more closely the ways through which information technology can help us to become greener.

Although the early iterations of cloud computing datacentres were built primarily for power, speed and accessibility, it was not long before the notion of Power Usage Effectiveness (PUE) came to the fore. This is a measure of how much power a datacentre uses as a ratio of how much energy it uses for electrical power to run machines, cooling systems and all other site facilities.

Today the discussion has broadened past PUE metrics, although they are still very important. There is now a more implicitly understood set of mechanics derived from common sense and experience, i.e. we know that huge datacentres can complete more ambitious solar panel installations and also leverage far wider economies of scale for operational efficiency. Wind farms too,

as they can be built on sites with optimal conditions in terms of geographies and topologies.

Not forgetting the still-developing approaches to achieve better PUE (deep ocean water cooling is very much still an embryonic idea), we now perhaps look more broadly at the way digital cloud backbones can enable us to work more sustainably.

Integration, optimisation, modernisation

Cloud computing enables us to achieve deeper and wider-reaching integration levels across every business, but talk is cheap, so let's consider some real-world implementations. In practice, this means things like supply chain integration and performance management technologies that can be applied to equipment, workplace systems and even individuals.

Once we start to think about working to a more prescribed circular economy methodology, then we can use Product Lifecycle Management (PLM) to bring end-of-life status to digital products. This is not waste, this is efficiency. Taking outdated, surpassed, non-optimised, duplicated or even archaic and redundant elements out of our IT stacks and replacing them with newly optimised finely-tuned and precision-engineered solutions can be a carbon-neutral – and ultimately carbon-negative – step to make our digital investments work better for the bottom line and for the planet.

It's important to think about PLM in the context of our global mission for a carbon-neutral existence. In this regard, we can think about managing a product's lifecycle from inception, through design and manufacturing, to sales, service and eventual retirement. Taking that more holistic view of PLM can help to combat (and ultimately avoid) eWaste, so that companies can integrate environmentally-friendly practices into their business. In the technology arena specifically, this means both hardware and software organisations working in concert to the same goal of increasing IT stack efficiency and building less power-hungry devices in both physical and virtual (i.e. software) terms.

This is a more sustainable form of operations. These are actions to adopt, based around design principles where the products and services themselves tell us when they should be end-of-life retired. When a car left the factory in the past, its

product evolution stopped as it was driven away. Today, we can build a car that develops throughout its lifecycle as a result of all the data it creates and feeds back to a central cloud service. Ongoing sales can be based upon maintenance, enhancements and other additional services. We must still remember that, alongside the customer, profit is always king. This means that manufacturers will always be concerned about losing profits with the Right to Repair act in mind. However, if done wisely, it can generate profit streams, where upselling features/services or maintenance is carried out on devices that are now continually evolving.

As we now work to bring integration, optimisation and modernisation to our IT stacks, we can help support the more widespread use of Internet of Things (IoT)-empowered devices. With the power of predictive maintenance delivered by sensors and systems intelligence monitoring platforms, we can make machines work better, which almost always helps humans work better – often using more remote working practices – and with a lower carbon footprint all round.

Cloud and sustainable engineering

The very structure of cloud computing frameworks and platforms can be used for sustainable advantage if we think prudently about the way we optimise the applications and data services we use every day. Serverless technologies enable another degree of decoupling that can enable us to decrease overheads and reduce our contribution to unnecessary emissions. By using caching mechanisms, it is possible to take the load off backend instances as we simultaneously reduce network traffic and increase message processing speed.

The central and most important element of cloud computing in the context of sustainability is the ability to tap into a pool of resources and not have to invest in CapEx. Almost every organisation that runs its own private datacentres is not running it at anything like capacity. The most practical use cases in this area of IT implementation often see organisations adopt two (or possibly more) Cloud Services Providers; this avoids vendor lock-in and is a good idea for Disaster Recovery (DR), but what is perhaps more important is the operational flexibility it affords for wider long-term sustainability.

We can indeed use cloud computing

for a sustainability advantage. Then, at a higher level, we can use cloud computing sustainably for a greater sustainability advantage. The difference lies in how efficiently organisations are engineering cloud services into the IT stacks from a network traffic point of view.

A simple exchange of data in an on-premises infrastructure has a lower impact on the network compared to services exchanging data over multiple cloud services and regions. In order to minimise network data traffic, review your services. A huge one-size-fits-all service should be discouraged since often just a small part of the returned data is relevant. Furthermore, we can also say that colocation is another way to reduce network traffic and provides the opportunity for companies to host servers in datacentres using renewable energy sources. Additionally they can look to use advanced cooling systems that use water to cool down systems and then use the heated water to heat the building or convert it to energy to cool the building.

Kilowatts per compute

While most companies are still some way off of being able to calculate their kilowatts per compute ratio – or Kpc as it will surely be known – we are moving rapidly toward businesses understanding that they need to measure the carbon impact of all existing and newly deployed IT products.

The important point of realisation when working towards adopting this kind of measure, is collective scale. One user turning off one app or one service doesn't make much of a difference on its own, but thousands of users shutting down unused or inefficient connections does. Equally, at the machine level, one inefficient API call being circumvented, replaced or removed doesn't save many trees, but taken collectively at massive scale, this is the kind of action that really does make a difference.

As we now advance with Environmental, Social and Governance (ESG) practices across entire organisations, the time to act is clearly now.



USING TECHNOLOGY TO ELIMINATE FRICTION AND STREAMLINE THE SBA LOAN PROCESS

Small businesses have always been dependent on government and private loans to stay afloat. By nature, these business owners are scrappy and savvy, turning to their mobile phones or tablets for apps that make business smoother and more accessible to their customers, and have little patience for long, drawn out, manual processes. Yet, many of the financial institutions they depend on do not embrace digital tools with the same ease.

For decades, loan origination for small businesses has relied on manual processes that often force lenders to spend more time gathering documentation and checking boxes, than building meaningful relationships with customers. Consider this statistic: 43% of 2020 homebuyers completed their entire mortgage application online¹. So even as the world around financial institutions innovated, many banks servicing the small business marketplace were left clinging to slow, out-of-date procedures, and time wasted rekeying repetitive information, that inevitably cause friction and don't immediately serve customers' needs.

Fortunately, cloud-based technologies that automate and streamline the SBA lending process can create opportunities to strengthen relationships with your small business customers and team members alike by eliminating friction points. Still on the fence about SBA loan origination

technology? Here are four benefits of using cloud-based technology to streamline your loan origination process:

1. Eliminate Manual and Disconnected Processes for More Transparency and Collaboration

It's true. Age-old manual processes are inefficient and create challenges for loan officers and underwriters alike. Bank leaders need to ask themselves one question. What is the ultimate cost of your team members' days? By sticking to these manual processes the majority of a team members' time is spent rekeying customer information, double-checking accuracy, and performing duplicate tasks across multiple platforms that could, at minimum, result in data inaccuracy. Inefficient loan processes also chip away at transparency in your system and slow collaboration within the loan team.

Bringing loan origination under a single platform that contains all data, documents, files, and financial statements that are easily accessible by anyone on the loan team at any point during the lending process eliminates the need for repeating status updates to keep everyone informed. In fact, loan origination technology builds collaboration as everyone is always on the same page.

Digital transformation is critical for banks, yet late blooming financial

institutions are playing catch-up just to retain market share. In fact, according to AdvantEdge Digital, 53% of financial executives report feeling at least somewhat behind (if not very far behind) their peers. Today, 55% of consumers say they visit branches less often as they choose to employ digital banking services, and a whopping 79% say they want more all-digital processes in the future².

2. Improve Accuracy and Efficiency by Eliminating Siloed Processes

Currently, it's estimated that 30 to 40% of lenders' time is spent on manual tasks across siloed systems³. While underwriters may be in the midst of processing some of the paperwork, loan officers may be handling different manual processes... or potentially, even the same, duplicative tasks. This lack of transparency inherent in segmented processes inevitably causes friction. Layer on top of that the challenges of the current hybrid work situation that makes casual, face-to-face meetings and simple check-ins a thing of the past, it's no wonder that there may be incomplete paperwork or unnecessary, friction interfering with back and forth communications between team members.

To be sure, lenders who rely on paper-intensive underwriting processes end up

¹ <https://www.gdslink.com/5-lending-trends-for-2021/>

² <https://info.lightico.com/covid-19-consumer-banking-report-may-pdf-page?submissionGuid=e2931697-a703-450b-abd0-d459f0a65ee7>

³ <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/financial-services/us-commercial-lending-digital-transformation.pdf>



Nick Elders,
Co-founder and Chief Executive Officer,
Ignify Technologies Inc.

Nick Elders is co-founder and Chief Executive Officer of Minneapolis-based Ignify Technologies Inc. Ignify is responsible for the design, development, and support of SPARK, a transformational, cloud-based loan origination platform designed to simplify the process of delivering secure and efficient lending products to small business owners. With SPARK being the only Public Benefit Corporation in the bank loan origination space, Nick is a leading advocate for leveraging fintech innovation to improve economic opportunities for small businesses and is a champion for financial inclusion, especially in underserved communities.

For more information, visit: <https://lendwithspark.com>

prolonging the loan origination process and likely lose customers (and money). Digital loan processes are faster, more collaborative, and easier to use, resulting in higher employee productivity and more loans processed in less time. Plus, automation eliminates the risk of human error. Instead, digital lending platforms decrease the number of steps in the process, reducing origination time and opening opportunities for your bankers to be involved with customers even more.

3. Manage Documents Collection While Increasing Customer Interaction

Speaking of customers, consumers still value authentic, human interaction. But it's also true that they value their time and money. If paperwork, data and document collection drives the origination process, loan offers without automation technology have little time to develop relationships with customers, build loyalty, or strategize new ways to grow business.

By incorporating automation even more throughout banking processes, a bank sends a message that your financial institution is, in fact, prioritizing customer relationships instead of wasting precious time. When less time is spent gathering and managing documentation collection, more time is left for lenders to build customer relationships that last.

Also consider that digital processes allow for more inclusive lending practices that can build consumer insights and demographics into product innovations that serve both high credit consumers and low-income households, students, and freelancers. And, inclusive lending matters more than ever to consumers, considering that nearly 45% of millennials (a generation of 75 million U.S. consumers) belong to communities of color⁴.

4. Build User Experiences That Lives Up to Your Brand Promise

Picture this. Your bank's marketing materials highlight how loans are processed with ease; how customers' needs always come first. Yet, the actual loan origination process is cumbersome, time consuming and inefficient. From the start, the small business owners' experience with your bank does not match the marketed promise.

According to the User Experience Professionals Association, every aspect of the user's interaction with a product, service, or company makes up their perceptions of the whole. So, if the marketing doesn't match the actual user experience (in all aspects but especially with technology), banks should be concerned about meeting their customer's expectation and the possible negative perception around its services.

Better user experience design in technology (in the real world, that means fewer clicks) benefits the borrower with faster, more helpful service which leads to increasing market share for banks. Better user experiences with team members means everything they collect is more complete – reducing frustration later. The result: they are more confident in their actions, work harder, feel more invested in their jobs, and are easier to hire and train quickly.

With so much at stake, why are some banks still hesitant to invest in a loan origination platform that offers a better user experience? Consumers, business owners, and professionals alike are now accustomed to living in a digital world with apps and subscription services to fit every need — and they expect their banks' offerings to be on par.

Interestingly, unlike the sleek consumer apps we've become used to, well-designed loan origination software doesn't have to be flashy. It just has to help users do their work better and faster. It's not a technology OR people scenario; it's building stronger banks and communities through efficient and accurate loan origination.



⁴ <https://www.bai.org/banking-strategies/article-detail/lenders-start-to-place-more-emphasis-on-inclusion/>



Paul Fannon,
Managing Director, Global Business
Solutions,
Bottomline



2022: PREPARE FOR THE NEXT LEVEL OF TECHNOLOGY

Welcome to the next level. From my perspective, 2022 will be a year that sees the continuation of some legacy problems countered by new technology solutions. If you're a finance leader or senior executive at any financial institution or fintech, you need to be ready for a new level of intensity behind the speed and scale of digital transformation, financial messaging and anti-fraud defenses. Don't look at the coming year as an extension of 2021. The need is more urgent. Your actions, or lack thereof, could have long-term consequences in 2022.

A good example of this next-level thinking centres around the pandemic. Yes, the variants of various Greek letters will be hanging around, and you don't need to be an epidemiologist to figure out that COVID will continue to be a drag on lifestyles, commerce and supply chains. But it's important to put the changes wrought by it in the context of the UK financial scene. And that starts with what we can expect to accelerate in our steady state of "new normal".

For one, we should expect new intensity levels in fraud and financial crime. This intensity can be countered by innovative technology, at least for those companies open to new defences. For example, let's take the hybrid workforce. Yes, employees have shown they can be productive and happy from home and will continue to do so. But it's more than an interesting by-product of the pandemic. The hybrid work situation has been a key factor in driving insider fraud to high levels, and we need to embrace the technology that goes beyond the content filters that once worked when everyone and their devices were under one roof.

The technology solution for insider fraud, from my perspective, involves a shift in technology thinking. It's important to know a bit about how it works, because its design and level of effectiveness are radical. Content filtering, most often used to monitor unauthorized data access or unauthorized data sharing at the network layer, is a data leakage prevention (DLP) technology. An additional layer, for desktop monitoring, is often added to protect against writing files to removable storage devices or mobile devices. But an even better solution is when the DLP technology focuses on the application layer, which protects against intentional data leakage at the heart of insider, or employee, fraud. The application layer detects anomalies in accessing sensitive data and proactively addresses misuse before it occurs. Application layer DLP sits between the company's application server and the end-user, preventing those users and their customers from abusing authorized access to data within applications. It evaluates any access of employees to banking systems or other sensitive information and profiles their behaviour. It can then detect abnormal access patterns that may indicate data leakage in the process.

In fact, the incidence of general payments fraud and other financial crimes have soared during 2021, and they are just as urgent to deal with as

pandemic-driven ones. But the trend toward more frequent and innovative fraud tactics has been countered by innovations like Confirmation of Payee (CoP). This new industry initiative has proven to be a solid defence against authorized push payment fraud (APP), in which a fraudster impersonates a trusted individual or company. CoP should inspire confidence that fraudsters can be checked by innovative technology.

No 2022 strategies for Financial Institutions would be complete without mentioning instant payments, or real-time payments. New payment rails that look to eliminate friction will continue to generate traction among FIs as consumer adoption increases. Here technology will benefit banks by generating a windfall of actionable data. A good deal of this will be due to the ISO 20022 messaging standard. The richer datasets that ride along with ISO messaging will affect processing speed and reliability and stretch into more reliable cross-border payments in 2022. My concern is the speed at which banks need to adopt it. Recent Bottomline research shows that 13% of FIs have implemented ISO 20022 to date, 15% are mid-way, and 13% are complete. Great progress, but it means many banks need to get moving.

Last, but not least, there's Open Banking. It's a fairly obvious trend that we will continue to talk about over the next year. But let's look at the data side of open banking technology or, if you like, the next evolution of Open Banking, which is Open Finance. Open Banking gives third parties access to standard banking data. But what if a business' entire financial profile, including savings, pensions, insurance and credit accounts could become part of the API economy? That's Open Finance, and it could remake the entire data analytics landscape. It's definitely a trend to watch.

In the UK, the Financial Conduct Authority is consulting stakeholders on whether Open Banking should take this next step and expand into Open Finance. This would cover the mandatory sharing by banks of additional customer data beyond account information and payment initiation. The broader definition of Open Finance includes data sharing that goes beyond banks and other FIs and opens access through APIs to insurance, mortgages and even utility providers as consumer data becomes a treasure trove on which new products and services can be built. Advantages include faster and more accurate credit checks and easier service-oriented price comparisons for consumers. So, for example, in Open Finance an auto insurance company could access a consumer's historical financial data to extend a better (or more expensive) rate faster and more accurately than without the data sharing option.

To be ready for the next level, FIs will need to either complete their digital transformation projects or at least make enough progress to stay competitive. Modernization of our financial ecosystem encompasses all the trends this and other outlooks will put forward. Without it, FIs may be in for a tough time in 2022 and beyond.



Paul Sparkes,
Commercial Director at true cloud
accounting software solution firm iplicit



WHY **CLOUD** IS NO LONGER DEBATED: IT'S A **MUST-HAVE**

Digital transformation has accelerated at a rapid pace following the life-changing impacts of Covid-19. And with global spending on advanced technologies and services set to reach nearly £3 trillion by 2025, there's no question it'll be part of most – if not all – business agendas in future.

Throughout the past two years alone, the adoption of intuitive cloud-based solutions has proved to be a lifeline for many industries. From the more obvious instances within the healthcare sector including how tools have been used to book in vaccines and monitor hospital bed usage, to the more 'everyday' demands of running a successful business and managing staff working from the office, home – or a mixture of the two.

Recognising this incredible demand for intuitive technology, forward-thinking organisations have wasted no time when moving away from outdated equipment that is no longer fit-for-purpose. At the other end of the scale, many companies may still be operating with a clunky on-premise tool they most likely implemented five or more years ago, and now – due to the current climate – are beginning to realise they want something more in-line with their ambitious growth plans.

For the organisations that are keen to embrace change and evolve their software stack as a result, they're the ones who understand that cloud is no longer an option, it's a must-have. That's because they know that when they integrate an intuitive solution, they're armed with the ability to positively impact the bottom line, compete in the marketplace – no matter how saturated – as well as provide a greater level of efficiency for employees and unrivalled customer experience.

And the truth is, for many individuals today, they expect the businesses they invest their time, money and energy into, to have the functionality to cope with modern-day challenges.

The problem with fake cloud systems pretending to offer true cloud solutions

That's why many accounting and finance professionals are discovering their once relied upon tool, is no longer providing the capabilities they need to do their jobs. In many instances, this has led to several professionals identifying that the system they adopted years ago, was in fact software masquerading as true cloud.

For those discovering that a 'fake cloud' or 'Same-old-Software-as-a-Service (SoSaaS)' solution is part of their tech stack, the current climate has shone a light on how these tools are leaving them burdened with excessive costs when it comes to managing legacy systems. They're experiencing an incredibly poor level of performance and, when time is tight, they simply don't have the capacity – nor the budget or resources – to improve what they already have in place.

And that's where many industries are coming unstuck because the

product that was initially invested in may have said it was 'cloud-first', but it only backs up to the cloud. For modern-day organisations that can be a costly lesson to learn from when finding out they don't have the true cloud software in place that's able to grow with their organisation.

Recent events have transformed the way in which everyone now works. With a heavy reliance on cloud technology, the last thing finance leaders need to be stung by is discovering their cloud tool isn't able to provide them with the granular detail they need – in particular the access to real-time data that provides one single version of the truth.

The great news for savvy businesses is that true cloud infrastructure has been built specifically with this requirement in mind. It offers professionals the chance to streamline processes and obtain reliable information which informs business-critical decisions. It includes data sets that can be shared across the entire digital ecosystem. It's a powerful tool that arms every employee with the insight to be able to help their organisation grow and, right now, move beyond the intense pandemic recovery phase.

And when a workforce only has to access a browser to retrieve real-time data at their fingertips – no matter where they're based – that level of flexibility will play a crucial role in how businesses survive, thrive and expand at pace.

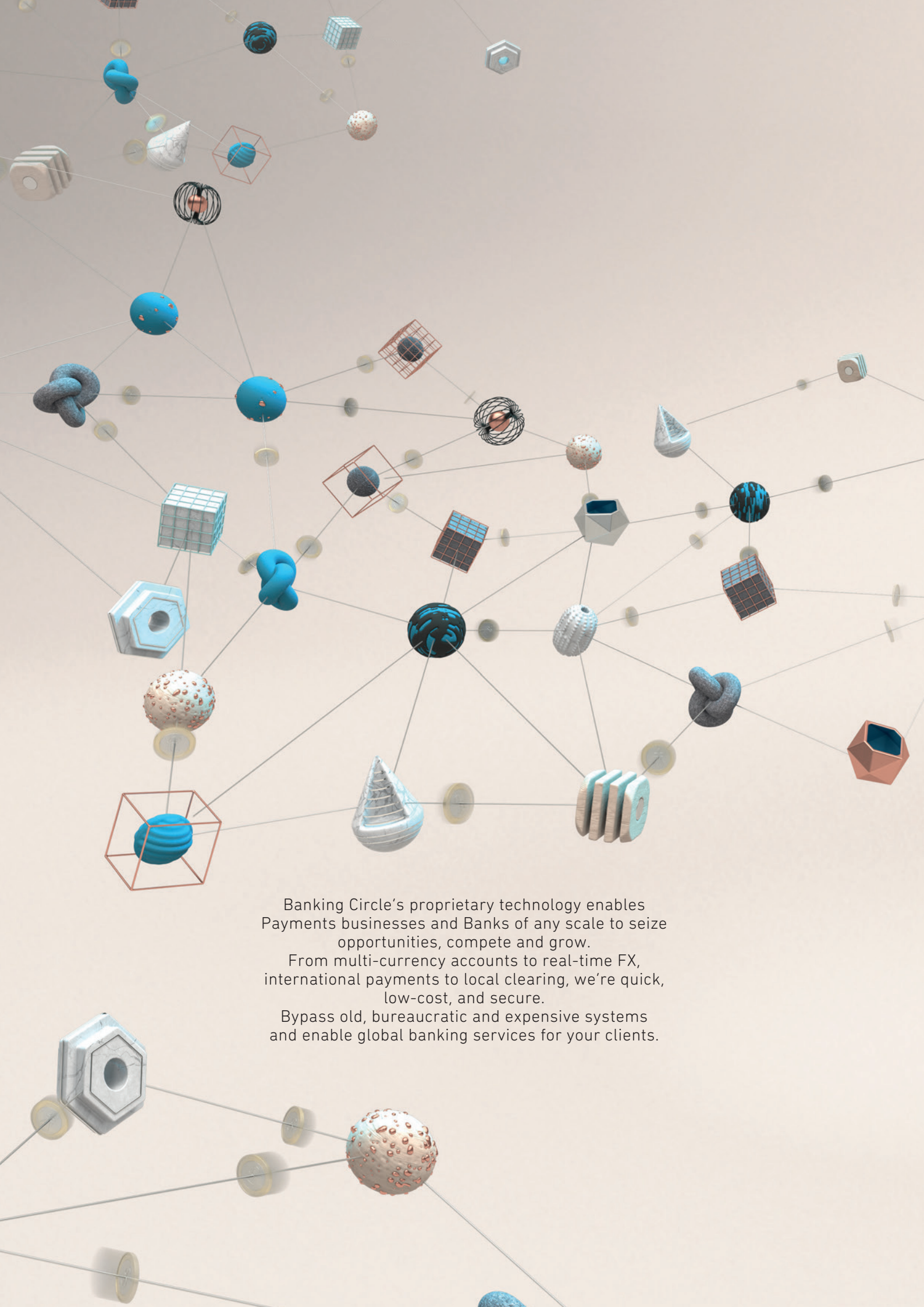
Plus, from a customer point of view, knowing the organisation they're putting their trust and cash into has a robust cloud infrastructure means they're likely to enjoy a far greater online experience compared to that of an on-premise alternative.

Cloud is the ultimate facilitator giving leaders the passport to agility

Finance leaders that spearhead their organisation's move away from legacy systems as soon as possible are going to give themselves more chance to focus on strategy, the company's trajectory and overall future. And for the businesses with large offices and a huge server placed in a room of its own, should be thinking the same too.

The good thing is, it costs absolutely nothing to shop around and find a true cloud solution that is tailored to match a specific organisation's needs, while growing alongside its expansion. The crucial part to remember though is that it's imperative that teams invest time and effort into that research stage so that their business doesn't fall victim to a fake cloud option.

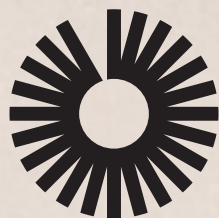
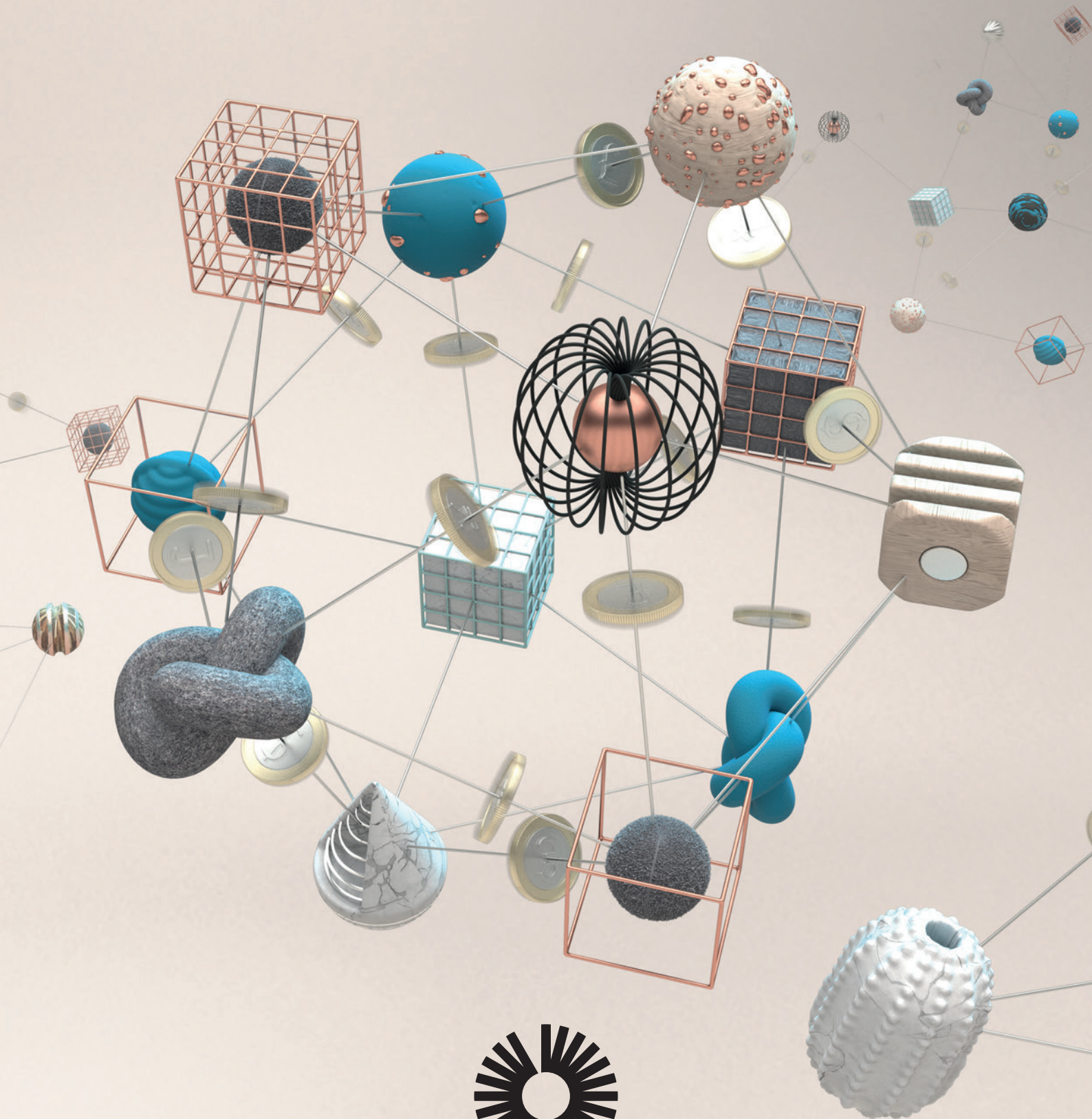
There's no question that Covid-19 has taught everyone the importance of doing things in a more efficient, digital-first way – and cloud has been transformative in being able to make that happen. Not having to explain why cloud is a good thing and instead speaking about how it can benefit their business is an exciting prospect for many leaders who are committed to driving forward their company's bottom line.



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