Impact Study

In association with: Diebold Nixdorf

Future-Ready Payments Solutions:

Remaining competitive with reusable technology

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Finextra | Diebold Nixdorf

Contents

01 | Introduction

Over fifty years ago, when the original payment pioneers built electronic funds transfer (EFT) platforms to enable card services, they had a single use in mind. Reliable and secure card payments were achieved, but the architecture was so closely bound to card transactions that it is now becoming incompatible with today's colourful payment universe.

With a raft of new and emerging payment schemes – largely built around digital ecosystems with a variety of tokens, security schemes, and different payment networks to integrate with – legacy payment infrastructures that use proprietary technology and single payment types are struggling to function effectively.

As mobile and contactless payments, Quick Response (QR) codes, digital currencies, Request to Pay (R2P), Real-Time Payments (RTP), Buy-Now-Pay-Later (BNPL) and peer-to-peer (P2P) payment applications take off, banks are forced to build separate in-house silos, in order to process these new payment types. Given a plethora of dedicated systems are already in place to process cash, cheque and card payments, management of these silos and 'add-ons' is becoming a complex undertaking.

The profitability of supporting multiple payment schemes is being eroded by the considerable costs that come with developing, operating and maintaining multiple silos. Sitting on different technology platforms, they provide little opportunity for integration and commonality across different payment methods. What's more, as the resources associated with legacy platforms become scarce and more expensive to source, these costs will continue to rise as the platforms are customised to handle new features and schemes.

Smaller banks typically tackle this challenge by outsourcing services to processors. While this may work in the short-term, it can stifle differentiation in the market, and create a barrier to innovation – as well as become expensive, despite the potential revenues.

Forward-looking banks, on the other hand, are deploying modern payments platforms that are comprised of a set of re-useable services. These have the capacity to not only consolidate numerous payment schemes onto a single platform, but they can also future-proof businesses by facilitating easy adoption of new payment types. This is done by re-using existing service components and reducing the amount of new development required to support new business ventures.

Built with a cloud-native, micro-service architecture, API connectivity, and development resources, these platforms enable banks to offer modern payment systems; reduce their time to market; circumvent dependence on multiple vendors; rationalise operational costs; and even achieve a more centralised view of authentication, authorisation, exposure, and risk.

Cloud-native, micro-service platforms have the added benefit of leveraging a comprehensive set of low-cost tooling, which supports the development and operation of the platform. It also can enable the incorporation of proven open-source modules, to speed up time to market and support scale, security, and advanced operational capabilities.

As the payments race heats up – and banks wrestle with the emergence of new digital currencies, payment instruments, funding methods and payment types– those with the most agile, secure, and reusable platform will be rewarded with a strong competitive edge and improved margins from being able to control when, how deeply and how long to take part in any new payments venture.

02 | The emergence and market impact of new payments systems

The payments landscape has evolved considerably in recent years, and customers are increasingly demanding the newest innovations from their bank. This rapidly shifting environment presents a material challenge for financial institutions. How should they transition from their current, legacy payment infrastructure, to one that enables modern, flexible and real-time, payment schemes?

A common strategy for large financial institutions has been to either heavily customise an existing platform that wasn't properly architected for the new purpose, or build a series of in-house silos, or digital 'payment islands', to process these new schemes. While this strategy may work in the short-term, the approach does not make it easy for an organisation to offer new payment solutions at speed, and it increases operational costs in the long-term.

Today, countless new payments opportunities continue to emerge, and many banks find themselves grappling with the question of how they can be best offered under their dated and fractured infrastructure.

Real-time payments

One of these key new systems is Real-Time Payments (RTP), which are now a reality in many geographies – and are being offered to both consumers and businesses.

Real-time payments' impact on the market has been potent and multifarious. According to Deloitte's '**Economic impact of real-time payments**' report, the scheme can be leveraged to increase exposure to future innovations and create a platform for the next wave of use cases developed by fintech disruptors.

Other key impacts include:

1. The eventual displacement of a range of other payment instruments.
2. Material financial savings will be garnered by transitioning from legacy payment instruments to real-time payments. This efficient, practical, and cost-effective alternative will further contribute to displacing high-cost instruments, such as cheques.
3. Financial institutions can become more inclusive – bringing in more of the unbanked segment by modernising their payments infrastructure. The rapid development of real-time payments in the previously cash-dominated economy in Thailand is a good example, notes Deloitte's report. In the long-term, consumers will gain access to other valuable financial services.

Serving to catalyse the adoption of RTPs was the Covid-19 pandemic. In a 2020 PYMNTS and Alacriti report – '**Accelerating The Real-Time Payments Demand Curve**' – it was found that 30% of consumers now consider access to real-time payments a key factor when selecting a financial institution. Meanwhile, 38% of Generation Z consumers said they would be "very" or "extremely" likely to switch to financial institutions that offer real-time payments.

To stay competitive, financial institutions have no choice but to update their IT platforms and join schemes that can deliver RTPs – even if their business models are different, and potentially less profitable, than the slower traditional schemes. In some cases, banks have tried to deploy more modern technology to address the need for RTPs. Sadly, some of these deployment projects are discreet, with a single use case in place. Dedicating time to architecting and deploying a service-based architecture with the next generation in mind, is critical.

Mobile services and QR codes

In the wake of the pandemic – and the widespread uptake of e-commerce – customers' demand for access to mobile and contactless payments spiked.

In 2021 alone, for example, over **four out of 10** US smartphone users had used a contactless payment at least once – a figure comparable to South Korea. In the EU, meanwhile, Apple – like several other firms – is being put under increasing pressure to open up its wallet technology to others.

Such mobile money trends are giving way to innovation beyond the card-based payments space. Peer-to-peer payment applications, for example, use a mobile number or email address to enable customers to send money to each other without the need for bank details. In the US, for instance, bank-owned digital payments firm, Zelle, is seeing rapid growth. In **Q2 2021** alone, small businesses and consumers sent 436 million payments, worth $120 billion, with Zelle.

In Asia, meanwhile, Alipay is also enjoying a meteoric growth. According to **Statista**, between 2016 and 2019, users of the third-party payment tool in China grew from 451 to 900 million. Today, Alipay boasts over **1.3 billion** users worldwide.

Further removing friction from the payments experience are QR codes. These machine-readable matrix barcodes make transactions seamless by transferring information instantly between smartphones and other devices – thus increasing the likelihood of a customer making a purchase.

Perhaps the most prolific of these schemes is China's Alipay, which operates in 50 markets around the world. Various other bar-code and QR based schemes are now active around the globe, and both retailers and consumers have been quick to take advantage of the schemes.

The impact of QR codes on the market has been to popularise the cashless payment method, notes **Deloitte**. Traditional cash-based society, Japan, for instance, is evidence of this. After having been developed by a Japanese company, QR codes – along with the spread of smartphones – are quickly catalysing the country's transition to a cashless world.

Other cashless payment methods, such as credit cards and prepaid-money, have failed to disseminate as widely in Japan due to vendor-related issues, transaction fees, device maintenance costs, as well as the limits of a low fee business model. However, the QR code payment does not place a significant burden on vendors in terms of initial investment.

Due to the promise and customer-friendly nature of QR codes, many competitive service providers are now entering the cashless payment market via the QR code – backed by governments looking to engender a cashless society. Reasons for entry include the merits of circulating funds within their respective economic networks of services and locking in customers, as well as the opportunities of acquiring payment data with a wide range of uses, including analysis of customer behaviour, says **Deloitte**.

Payments are a key customer contact point for banks. Ever since Apple and Android introduced native scanners, QR codes have served to make this connection more immediate.

Digital currencies

The emergence of digital currencies – such as stablecoins and Central Bank Digital Currencies (CBDCs) – are also shaking up the payments space, by combining new currencies with decentralised payment systems. This is a development banks must keep abreast of.

According to **Axios**, 81 countries are already in the planning stage, or beyond, for CBDCs. Meanwhile, PayPal has already begun letting consumers use cryptocurrency to pay at millions of its online merchants – while Facebook's crypto project, Diem, is due to launch its US dollar stablecoins this year.

Digital currencies will have considerable implications for the financial sector. They have the potential to increase the speed of domestic and cross-border transactions, and even reduce transaction costs.

Countries racing ahead with their own CBDCs – such as China, whose central bank is now rolling out a **virtual version** of the yuan in trials across several provinces – are seeing cash use dissolve. A CBDC is also an effective strategy for a central bank to avoid losing market share to cryptocurrencies, and pursue negative interest rates (charge a fee to depositors rather than pay interest) during an economic downturn, notes a **Brookings** article.

A CBDC could, however, limit private sector innovations in digital payments. As such, the goal should be to offer **CBDCs as tokens** – on top of which the private sector can innovate in terms of using those tokens more effectively to intermediate payments between customers and businesses or between businesses and businesses.

Embedded finance

The point where non-financial institutions offer financial products, such as lending, insurance, and payments services, to their customers is known as embedded finance – and it is key to the story of the evolving payments space. Characterised by Buy-Now-Pay-Later (BNPL) schemes, the phenomenon is already disrupting both physical and online commerce business.

With credit card take-up declining among the younger generation, and an unserved segment of the population failing to meet credit thresholds, more high-value purchases are being made through BNPL – impacting both the non-interest and interest income of bank's bottom-line earnings.

The competition in this space is heating up. Between 2019 and 2020 the BNPL market grew from **$3 billion to $39 billion** – a stunning 1200% increase. This upward trend shows no signs of slowing down. The August 2021 '**Global Buy Now Pay Later Market Size, Share & Trends Analysis Report**', for instance, predicts the scheme's market size will reach $20.40 billion by 2028.

Providers of BNPL schemes are reaping the benefits of its growing popularity. Affirm, for example, is expected to hit **6 million users** later this year. AfterPay, on the other hand, is on pace to reach nearly **13 million**, while India's LazyPay had at least 75,000 new users join the platform every month throughout 2020 – and is now topping **30 million** users.

As outlined by **McKinsey**, there are several key market impacts of the rise of embedded finance:

1. Banks will be forced to embrace shared customer ownership and new distribution models for products and services. This new era of partnerships between financial providers, brands, and intermediary fintechs – such as Treasury Prime, Synctera, Unit, and Bond – will mean more low-margin, high-volume business for banks.
2. Financial players will need to develop new business models, such as pay-for-use monetisation, B2B2C and B2B2B distribution capabilities, and so on.
3. Banks will increasingly create bundled offerings, often white-labeled or co-branded services, that non-banks can use to serve their customers.
4. New technologies and capabilities will be required since embedded finance is distributed to clients via APIs.
5. All banks will have to build and maintain their embedded finance channel – which may become as ubiquitous as online or mobile banking.
6. The BNPL market could become dominated by a few big players. If this happens the financial players at the vanguard of the movement, technologically, will develop huge competitive advantages in the space.

In the UK, the BNPL movement is taking off. Bain & Company's recent survey estimates that approximately **10.1 million** people used BNPL in the UK in 2020, with the number of users growing by 70-80% from the prior year. Meanwhile, 54% of merchants in the UK reported having their brand exposed to new customers through co-marketing activities, and 76% of surveyed merchants in the UK said BNPL will be a key part of their growth plan over the next year.

Since the key to embedded finance is offering products as part of another transaction – i.e., the consumer is not undertaking a separate 'offline' sale – it is vital that banks stay in this mix.

Overlay services

Banks are also having to factor overlay services into their payments architecture, such as Request to Pay (R2P) and Confirmation of Payee (CoP).

Recognised by some as the missing piece of the global payments puzzle, R2P services are poised to play a starring role in the transformation of the UK and EU's payments landscape. Promising to reduce fraud, chargebacks, deliver better transaction data, and even act as a further catalyst for instant payments – the potential of R2P is transformative. What's more, by streamlining systems and processes, the scheme is also expected to reduce costs – **£1.3 billion saved per annum** in billing.

A recent **EBA Clearing questionnaire** – which surveyed companies from 20 countries, between September 2020 and February 2021 – found that 100% of businesses have an interest in using R2P, and would like to see it implemented across Europe. With applications such as point of sale (POS), e-commerce, e-invoicing and recurring payments, R2P is pivotal for banks to engender high market penetration and preserve margins.

Arguably an impetus for wider R2P usage is CoP – a process whereby the bank account and sort code number are checked against the name for the bank account into which funds are being paid. Although adoption remains underway, CoP will be a key milestone in the evolution of the modern payments universe.

03 | The complexities of running multiple payments silos

The number of progressive financial institutions that have been able to rid themselves of the shackles of their ‘90s infrastructure is small. Many traditional banks and other financial players are choosing to maintain ever-more complex or customised solutions and run countless in-house or outsourced payments silos – without considering the underlying systemic issues and spiralling costs that come with this approach.

The strategy persists due to short-term convenience, and the perceived challenges and costs of transitioning bank infrastructure. In the long-term, however, an institution’s ability to take advantage of the potential rewards from emerging payment schemes becomes limited – thus giving many of the more modern and agile fintechs a considerable competitive advantage.

Here are five key issues that traditional banks and other institutions will face if they choose to continue running heavily customised, multiple, in-house, or outsourced payments silos to support a modern payments franchise:

1. Time to market

The first issue with running legacy banking systems is that the time taken to build a new product into the offering is lengthy. Indeed, dated systems are inflexible, and struggle to incorporate new payments types at a competitive pace.

According to the FCA, nearly 50% of banks do not upgrade old IT systems as soon as they should.
Fintechs, meanwhile, have been able to scale up their payments services rapidly since they are not chained down by outdated core systems. Thanks to their agile architecture, they can respond quickly to shifts in the market and customer demand.

To compete with fintech firms, it is vital incumbents' in-house, or external, siloes are rationalised so that products can be experimented on, piloted, and proofed at greater speeds. Modern, agile methodologies will also have to be adopted, such as the DevOps toolkit, which will enable automation and the continuous delivery of products and value. By adopting this approach, and leveraging the computing power and speed and of cloud-native software, the time to market can be condensed, and banks can stay in the payments race.

Failing to increase the time to market can have dire consequences. In a 2018 **report**, Gartner predicted that 80% of legacy financial service providers would become extinct by the year 2030, unless they catch up with the digital revolution.

Once again, the story of addressing this challenge boils down to transitioning from a hefty mainframe application to a modular, cloud-based solution, with a service-oriented architecture (SOA).

2. Duplicated costs

The price of structural inefficiencies can run deep into a financial organisation – particularly when infrastructure, operations, maintenance, and compliance costs are duplicated across silos, instead of being centralised around a single platform.

As we have established, payments silos often arise organically as a financial institution grows. However, disparities between these technologies can create frictions within the business and drive up infrastructure costs. Compiled English-like computer programming language, COBOL, for instance – which was first invented in 1959 – is still used by many banks today. When institutions embed new layers on top of this code, costly and damaging outages are commonplace.

A siloed posture can also result in the insulation of data, impede information flow, and duplicate efforts. When all information comes with a price tag, and handling it incurs infrastructure costs, the maintenance of multiple payments silos is a sure-fire way to incur cost duplications. Streamlining payments channels into a single source is therefore necessary to alleviate the financial burden of infrastructure on financial institutions.

To ensure operational cost efficiency, meanwhile, payments platforms and information must be easily accessible by all departments, systems, and applications. If not, duplicated information can be maintained, or inconsistencies can develop. Without a single source of enterprise-wide information, considerable reconciliation and analytical challenges arise. Indeed, structural rationalisation is key to informed decision-making, gaining a holistic view of potential opportunities, and even collaboration. Once again, all payments siloes should be integrated to avoid duplicated operational costs.

A siloed IT setup can also duplicate maintenance costs. When payments siloes are not rationalised, a 360-degree view of the architecture is lost. This means engineers are obliged to work in an atomised manner, with an incomplete view of the system,

in order to ensure business processes run smoothly. The more payments siloes that exist within an organisation, therefore, the higher the chance of resources being duplicated in the pursuit to maintain them.

A dated and composite payments setup can duplicate compliance costs, too. Siloed payments processes make data governance an extremely challenging undertaking – particularly on a group-wide level. In such an environment, reporting originates from multiple areas, and must be pooled. Naturally, this impedes regulatory compliance and can multiply its associated costs.

Clearly, legacy and complex architectures – with multi-level infrastructure built over decades – are compressing profit margins from new payments systems, which might otherwise represent a healthy return for banks. Without a fully integrated and holistic infrastructure enabled by the cloud, countless efficiencies emerge, and profit margins are squeezed.

3. Systemic risk

Since many legacy systems are coded in languages developed several decades ago (and are no longer taught in universities) the management of multiple payments silos relies on a skillset that is becoming increasingly scarce on the market – and in turn, expensive to source. As the workforce ages, this introduces an unignorable systemic risk for incumbent banks.

According to a Financial Times **article**, 43% of US banks still use COBOL – the coding language devised in 1959. There are a few key disadvantages to using dated languages like COBOL:

- It is challenging to learn, and was not designed with the internet in mind;
- There is a shortage of human resources and limited training opportunities; and
- Legacy systems based on COBOL do not work well with contemporary programming languages or tools.

All these factors mean that running multiple, dated payments silos carries more systemic risk, as a strategy, than that of a modern, agile payments platform. The technology deployed by modern payments platforms is taught today – rendering these skillsets far more ubiquitous and accessible.

In 2017, Reuters ran an **article** which noted that "the stakes are especially high for the financial industry, where an estimated $3 trillion in daily commerce flows through COBOL systems. The language underpins deposit accounts, check-clearing services, card networks, ATMs, mortgage servicing, loan ledgers and other services." Outdated technologies are precisely what cause banks to fall behind challenger banks and fintech companies.

4. No access to real-time data

Furthermore, many older platforms do not support the real-time availability of transaction, customer, and operational data and analytics. This is a big disadvantage; upscaling data management is a key driver of systems upgrades and resilience.

According to **Fintech Weekly**, if traditional banks can transform their organisational model and technologies to better match the rapidly changing market, it will help them build a system with better access to user data, and consequently, a better understanding of their customers' needs and behaviour. With such insights, financial players can continuously evolve, and earn higher retention rates through the supply of innovative payments products.

Once again, a vast gamut of real-time information is the bedrock of fast, seamless, and personalised payments services. In the cloud, artificial intelligence (AI) can provide fresh analytical approaches – including how information is used – with greater automation and fresh solutions.

Access to real-time data is also useful when it comes to credit and fraud risk. Multiple payments silos and no real-time linkage or detailed customer view, means banks' systems are more exposed to fraud and misuse. To stay ahead, it is important firms can analyse all available payments data, in real time, and leverage AI and machine learning (ML) tools to differentiate between legitimate and illegitimate activity.

Actionable insights taken from real-time fraud profile analysis can also lead to complex, holistic, and predictive analysis of customers' behaviour – generating consistent and tailored payments services.

5. Elasticity

Finally, older architectures are not as open to distributed deployments or sudden increases in business volume. Scale has to be planned and paid for well in advance and represents wasted investment when not used.

Legacy systems also do not allow business modelling or deployment of individual services in a specific region or territory, for compliance with regulation or to meet new business needs.

This inability to adapt at speed perpetuates friction, breaks customers' trust, and, at worst, will prompt an exodus to alternative payment providers, such as fintechs and neo-banks.

04 | The advantages of adding new services with reusable technology

The risk of 'doing nothing' is not one many bank chief innovation officers are willing to shoulder for long. Fortunately, there are tried and tested means to update existing systems. Cloud and API enablement hold the keys to digital payments transformation.

According to an Ernst & Young **report**, 40% of banks currently spend 10% or more of their IT budget on public cloud strategy. One to three years from now, 66% expect to do so. A third of banks expect to spend more than 20% of IT budgets on public cloud in future – up from 20% now. This rising trend comes down to the fact that cloud technology can transform an institution's operational efficiency, by circumventing the need for infrastructure investment – thus avoiding the duplicated costs issues explored earlier.

Furthermore, by selecting a platform with highly flexible cloud-native technology, modern payment schemes can be enabled at speed – thus dramatically reducing time to market.

The transition, however, need not be daunting. By following a phased, agile approach – and introducing the new system alongside the legacy one – financial institutions can upscale step by step, service by service, and transaction by transaction. This approach enables firms to gradually scale down investment in their older platform, scale up investment in new services when convenient, and shift across skills and knowledge in a measured way.

By following this trajectory, the gap between existing systems and modern services – namely, real-time transactions, cloud-based services, and API enablement – can be bridged easily. Powered by newfound real-time data, easy integration into the

existing ecosystem and marketplace is enabled, for a 360-degree view of customers, accounts, transactions, as well as the extension of hyper-personalised services.

The new platform acts as a payment services hub that:

1. Seamlessly processes transactions
2. Keeps pace with regulatory compliance
3. Enables the rapid configuration of new payment offerings; and
4. Orchestrates transaction flows across multiple systems.

But what other headline advantages lay in wait for banks willing to make the jump to the cloud?

Best-of-breed products

By leveraging an API-driven micro-services architecture, existing systems are pulled together, with future-ready options. These ecosystem partnerships, on common, cloud-native architectures ensure critical operational components can be modernised with cost effectiveness. Herein lies the technological elasticity, discussed earlier, that is so lacking in heavily customised payments silos.

What's more, per-transaction processing costs are brought down, straight-through-processing rates are boosted, and manual repairs and reconciliations become few and far between.

This architecture is also the key to re-use, as services can be swapped in and out with little development resource needed. If services are built according to modern cloud-native principles, the payments platform can consume 'best of breed' products, such as AI-based fraud detection, as well as new authentication services like facial, voice or iris recognition.

Bypassing dependence on vendors

While cloud-native platforms can provide considerable cost benefits, organisations should not simply replicate the infrastructural complexity of their previous architectures. Consolidation of in-house silos will circumvent institutions' dependence on multiple vendors and provide the ability to reuse certain components or services – such as validation, authentication, authorisation, and fraud and risk routing.

Ideally, this is all, orchestrated via a single, smart, and adaptable platform that can perform multiple payments services and support multiple payment schemes.

This is just one of the ways systemic risk, mentioned in the previous section, can be lessened by moving into the cloud.

Compressing the compliance timeline

Another pro of cloud-native architecture is that it shrinks the compliance timeline – a resource-heavy and costly enterprise for financial players of all kinds.

According to the **International Banker**, tier one banks spend over $1 billion per annum on compliance – with some commentators suggesting this figure could double in the near future. With the necessary staffing for compliance commitments doubling in the last five years, this figure accounts for more than 10% of most banks' operating costs. Fortunately, next generation payment platforms shoulder the technical burden of regulatory updates – allowing banks to double down on activities that drive revenue.

Designed to run smoothly during busy hours and respond to operational changes, a modernised payments platform is as reliable as it is scalable – allowing organisations to be agile when it comes to processing capacity, and scale horizontally or vertically, with little to no performance impact.

Clearly, cloud-native modern payments platforms have the potential to future-proof financial firms across the board – and can respond to changes in not just regulation, but new payment schemes, types, and channels. This is a transformative technology that banks should exploit today for business growth, increased efficiencies, and enhanced payments services.

05 | The features of a best-in-class cloud-native single payments platform

With the benefits of cutting edge, reusable micro-service technology established, it is time to address which key features institutions should seek, when on the market for a new, modern payments platform.

For a best-in-class service, banks should ensure the platform is:

1. Built on a cloud-native architecture

Geared for the new age of payments, cloud native solutions facilitate lower provisioning, lower infrastructure costs, elastic deployment of content, faster updates, and global scaling.

2. Continuously deliverable

Effective DevOps features ensure the platform is continuously upgraded and supported by continuous deployment methodologies and dynamic testing facilities. DevOps principles can also be leveraged to enable a salad of microservices to empower business agility as well as to ensure compliance.

3. API-integrated and dynamic

All future-proof payments platforms should be API-enabled, to ensure banks can develop new services at speed, connect with partners in the new payments ecosystem, and deliver innovative services to their customers.

This ability to cope with changes in the market, via configuration, and at a low cost, is vital. Tooling should provide new payment scheme connectivity, and take advantage of standards like ISO20022, Open Banking APIs, and RESTful, in an agile, automated environment, with the ability to scale up (and down) business connections and resources independently to meet demand.

Robust API functionality also enables a smooth migration path, and seamless integration with existing and future applications.

Business logic, meanwhile, should be able to be configured, re-configured, and turned off and on via a smart operator-controlled function. In the event a new or updated service has issues it must be switched out quickly – while business processes continue – until the issue is resolved.

4. Reliable, secure, and resilient

Given the current macroeconomic climate, and the rising demand for an uninterrupted, real-time, payments experience, financial players must be able to offer 'always-on' services. From a technological perspective, this means deploying a platform that enables a 24/7/365 round-the-clock processing, and leverages IT resources efficiently.

'Always-on' services are vital today. According to a study from LexisNexis Risk Solutions, failed payments are estimated to have cost the global economy **$118.5 billion** in fees, labour and lost business in 2020.

The platform must also be distributed with the ability for a real-time failover for a component, an entire system or even an entire datacentre.

5. Informative and reactive

Modern platforms have the advantage of many tools and metrics, thanks to their infrastructure. Service and platform issues can be quickly flagged to the appropriate business, operations, or technical support teams for immediate resolution.

Secure, encrypted data can be streamed in near real-time to the appropriate analytical platform – typically an Elasticsearch, Logstash, and Kibana (ELK) stack. Customer data, meanwhile, can be made available instantly to both the consumer and the business teams – enabling a reduction in fraud and an improved service capability.

06 | Conclusion

While initially cautious to embrace cloud computing and the API revolution, financial players' attitude toward this transformational technology is beginning to soften. For some banks, it hails the endgame of payments transformation.

Three factors underscore banks' increasing adoption of reusable, cloud-native payments solutions:

- First is the need for infrastructure renovation. Customer and business' demands for immediate payments – alongside the competition from fintechs that are more easily able to meet them – means banks need architectures built around quickly deployable services.
- Second is the need to assume an agile stance to support emerging mobile and digital payment types, and brace for the constantly shifting world of commerce and compliance.
- Third is the need for financial institutions to deliver disruptive payments systems – such as P2P, BNPL, and so on – at speed.

It may be imprudent to view this upheaval of legacy systems as a purely IT-related preoccupation. At its core, the payments renaissance is a business opportunity. Financial organisations can no longer hope to transform their technology stack triennially – changes on the horizon must be provisioned for today, in order to retain market share. Time and time again, transitioning to a modern payments platform – supporting scalability, flexibility, and automation – seems to be technology's best answer yet to the challenge.

This new paradigm – in which firms are turning their back on punchy, in-house payments processing silos – is where the road starts to fork. For banks, choosing the right path will be the difference between growing or losing valuable revenue.

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