A RESEARCH PAPER FROM FINEXTRA IN ASSOCIATION WITH FISERV

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PAYMENTS TRANSFORMATION: JOSTLING FOR POSITION IN THE NEW DIGITAL LANDSCAPE

Finextra

01

FOREWORD

– EVOLUTION OF THE PAYMENTS MARKET

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Over the last few years, when discussing the payments market with bankers around the world, a shift in viewpoints has played out.

Many did not initially see the need to move money faster. They cited the fact that their customers had not asked them for it and were also certain their customers would not be willing to pay for it. In any case, they said, the industry was moving too slowly so they would simply wait and take care of other priorities. These views are now, in most markets, firmly in the minority.

At the other extreme, some, in the last few years, have almost been too eager to point to the latest distributed ledger technology (DLT) proof of concept as the next step in the complete redevelopment of domestic and international payments. The expectation has been for those with these views that banks around the world will invest in leading edge technology to create the network effect required to enable low cost, ubiquitous, sustainable exchange of value. Some of the views expressed have even started to go along the lines of 'drop any investment in existing systems and forge ahead with the new.'

As a way to reconcile these two viewpoints, we can turn to the writings of a well-known futurist, Roy Amara, who coined the phrase: "We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run." With the discussions around these viewpoints, we have a well-played path of how markets evolve.

In today's payments market both views are likely to be wrong. Taking no action will lead to an underestimation of the long-term impact of changes, and the hype around these types of new technologies will turn to realism as real-world projects test the mettle of the technology.

Finding the right path for your organisation can be challenging. Fiserv, with its full range of payments and banking solutions can help you and your customers navigate the evolving payments market.

This fourth edition of the payments survey gives us the opportunity to look at not only the current views but also examine the underlying trends in the payments market.

CHANGE IN NETWORKS IS HARD

The payments market is, by the very nature of payments, a series of networks. From the conventions adopted around the first cheques to the standards used in the latest instant payments market infrastructures, every party must agree to adhere to the agreed common practices. Once developed and operational, it can be very difficult for a payments network to evolve and it can become easier for innovators to create services on top of old infrastructure than for the industry to fix the underlying problems. We see this happening in a number of domestic markets and internationally.

Some of the challenges that this year's survey highlighted will look familiar to most:

- 78% of respondents see their core banking system not being real-time as an obstacle to adopting real-time payments
- 67% of respondents see bank operations not being 24x7x365 as a barrier
- 61% of respondents cite the lack of their central bank operating 24x7x365 as a barrier

Given that these challenges impact each individual organisation, if you multiply this view by the number of endpoints in a network, the scale of the challenge is more apparent.

OPPORTUNITIES IN REAL-TIME

Real-time / instant / faster payments has been viewed as important right from our first edition of the survey. Increasing levels of comfort with building the business case are evident.

- 84% of respondents see the advent of real-time payments as providing a way for their bank to remain competitive
- 83% of respondents agree or strongly agree that real-time credit push payments will be available at the point of sale within three years

Industry initiatives to standardise the point-of-sale presentation of a credit push-initiated payment, show the translation from theory to reality for many of the new capabilities of real-time and instant payments.

With respect to SWIFT global payments innovation (gpi), there is some scepticism, with only 46% of respondents agreeing or strongly agreeing that SWIFT gpi will help them remain competitive in cross-border payments. SWIFT gpi is unable to address all the international payments requirements, though viewed as an important beneficial initiative by many.

LEGACY – THE LABOURS OF HERCULES

This year's survey is consistent with previous years in what have emerged as the continuing changes faced by financial institutions as the payments market evolves:

- 76% of respondents perceive competition to be driving improvements in service and pricing
- 88% of respondents cite that "existing bank systems, processes and infrastructure hinder the competitive response of banks"

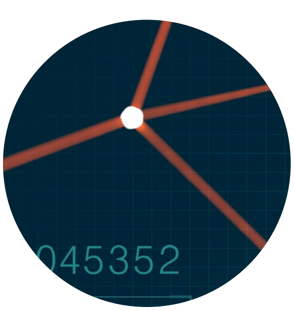
HOW WILL THE HYPE PLAY OUT?

Blockchain/DLT technologies arrived on the banking/payments scene several years ago with quite a fanfare. For some it was trumpeted as the technology that would take over the world. There have been many successful proof-of-concepts but significantly fewer industrial-scale applications adopted widely.

The survey this year asked the question to what extent individual lines of business within financial service would be impacted by the advent of DLT.

Trade finance was considered to be the market that was most likely to be disrupted by blockchain/DLT (72% of respondents), with Securities and Asset Management falling second and third respectively. International and Domestic Payments ranked bottom of the list with 51% and 36% of respondents respectively.

While the promise of DLT technologies is significant, the real world implications need to be worked through. Many early efforts have picked particular payment corridors, currency or banking pairs. While demonstrating the concept, these efforts alone are unlikely to create the network effect needed in payments. In addition, any new capability, while perhaps technically superior, needs to demonstrate a significant improvement in existing processes and outcomes. With little room for vast improvement in domestic payments and a significant mountain to climb in international payments, wide-scale industrial adoption currently looks highly challenging.



Beyond doubt, payments domestically and internationally are significantly changing. This change is gaining pace as consumers, small businesses and corporates see the advantages of putting the bank account at the centre of their payments activities. Industry initiatives such as SWIFT gpi will help provide banks with another way to counter the competition that has been developing on the back of the existing payments market inefficiencies. The industry is also trying to address payments infrastructure limitations, but this is complex and will take longer than many anticipate. However, the more adept and progressive financial institutions are starting early to leverage the new payments capabilities.

> **“The more adept and progressive financial institutions are starting early to leverage the new payments capabilities.”**
>
> TREVOR LAFLECHE, DIRECTOR PRODUCT MANAGEMENT AND MARKETING, ENTERPRISE PAYMENTS SOLUTIONS, FISERV

02
INTRODUCTION

The world is moving ever faster. The willingness of consumers and businesses to tolerate any delay or inconvenience is rapidly approaching zero. Fintechs are entering the market at record pace with a focus on taking profits from any inefficient market. The banking industry is starting to move. From the rapid rise of instant payments to SWIFT gpi, banks are forming a competitive response to these market forces gaining market and mind-share.

So how far has the industry come and what challenges remain? This is the fourth research paper from Finextra, in association with Fiserv, on the state of the payments market and the competitive challenges and pressures. It focuses on the challenges banks face in building intelligent experiences for their corporate and retail clients to meet their increasing expectations of speed, seamlessness and security.

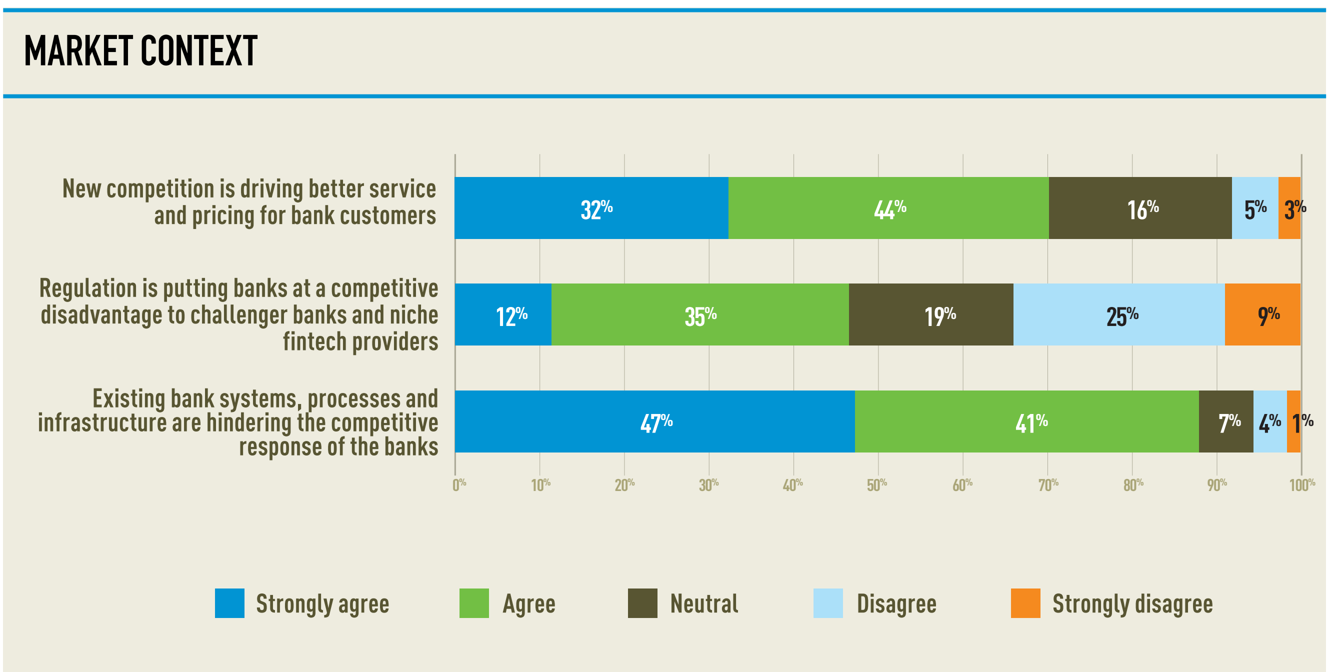
The survey sets out the various aspects of banks transitioning to meet the opportunities and challenges of the 'faster / instant' world; the market context (new competitors, new regulations, operation and technologies) with which the banks are contending, the key issues around instant payments and building of business case to support the investment required. This information is supplemented by a look at what's happening with blockchain and distributed ledger technology.

The research was undertaken in September 2018 and is based on a survey of over 100 financial services professionals from around the world.

03
MARKET CONTEXT

As Chart 1 shows, the survey respondents overwhelmingly agree that the introduction of competition to face-off against established providers of transaction services is a welcome development. The promotion of effective competition in an open and transparent manner is a core tenet of regulation and oversight.

CHART 1



Past regulation often focused on the introduction of tighter controls and governance of the established banking industry, but since 2008 and the financial crash there is a new mindset. The introduction of the Second Payment Services Directive (PSD2) within Europe, and similar initiatives in other countries, encourages the emergence of new, regulated providers of a range of payment and transaction related services and products.

Respondents overwhelmingly agree that the introduction of competition to face-off against established providers of transaction services is a welcome development. The promotion of effective competition in an open and transparent manner is a core tenet of regulation and oversight.

The objective of these new regulations is manifold, i.e.,

- to provide new services and improved customer experience in an increasingly inter-connected, digital age;
- to enable greater competition between banks on product, service and price and to generally disrupt the traditional bank business models;
- to allow new entrants (both banks and fintech companies) to enter the market;
- to afford more choice to bank customers and offer greater protection.

The successful effect of the continual introduction of regulation and the challenge of new entrants to improve services to bank customers is reflected in the survey responses.

However, for many of the established banks there is a dichotomy. For some, regulation is seen as a heavy-handed and costly overhead. New entrants, specifically the so-called challenger or digital banks, are seen to gain competitive advantage.

The challenger banks are encouraged to compete with the traditional providers in a more open and accessible market. In a new age of banking, consumers are attracted to the increasingly digital, customer-centric led services of new entrants who target the more profitable areas of traditional sources of bank revenue. This more agile approach and new, tiered forms of regulation allow them to compete in niche areas while there is a sense that established banks must adhere to the highest levels of scrutiny and oversight. This is seen by almost half of respondents as a competitive disadvantage to established banks.

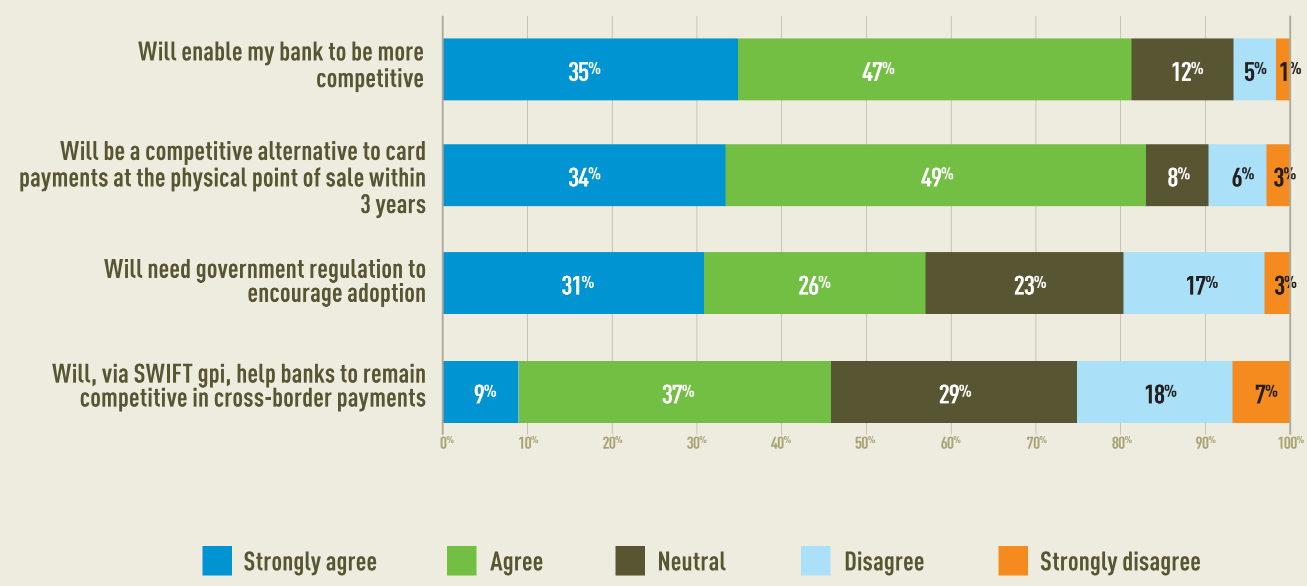
In all this, it is clear that the infrastructure and processes of the main banks have grown over decades, often to a point where aspects of it are outdated and represent a significant hindrance to transformation for them. Inflexible legacy platforms make it difficult for banks to become more agile in their approach to processing and innovation in a highly competitive industry. Core banking systems and infrastructure govern every major bank process and while they are robust, built for scale and central to how they handle day-to-day operations, respondents agree outdated core systems are a barrier to responding to competition and customer expectations.

04
REAL-TIME / INSTANT PAYMENTS

In a previous survey prior to the implementation of PSD2, we highlighted the challenge banks have in meeting the needs of increasing regulatory requirements, and the dual effect of competition offering greater consumer choice. At the time, the trend toward real-time or instant payment schemes was growing and has continued to do so around the world. There are many variants to these schemes but what's clear from the survey is their competitive opportunity, as illustrated in Chart 2.

CHART 2

REAL-TIME / INSTANT PAYMENTS



Access to these schemes is no longer the domain of established banks. Challengers and non-bank payment service providers can connect directly to the schemes. Regulation removes the need for them to rely on a commercial bank to sponsor their membership, hence they settle directly with the Central Bank.

The business case and return on investment is difficult to construct and in many cases the growth of the immediate movement of monies is led by government-steered regulation and supported by industry momentum such as national clearing houses.

The provision of a faster payment service by new entrants to financial services is often seen as a core offering upon which to make use of a range of developing overlay services upon which to differentiate on price and value to their customers.

Of equal standing is respondents' thoughts on the future of card payments. Their belief is that faster payments will be a competitive alternative to the use of card-based payments at physical points of sale. All within a three year period. There are several thoughts supporting this view.

The ease of using faster payments in store or online, the potential lower fees for merchants and the speed of settlement could result in lower levels of card transactions. Customers might prefer the use of direct, immediate payment and settlement of purchases. It is felt there is further disruption in this sector as a consequence of the adoption and growth of faster payments.

But what encourages adoption of faster payments? Over half of the replies to the survey state that government regulation is needed to encourage faster payment services. Equally, a quarter declared neutrality. The business case and return on investment is difficult to construct and in many cases the growth of the immediate movement of monies is led by government-steered regulation and supported by industry momentum such as national clearing houses.

A substantial number of banks have adopted SWIFT gpi and its aim is to allow them to effect cross-border payments at high speed, timed in minutes or even seconds. By 2020 SWIFT predicts gpi will be the standard for all cross-border payments using their network. It is a major industry initiative led by SWIFT and supported by many global banks.

Yet replies to the survey do reflect a high level of indifference at the current time. Just over a third agree it will be a competitive contributor in handling cross-border payments but over a quarter were indifferent and close to 20% disagree with the statement.

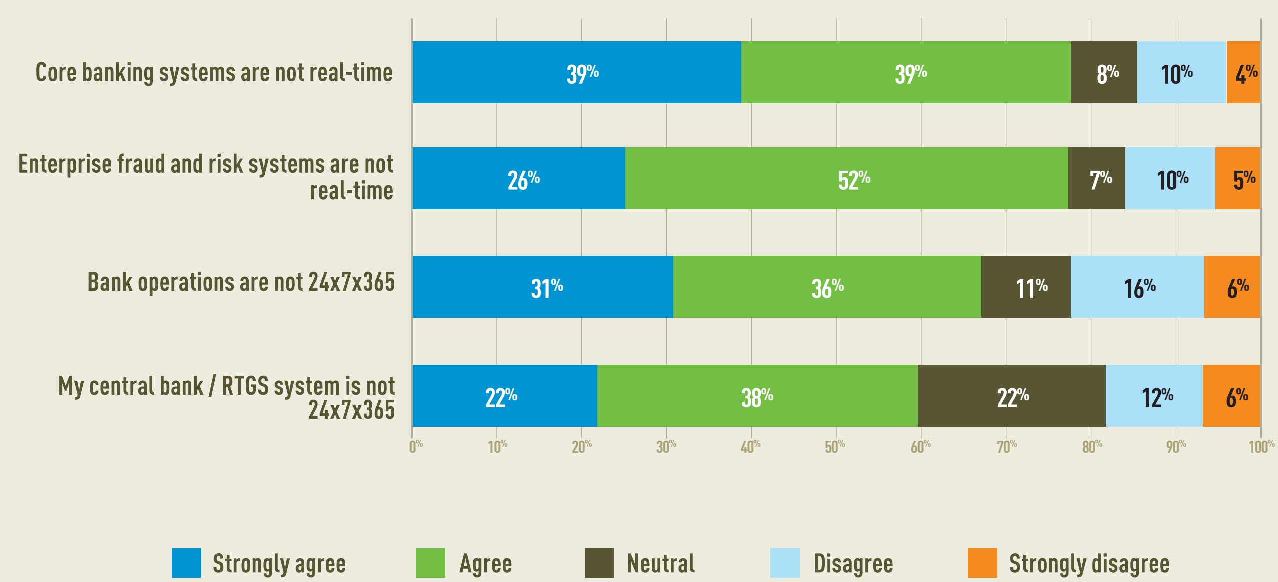
The deadline of 2020 may drive a lack of urgency and adoption but other factors may also be present- the investment case, the impact on their technology infrastructure and other more near-term mandatory initiatives.

05
DEALING WITH 'FASTER'

Many traditional core banking systems of banks do not operate in a real-time environment and, as Chart 3 below shows, 80% of respondents agree that this is a barrier, half of them strongly. In many banks the core banking architecture is a development over time, decades in many cases, based on design and applications that do not naturally lend themselves to competing in a highly overcrowded industry.

CHART 3

TO WHAT EXTENT DO YOU AGREE THAT THE FOLLOWING ARE BARRIERS TO BANKS MOVING FASTER / 24x7x365



This, at a time when customer demand, competition and the emergence of new technologies demand improved services and banks look to reduce processing costs and overheads. Without modernising their infrastructure banks will struggle to compete.

A strong consideration also is the emergence of faster payment services in a rapidly changing digital world. It has had a disruptive and beneficial effect for customers and financial institutions who provide payment services. But as monies move in real-time, so must all the procedures, compliance, risk and governance checks and controls. There has to be alignment across the end-to-end capture, processing and settlement of transactions.

The level of attention this merits is reflected in the replies to the survey. A high proportion of respondents acknowledge the lack of comparable real-time deployment of enterprise fraud and risk systems, and this has the potential to expose payment providers to risk and fraud with the resultant impact on financial penalty and reputation.

Two thirds of replies highlight the lack of round-the-clock bank operations. This stifles innovation and, as referred to in other responses, impacts banks' ability to compete. System use, and access, is increasingly needed 24x7 to meet the growing preference of customers to manage their banking affairs digitally and outside traditional bank hours. Again, banks are looking to alternative system solutions and suppliers to modernise their architecture, to:

- compete and operate more effectively within their organisations;
- accommodate demand for digitally driven services, and
- head off competition from disruptive competitors.

The extent to which central bank and RTGS systems are not operative full time is also a concern for two thirds of the respondents. Quite what the future direction of these global gross settlement systems is remains to be seen but they are viewed as barriers to banks moving faster, real-time 24x7x365.

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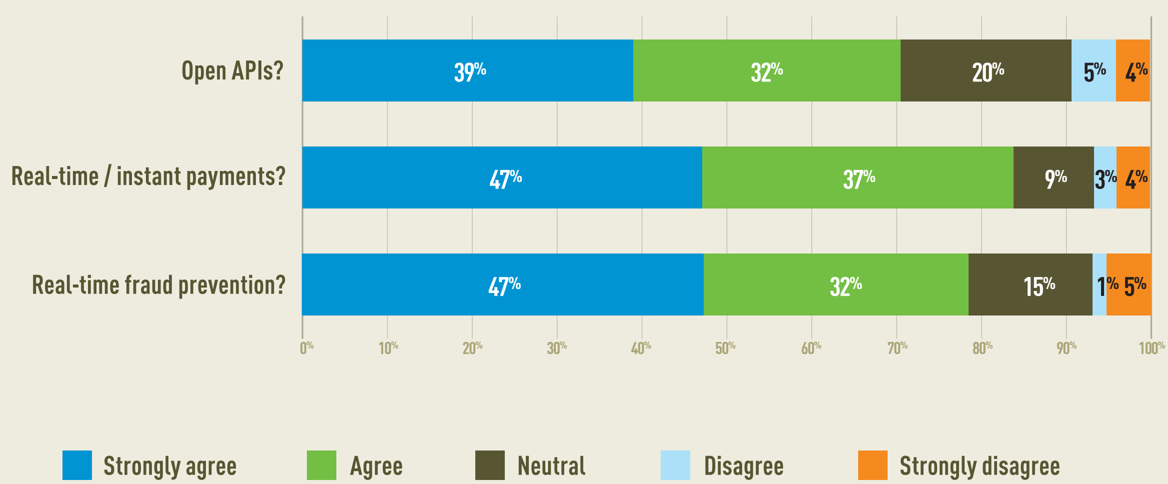
06
BUSINESS CASE / INVESTMENT

A compelling business or investment case is a pre-requisite for accessing the change budgets of any organisation. It has been the case for many years that the bulk – often circa 80% – of banks' technology change budgets are taken up by mandatory / regulatory / compliance developments leaving little left for new products and innovation.

CHART 4

TO WHAT EXTENT DO YOU AGREE YOUR BANK HAS A COMPELLING BUSINESS CASE TO INVEST IN



The respondents agreed they would have access to funding for mandatory initiatives such as the implementation of regulatory projects such as Open Banking and real-time payments. Furthermore, both these initiatives have a supportive competitive aspect in that the respondents' respective markets are adopting instant payments and open APIs as standard offerings – in terms of customer expectation, a bank unable to provide such 'vanilla' services would struggle to compete.

The arguments for gaining access to funding for the enhancement of real-time fraud prevention systems are different, but responders believed themselves well capable of making them. With the global cost of cybercrime estimated at $600bn in 2017 and the exponential growth in real-time payment volumes in many countries, it is difficult to envisage that any senior bank stakeholder would not be supportive of bolstering the bank's defences against real-time fraud. This statement holds, irrespective of the area of responsibility – e.g. the Heads of Retail and Commercial Banking, Risk and Compliance, Operations, Public Relations.

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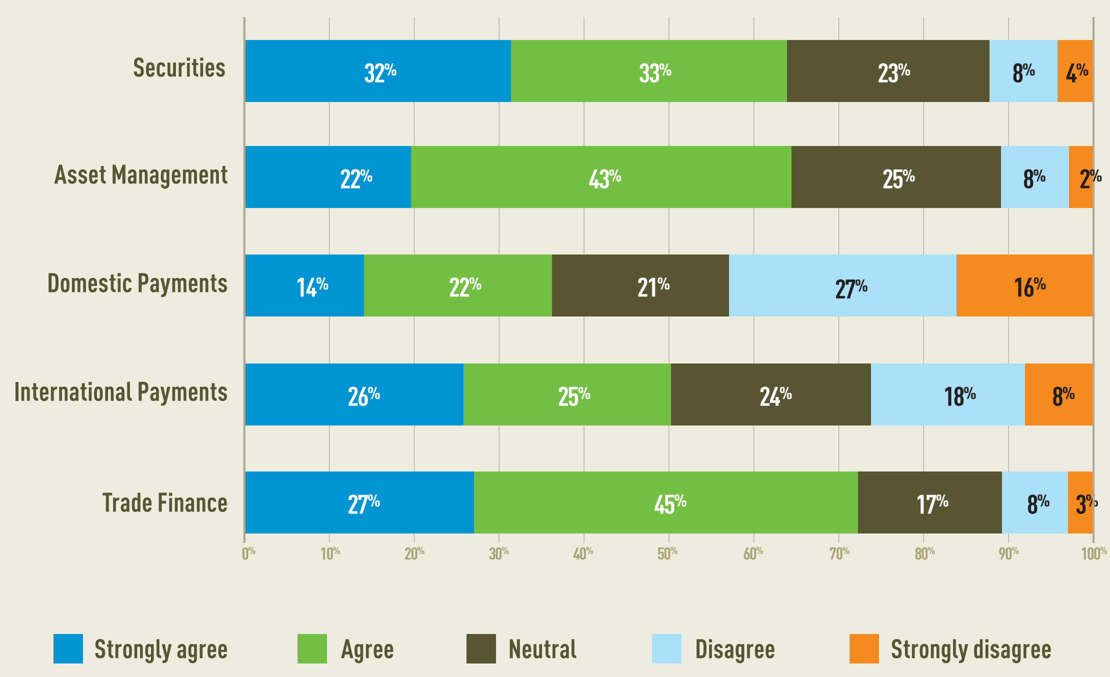
07 BLOCKCHAIN / DISTRIBUTED LEDGER TECHNOLOGIES (DLT)

As Chart 5 below shows, market sentiment on this topic is divided between industry verticals or markets where it is believed that DLT has a role to play – i.e. Securities, Asset Management and Trade Finance – and payments, where it seemingly does not.

CHART 5

TO WHAT EXTENT DO YOU AGREE EACH OF THE FOLLOWING FINANCIAL SERVICES VERTICALS WILL BE DISRUPTED BY BLOCKCHAIN/DLT INITIATIVES IN THE NEXT 3 – 5 YEARS?



The prime differentiator between the two is that the use cases around Securities, Asset Management and Trade Finance are based on the involvement of multiple parties both inside and external to the banks. For example, transactions in the Securities market involve buying and selling by clients, their bankers, their brokers, clearing houses and a variety of centralised securities depositories.

Similarly, trade finance and its associated supply chains, also involve multiple players – buyers and sellers, their bankers, logistics companies, manufacturers, certifiers, etc., where there is significant post-trade activity with multiple ownership and transfer of assets, and exchange of documentation.

For these examples, the ability of DLT to provide, to each of the parties involved, a highly secure and auditable 'single view of the truth' both currently and historically, is a key advantage. This removes the need for each party to maintain their own records, reconciling against the similar own-use ledgers of other parties, investigating any discrepancies.

Cue development of DLT-based solutions such as the Singapore-based GeTS Open Trade Blockchain Platform, a blockchain based platform focused on cross-border trade between ASEAN nations and China. Similarly, the securities industry has seen:

- the launch of the DLT-based SIX Digital Exchange (SDX) by the Swiss Stock Exchange;
- Blockchain based solutions implemented by the Australian Stock Exchange (ASX) for post trade processes, and the new platform of Turkey's national stock exchange, Borsa Istanbul.

Use cases around domestic and international payments, however, are different and don't lend themselves so naturally to DLT-based solutions. Payments are by their nature transitory and in many cases immediate and, unlike trade and securities transactions, are not 'entities' that evolve over time having pre-, current and post- states – all of which need recording in an easily auditable way.

The fact that DLT-based solutions are not seen as appropriate to many use cases within financial services is demonstrated by Chart 6. This shows that roughly a third of respondents are planning to launch a DLT-based service in the next 18 months, a third are not, whilst the other third are undecided.

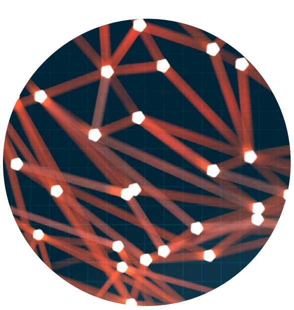
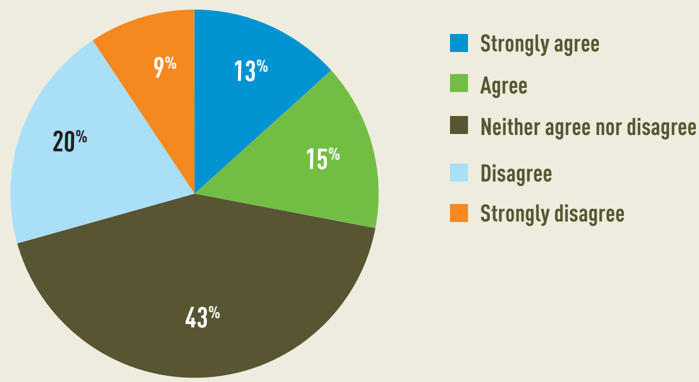


CHART 6

TO WHAT EXTENT DO YOU AGREE WITH THE FOLLOWING STATEMENT; MY BANK IS ACTIVELY PLANNING TO LAUNCH A BLOCKCHAIN / DLT CONSUMER OR CORPORATE SERVICE IN THE NEXT 18 MONTHS?



In order to compete with these agile new entrants as well as meet the fast-evolving needs of their customers, banks must get to grips with making their core, legacy platforms capable of playing new tunes.

08 CONCLUSION

Overall, the survey results paint a picture of a banking industry that has embraced many aspects of moving to the 'faster / instant' world. However, as competition drives banks to offer new services and the effect of regulation begins to gain traction, the businesses of the traditional banks will be subject to perhaps unprecedented levels of change and challenge from new market entrants – both new entrant digital banks and fintech companies.

In addition to greater levels of competition driven by regulations, banks are also faced with meeting the fast-changing needs of increasingly tech-savvy customers to whom instant and device-agnostic services are an expectation rather than a bank differentiator.

In order to compete with these agile new entrants as well as meet the fast-evolving needs of their customers, banks must get to grips with making their core, legacy platforms capable of playing new tunes. There is a need to modernise traditional core banking platforms and applications but knowing how to do so is a challenge.

Transforming from the past to the future is essential. Determining how to migrate and manage risk is crucial in a world where any form of outage or disruption to service is instantly communicated globally through social media; where fiscal penalties imposed by regulators are high and the damage to reputation both significant and immediate.

There are modern solutions enabling banks to simplify their payments infrastructure and meet the demands of their payment strategy. This should be established first to drive the digitally driven transformation of the bank and the resultant decisions to improve its technology infrastructure and business model.

Transformation of the core technology will result in improved efficiency with the resultant reduction in cost. Equally it is the platform on which to innovate and compete. Once their core has been secured, banks then have a gamut of products and propositions available to them from specialist fintech suppliers, all accessible via open APIs.

By working with fintechs through open APIs, banks can achieve step changes in their products and services in areas such as mobile banking, as well as assistance with resolving areas of concern internally, such as KYC, real-time fraud prevention and new capabilities based on data analytics. Indeed, to innovative strategically minded banks, open APIs provide the answer to meeting many of the demands of the faster, more instant world.

As regards blockchain / DLT, it seems that the markets and use cases where this new technology has a key role to play have already been evaluated and identified. Various initiatives are either live at this time or are planned for the near future in the verticals of Securities, Asset Management and Trade Finance.

> **"A challenge that is rapidly becoming the elephant in the room is that, as you move to 'real time' and there is an expectation of real-time information from the customer, this puts continued stress on the legacy platforms that banks have in their core."**
>
> **KEVIN BROWN, INDEPENDENT NON-EXECUTIVE DIRECTOR AND ADVISOR**

10 ABOUT

Finextra

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