

GLOBAL
PAYMENTS
INNOVATION
JULY 2022

PAYMENT INNOVATION:
MYTHS AND REALITIES

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EXECUTIVE SUMMARY

Every few years since 2008, a Payments Innovation Jury has been convened to investigate how innovation in payments really happens, and what turns clever ideas into commercial success. In the payments industry there have long been competing ideas on what will be the 'Next Big Thing'. Indeed, the entrepreneurs and investors who can decode the DNA of payments innovation are in a very powerful and privileged position. However, many good ideas fail to achieve the scale to operate economically. The Global Payments Innovation Jury of 2022 comprises of industry leaders from around the world who are prepared to share their views on which innovations will most likely be successful. This Jury has broken new ground, because it includes views from not only major investors in payments companies but, in a highly significant development, several regulators and public policy organisations. Regulators play an increasingly important role in the evolution of the payments industry and we are delighted that so many decided to join the 2022 Jury.

The research looked at areas of payments innovation where sweeping claims are frequently made, and the Jury gave their views on the credibility of these claims. The 79 Jury members, drawn from all five continents and all major industry stakeholders – established financial institutions, fintechs, national payments operators, investors, and regulators – gave their views on five areas:

- Whether the rise of new payment types such as mobile money and real time account to account payments will lead to the development of new dominant payment forms
- Whether and how Central Bank Digital Currencies (CBDCs) will increase innovation
- Which of the large number of regulatory and market initiatives to encourage fintechs to participate in payments are most successful
- The value proposition and future role of Buy Now Pay Later (BNPL)
- The real value of payments data and the organisations most likely to successfully exploit it

The Top Findings of the Jury

- The market share of real time A2A and mobile money transactions is expected to increase steadily over the next five years. However, for real time A2A, the dominance of the card model in developed countries is going to be hard to shake and the lack of a sustainable income stream for participants calls the business case into question. For mobile money, the major challenge to overcome is regulation, which, although invariably well-intentioned, can easily damage the business case for widespread adoption.
- The card model has the opposite problem of real-time A2A to overcome in many markets - the fee structure which usually favours financial institutions to the detriment of merchants keeps attracting regulatory intervention. Although the card model has the very real advantage of having solved the problems of interoperability and dispute handling that new payment types have yet to satisfactorily address, it seems that the continued growth of card payments will be harder to achieve than in the past.
- Almost all national governments now have policies to allow more new market entrants to encourage innovation. Furthermore, most payments regulators have introduced regulatory frameworks to facilitate this by creating payment institution licenses with lower regulatory capital than full-service banks. In terms of which initiatives regulators should prioritise to promote innovation, the establishment of these licenses was seen as most effective.
- Open banking is also becoming more widely available but, in some countries, it has been left to market participants to develop, which tends to result in lack of standardisation and slower overall progress.
- Banking as a Service is developing fast as a way for non-banks to offer payment/financial services more easily to their customers. Hopes that traditional banks would benefit seem largely misplaced, as it is a new generation of specialist platform providers that are leading the charge.
- BNPL usage is set to increase in the short/medium term because of strong benefits for consumers and merchants. However, credit losses are viewed as likely to increase significantly, and the sector is certain to lose its unregulated status in many major markets. Therefore, the rapid expansion is seen as a short-term phenomenon rather than a long-term game changer.

- The introduction of CBDCs is seen as highly likely in most markets, although in very different timeframes. Fintechs are believed much more likely to benefit from CBDCs than traditional banks, who may well experience significant negative effects. The Jury was not convinced that there is market demand for CBDCs and also highlighted the significant technology costs associated with deployment. Essentially, the Jury believes that CBDCs will happen, but it is not clear that there will be tangible benefits for much of the industry nor end users.
- Payments data is still not being utilised to its full advantage, despite being seen as a potential game-changer for many years. Fraud reduction is still seen as the major use of data for most industry players - the business case is very clear. The use of payments data for marketing and cross-selling purposes is becoming increasingly difficult due to regulatory restrictions on the use of personal data. This is leaving the field largely clear for a small number of global bigtechs who have better technology and a different business model than conventional payment providers.
- On a regional basis, Asia continues to lead the global charge on payments innovation, with high profile initiatives such as Alipay and WeChat Pay in China, UPI in India and Gojek in Indonesia. It is fascinating that for the second time, Africa comes out ahead of the USA and Europe, despite traditionally having much lower levels of investment. More recently, the continent's entrepreneurs have been attracting more attention from major investors and unicorns are now rearing their heads across the continent.
- In terms of likely winners and losers, the Jury picked real time A2A and mobile initiated payment as the innovations most likely to create significant benefits for users. And, notwithstanding the challenges in making good use of payments data, the Jury felt that data-centric businesses that were successful would be the most likely generators of outsize returns. The two areas where the Jury felt that the reality diverged most from the promise were crypto and BNPL.

It has been very rewarding to gather the insights of 79 of the most senior players shaping the global payments industry. My grateful thanks to them for taking the time to share their views, which have been curated in this report.

The support of the World Bank, for the third time, is much appreciated, as is the sponsorship of Interswitch from Africa and Global Processing Services from Europe. Their patronage allows us to operate on a not-for-profit basis and distribute the report free of charge.

Thanks also go to my collaborators Chris Hamilton in South Africa and Greg Boudreaux in the USA, the support team of Erin Lovett (from communications consultancy Missive) and Athena, my Executive Assistant.



A handwritten signature in blue ink that reads "John Chaplin". The signature is fluid and cursive, with a long horizontal line extending from the end of the name.

John Chaplin,

**Chairman, Global
Payments Innovation Jury**

WORLD BANK FOREWORD

Following a period of unprecedented economic and social disruption, the world is now trying to claw its way back to some sense of normality. The importance of digital payments and payment systems in helping the world cope with the pandemic and adjust to the “new normal” has been widely recognized. In addition, incipient trends like open banking, crypto-assets, Central Bank Digital Currencies (CBDC), data monetization-driven business models, and Fast Payments have all evolved further during the pandemic. Now is the perfect time to evaluate the next phase of their growth and their ability to shape the payments landscape in the future. In addition, the broader trends in the technology sector, such as cloud computing and open source, are also beginning to impact the payments sector. The focus of this edition of the Payments Innovation Jury is therefore timely.

The pandemic also brought renewed attention to the link between financial inclusion and digital payments. The recent edition of the World Bank Findex shows remarkable progress in advancing access to and usage of transaction accounts. Worldwide account ownership has increased by 50 percent in the 10 years spanning 2011 to 2021, to reach 76 percent of the global population. From 2017 to 2021, the average rate of account ownership in developing economies increased by 8 percentage points, from 63 percent to 71 percent, largely due to innovations in payment services notably mobile money. Further, the share of adults making or receiving digital payments in developing countries has grown from 35 percent in 2014 to 57 percent in 2021.

While much progress has been made, we need to seize the momentum and push for further advancing financial inclusion and greater usage of digital payments. We need to collectively address the gaps in access and usage between advanced economies and emerging market and developing economies; based on gender; and the gap between rural and urban areas. Further, with large number of new users entering the market, it is more important than ever that they receive the right support in learning how to use digital payments and protect themselves from fraud. As per the Findex 2021, one-third of existent mobile money account holders in Sub-Saharan Africa say they cannot use their account without help from a family member or an agent. Inexperienced account owners that must ask a family member or a banking agent for help using an account may be more vulnerable to financial abuse.

Innovation is going to be the key lever for this phase of payments transformation as well, and the jury has provided some useful insights on how to harness them responsibly. I am sure the insights presented in this report would be useful for the various stakeholders following and shaping the developments in the domestic payment systems and eliminating the gaps we see in access to and usage of digital payments.

Let me conclude by thanking John Chaplin for taking time from his busy schedule to convene the payments innovation jury and bring to us their invaluable insights.

About World Bank

The Financial inclusion and Infrastructure unit of the Finance, Competitiveness and Innovation Global Practice of the World Bank works to improve the safety, reliability and efficiency of payment systems and Financial Market Infrastructures by providing financial and technical assistance and policy advice to client governments and public authorities. The Bank contributes to international standard-setting, assessment and implementation and advances and disseminates payment-system knowledge.



Harish Natarajan

Lead, Payments and Market Infrastructures Finance, Competitiveness, and Innovation Global Practice, World Bank

INTERSWITCH FOREWORD

So much has changed in the African payments landscape since the publication of the African Payments Innovation Jury Report in 2017.

Africa's financial services sector has had an eventful trajectory, made even more interesting by the advent of young, agile and disruptive fintech/payment players carving out their share of the dynamic market, whilst 'incumbents' from banking and fintech sectors equally accelerate the frenetic race towards consolidating their scale, becoming nimbler, and staying relevant, among other imperatives.

The COVID-19 pandemic marked a watershed, challenging and irrevocably disrupting every sphere of human endeavour. It has perhaps become the most potent catalyst in recent history to rapidly accentuate the already growing pre-pandemic trend towards digitization, thereby boosting the appetite for digital financial services across the globe – and particularly on the African continent.

As one of the leading and influential players in payments who regard Africa as both origin and primary catchment market, we are extremely enthused at Interswitch to yet again facilitate this timely and important research effort. The Payment Innovation Jury Report curates practical

insights and expert perspectives of senior leaders globally, and across the entire spectrum of African retail payments, including banks, payment switches, card processors, closed loop payment networks, schemes, mobile money operators and agency networks, into a single compendium offering a contemporary and incisive view into the many complex issues determining how payment innovation happens in Africa.

It is worth mentioning that this edition coincides with the 20th anniversary of Interswitch's inception in 2002, a time when payment innovation on the continent was at its most nascent level.

I am thoroughly delighted that at such a significant milestone in our journey as a front-row contributor to payment innovation in Africa, Interswitch once again has the privilege of supporting this worthy initiative that is facilitating balanced appraisal and better understanding of the payments industry as it continues to evolve.

Mitchell Elegbe,
Founder/Group CEO

ABOUT INTERSWITCH

Interswitch is a leading technology-driven company focused on the digitization of payments in Nigeria and other countries in Africa. Founded in 2002, Interswitch disrupted the traditional cash-based payments value chain in Nigeria by supporting the introduction of electronic payments processing and switching services.

Today, Interswitch is a leading player with critical mass across Africa's developing financial ecosystem and is active across the payments value chain, providing a full suite of omni-channel payment solutions. Interswitch's vision is that of a prosperous Africa, driven by a seamless exchange of value and commerce and its mission is to create technology solutions that connect and empower individuals, businesses, and communities. Interswitch's broad network and robust payments platform have been instrumental to the development of the Nigerian payment ecosystem and provide Interswitch with the infrastructure to expand across Africa.

We continue to create and facilitate technology solutions and platforms that support a variety of industry ecosystems which help commerce evolve, businesses grow and individuals thrive. Our solutions and services are secure and provide convenience and real value for consumers, whilst also improving operational efficiency and driving sustainable revenue growth for businesses.

Learn more at: www.interswitchgroup.com



GLOBAL PROCESSING SERVICES FOREWORD

The global payments market is connecting billions of people, businesses, devices and solutions across a landscape with increasingly blurred dimensional lines between physical, digital and even meta experiences.

This year's report captures the defining forces reshaping the world before our eyes and is one of the few of its kind that reflects the full spectrum of the global payments industry.

The global reach of the Jury, the quality, quantity and integrity of the raw data, and anonymity of jurors, have moved the dial to ensure the report is filled with fresh, tangible insight.

Compared to last year's report which, rightly, led with discussions of the pandemic and role of digital payments, it's significant to see just one mention this time around. Acceleration of digital payment adoption certainly took place because of it, but as consumers and businesses worldwide seek more choice in the ways they pay, these new market demands are pushing ingenuity beyond what was thought possible just a few years ago – and leading to less competition and more collaboration between fintechs and banks.

The fast-expanding plethora of next-generation payment solutions in both the B2C and B2B spheres, which are weaving intuitive user experiences, data-driven foresight, and innovative service architectures together, is testament to the unprecedented momentum we're privileged to witness.

But as mobile wallets, BNPL, A2A and real-time payments grow in usage, new challenges and ramifications will arise. What do these innovations mean for incumbent payment methods like cards? As CBDCs move from proof of concept to reality in some parts of the world, the definition of money as we understood it for thousands of years is also being rewritten.

For us at Global Processing Services some things remain unchanged. Customer experience and financial inclusion are at the heart of our operation. As we reflect on the current state of the cost-of-living crisis, instability in some parts of the world, and the rising demand to meet ESG objectives, we can draw on the insights here to understand how we can best support consumers and businesses from a payment perspective.

Collectively, we can capitalise on the huge global opportunities ahead, to help improve the lives of the global population through faster, easier access to financial services – and to prepare for the future of payments.



Joanne Dewar

Vice Chair, Global Processing Services

ABOUT GLOBAL PROCESSING SERVICES

Global Processing Services (GPS) is the trusted and proven go-to payments processing partner for today's leading fintechs, including Revolut, Curve, Starling Bank, Zilch, WeLab Bank, and Paidy. GPS has issued millions of physical and virtual cards, enabled in over 48 countries, and processes billions of transactions on its API-first cloud-based platform. GPS' highly flexible and configurable platform places the control firmly in the hands of global fintechs, digital banks, and embedded finance providers, enabling them to deliver rich functionality to the cardholder. It is a multi-award-winning issuer processor powering next generation payment segments, including expense management, B2B payments, crypto, lending and

credit (including Buy Now Pay Later ("BNPL") propositions), digital banking, FX, remittance, open banking and more. GPS is certified by Visa and Mastercard to process and manage any credit, debit, or prepaid card transaction globally, with offices in London, Newcastle, Singapore, Sydney, and Dubai. Its platform is equipped to meet the stringent standards required by Tier 1 banks, integrating with over 95 issuer partners and operates programmes for a global client base.

PAYMENT INNOVATION: MYTHS AND REALITIES

The world of payments has long been a hotbed of innovation and change. In such an environment there are inevitably competing views about what actually drives innovation. The entrepreneur or organisation that can accurately identify these drivers is in a very powerful and influential position.

The Payments Innovation Jury comprises of many of the leading industry executives and stakeholders across the globe, and we are grateful to them for contributing their views on how innovation occurs. The thinking behind the creation of the Jury was that experienced payments operators have valuable insights into how innovations are most effectively deployed in the market.

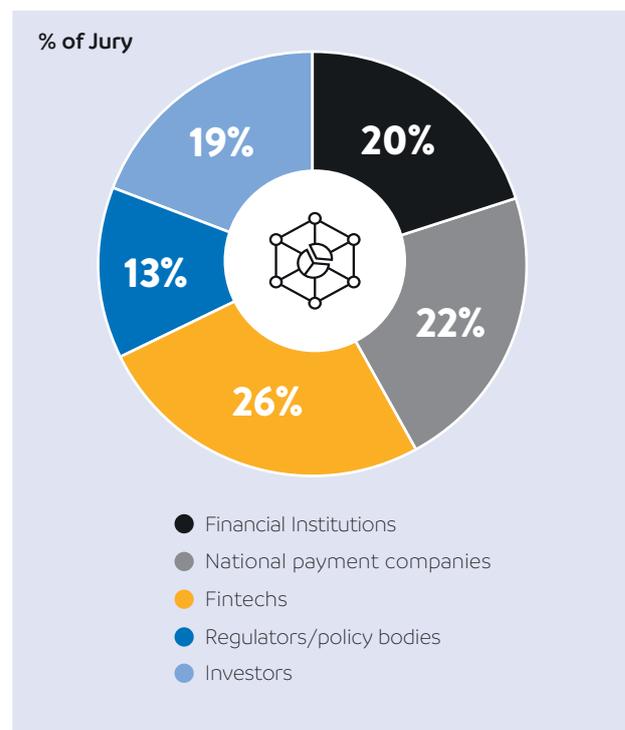
There have been many exciting developments in the payments industry over the years that seemed like great ideas, but could not be successfully taken to market for any number of reasons. The combined predictions of the Jury may not always be correct, but they do provide significant insight into what may or may not succeed.

This latest study explores five areas of payments innovation:

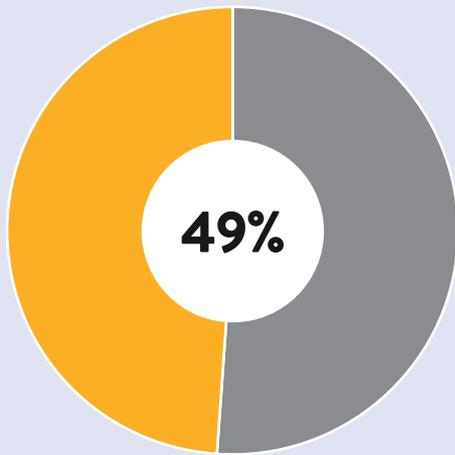
- Whether the rise of retail Alternative Payment Methods (APMs), such as mobile money and real-time account-to-account (A2A), will lead to a change in the current payments landscape and the emergence of new dominant payment types.
- Whether the introduction of CBDCs is an inexorable trend that has the potential to increase payments innovation.
- Which regulatory and market initiatives are the most effective at encouraging new market entrants and should therefore be top of the list for regulators.
- Whether BNPL is a true reimagining of the unsecured credit proposition, as it is being positioned, and how likely it is to continue to expand (and where).
- Whether retail payments data is more valuable than payments processing, as is often claimed; what the most valuable uses of this data are; and who will be best able to exploit the innovation opportunities payments data presents.

To examine these subjects, we put together a Jury of 79 members. To give a full, 360-degree picture, we recruited a significant number of senior regulators and investors to join the Jury for the first time since its inception. The 2022 Payments Innovation Jury comprised national payments companies, traditional financial institutions (banks), fintechs, regulators & payments policy bodies, and financial investors, comprising private equity and venture capitalists.

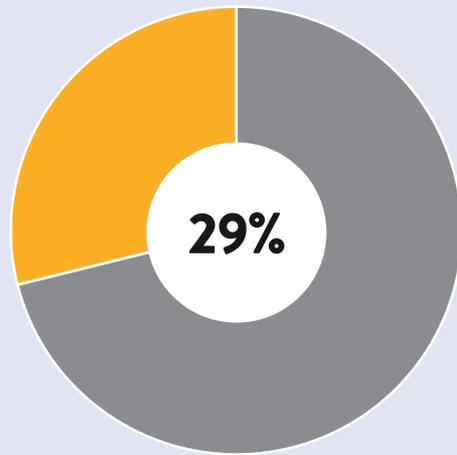
JURY COMPOSITION BY ORGANISATION



The 79 individual Jury members were domiciled in 28 different markets, making this a truly global panel. This, however, understates the global nature of the Jury, as many participants conduct business in multiple markets. Excluding the regulators, who are by their nature confined to a single territory, 49% of the Jury work for organisations that conduct business in four or more markets, and 29% in ten or more.



49% of the Jury work for organisations that are in four or more markets.



29% of the Jury work for organisations that are in ten or more markets.

The level of seniority of the Jury members was high. At financial institutions we spoke with the Heads of Retail Payments; for fintechs it was predominantly their CEOs or founders. Central Bank respondents were primarily the Heads of Fintech and Payments Regulation; at national payments companies we either spoke to the CEO or Head of Strategy; and across both VCs and private equity investors we surveyed Partners.

Jury members participate on an anonymous basis for two key reasons. First, anonymity allows them to speak freely, unencumbered by the innovation priorities of their current organisation, and second, because the purpose of the project is to gain as broad a view as possible of the industry, rather than concentrate on individual people and organisation's views.

“Proactive and data-driven regulation is key to the commercial success of fintech/payment players. Increasingly, the world’s leading regulators are trying to ensure that innovation is present in all financial sectors, and that the firms they regulate are using technology to offer superior services, manage risks more effectively and create new opportunities. It was therefore imperative that the Payment Innovation Jury reflected the views of regulators across various African markets.”

Mitchell Elegbe, Group CEO

THE PAYMENTS LANDSCAPE OF THE FUTURE

The 2021 Jury gave us a clear message in previous report DOMESTIC PAYMENT SCHEMES INNOVATION – TO SURVIVE OR THRIVE: while cards and cash remained central to consumer payments around the world, digital alternatives were expanding and proliferating. Two main categories of newcomer were identified: real-time A2A payments between bank accounts; and non-bank instant payment services accessed from a mobile wallet app (often referred to as 'mobile money'), whether provided by a mobile operator, such as Safaricom's mPesa, social media platform such as WeChatPay, or as a standalone service such as Venmo.

At the time, we saw this evolving blend of cards, mobile money and real-time A2A as having significant implications for market participants, particularly banks, and the potential for some difficult policy choices for regulators. Some more detailed research was needed, which is what the 2022 Jury have delivered.

72% jurors already seeing widespread use of A2A real-time services

91% jurors expecting A2A to grow its share.

The expanded 2022 Jury provided a perfect opportunity to explore this rapidly evolving landscape further. Respondents confirmed that mobile wallets and real-time A2A payments are now available alongside card payments and bulk/batch payments in most countries, and often widely used:

72% of Jurors have already seen widespread use of real-time A2A payments, and **36%** said the same of mobile money.

More importantly, almost all of the 2022 Jury (**91%**) expect market share of real-time A2A payments to increase, and **84%** felt the same about mobile money.

Despite the growth of APMs, write-in responses from the Jury make it clear that few expect card payments to give up volume to the newer services. Rather, a slow replacement of cash payments with digital payments, together with APMs capturing a larger share of future growth, will drive a rebalancing in most markets.

“Mobile Payments and Real Time Payments (ie Instant Payment) will increase but like other innovations, they will not replace the legacy ones but grow alongside them.”

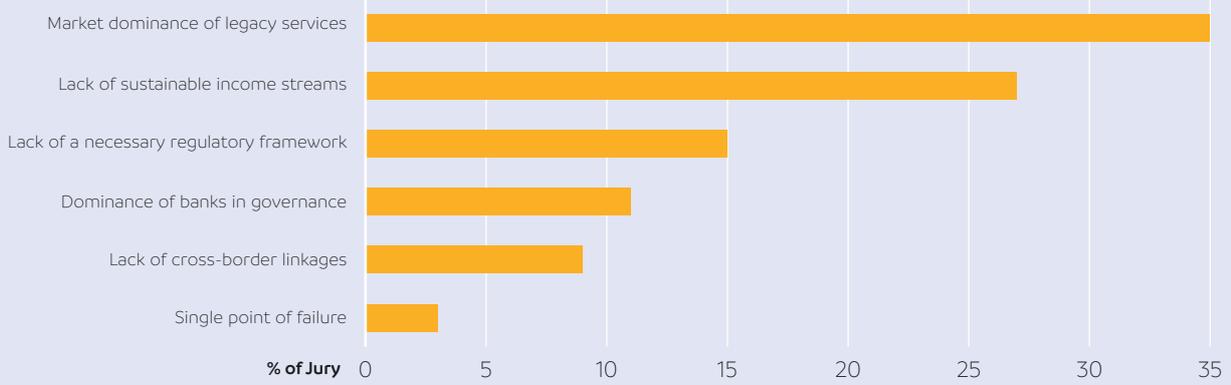
“As new technologies allow further onboarding of 'unbanked' communities, I believe all methods will increase in volume.”

“Mobile wallets are on the rise. Sepa Instant and Open Banking are driving real time.”

“Payments are consolidating on mobiles as almost everyone owns one and is connected to the internet. As such, phones are replacing cards as the primary means of transacting and engaging with banks.”

The Jury was subsequently asked about the challenges facing different payment methods. Although real-time A2A services are growing fast in many countries, Jurors saw the dominance of incumbent services, particularly card payments, and the lack of a sustainable income stream for participants, as challenges to further growth.

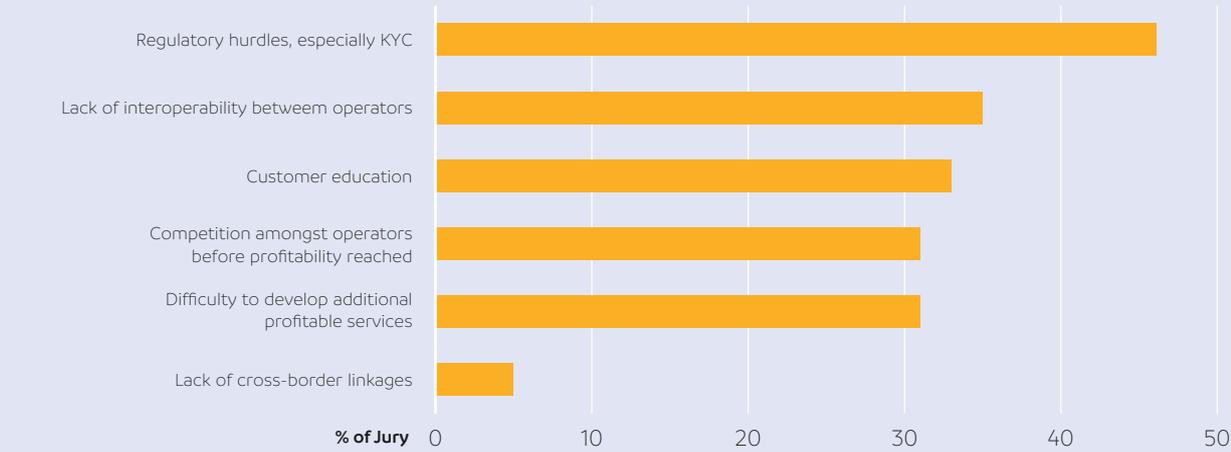
MAIN CHALLENGES FOR REALTIME BANK ACCOUNT PAYMENT SERVICES



For mobile money, regulatory hurdles topped the list. Regulators in many jurisdictions have encouraged innovation by leaving room for new non-bank services to develop, but are increasingly stepping in as these new

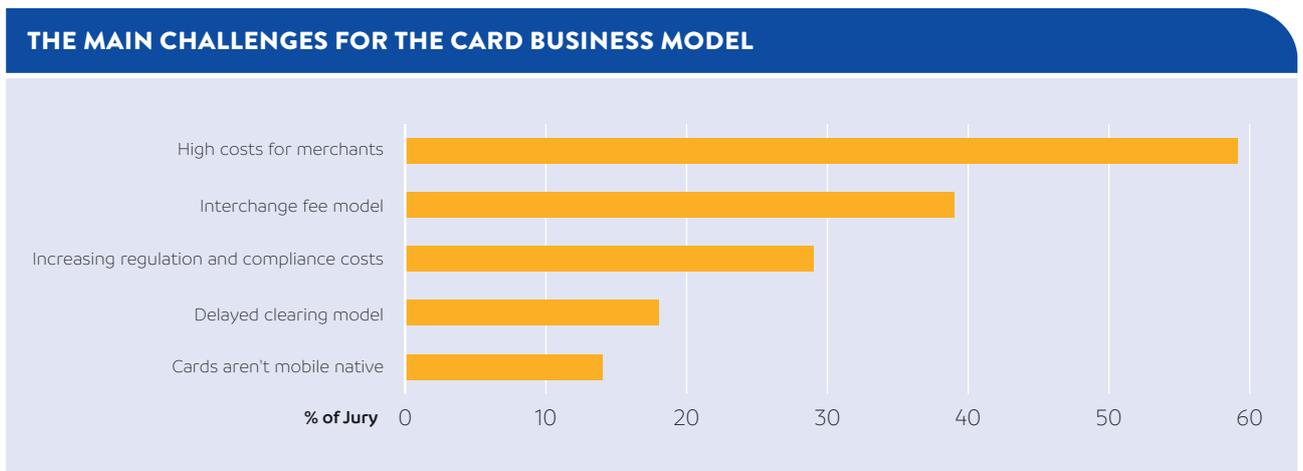
services reach scale and consumer risks increase. In China, for example, the runaway success of WeChat and AliPay was dealt a sharp correction by new restrictions and large fines, aimed at enhancing consumer protection.

MAIN CHALLENGES FOR MOBILE MONEY SERVICES



China also illustrates another concern of the Jurors: the interoperability of competing mobile money services. One reason for increased regulatory activity is to promote or even mandate interoperability. This can be hard to achieve, but the policy arguments are compelling: it encourages new entrants, who get access to existing networks, and it curbs misuse of market power by those with first mover advantage. These efforts have been occurring in the African heartland of mobile money, including Kenya, Tanzania, Morocco and Ghana.

In contrast, the challenges for card networks are largely cost related. Juror commentary confirms that although card schemes have been successfully adapting card services for use on smartphones – services like ApplePay, SamsungPay, MasterPass and Visa Checkout being cases in point – the card model still has an overall cost problem relative to new, mobile-native consumer payment services. We see this in all of the top three challenges identified for card payments: the high cost for merchants, interchange fees and increasing compliance costs.

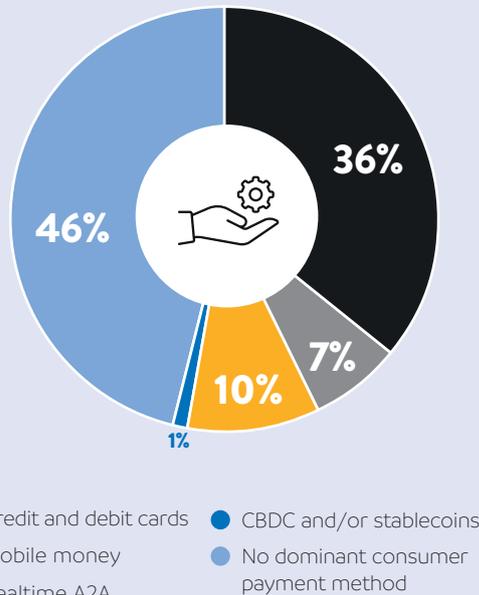


So where is all this heading? Again, the 2022 Jury provides some expert insight. We asked Jurors to look five years into the future and 'pick the winner' in their primary market. Around a third (36%) thought cards would still be the dominant consumer payment method in their home market. Few jurors were prepared to back mobile money, real-time A2A payments or even CBDCs/stablecoins

(discussed further on P20) as achieving dominance in that timeframe. Indeed, nearly half (46%) thought multiple methods would be competing, with no dominant method taking the lead. This is a remarkable outcome given how recently instant mobile alternatives appeared on the scene - the smartphone itself is barely 15 years old.

THE DOMINANT CONSUMER PAYMENT METHOD IN THE NEXT 5 YEARS

% of Jury



Jury responses suggest some interesting evolutionary themes. The first is that a long-term structural rebalancing is taking place as the inevitable transition from physical form factors to mobile devices occurs, and that multiple different digital payments methods are part of this. However, respondents were broadly in agreement that this process will take more than five years.

Although incumbent card schemes and operators will adapt, innovate, and generally defend their market position effectively, the cost dynamics mean that card services are unlikely to be able to access new volumes or new markets as effectively as newer payment forms. In emerging markets where card payments are not widely used already, the bulk of payments growth will be in mobile money and real-time A2A payments. We are already seeing this in China, India, and many African countries.

Many jurors saw different market segments – both demographic and geographic – preferring different methods, leading to a sustainably competitive marketplace. Others saw a grand convergence so that whatever their origin, consumer payments will all look and feel much the same: mobile, instant and in-app.

Finally, although few saw CBDC or stablecoins as a significant factor on the five-year horizon, many saw them as adding to the competitive mix over time.

It seems likely that the consumers of the world can look forward to real competition for their digital payments.

“Nothing changes overnight, and in payments, five years is overnight!”

“This will take time; CBDCs will arrive in the UK market in 2-3 years’ time and gradually erode traditional cards, displacing some of the mobile money sector whilst real-time A2A forges ahead. The UK typically retains all payment methods across its diverse population; these will add customer value and further layers to existing complexity.”

“All the above options have CX advantages and drawbacks, therefore each payment method suits a different lifestyle. A student might love mobile money but his grandfather might prefer plastic cards.”

““People are conservative in their spending habits. In the West, we’re likely to see cards continuing to play a big role, with lumps taken by wallets and RTP. In Asia it’s wallets or real-time payments (RTPs) depending on the market. Africa seems to be mobile money and in LatAm, it’s RTPs.. everyone owns one and is connected to the internet. As such, phones are replacing cards as the primary means of transacting and engaging with banks.”

THERE'S A PLACE FOR BNPL – LET'S FIND IT

Although retail instalment payments are not new, in recent years the Buy Now Pay Later (BNPL) concept has been given new life, both online and in-store, by a growing number of firms like Klarna, Affirm, and Afterpay. Well over 100 firms globally were offering BNPL solutions by the beginning of 2022, with some estimating a multi-trillion-dollar market by 2030. It's been estimated that consumer and merchant adoption have driven annual BNPL growth of 61% throughout the pandemic. Younger consumers in particular have responded positively to the BNPL model, which requires only a soft credit check and carries no interest or fees as long as the loan is paid off within its short payment terms (usually 120 days or less).

We asked the Jury to weigh in on the growth of BNPL and its future potential.

Before drilling into the sector's opportunities and risks, the jury was asked whether they believed BNPL usage would increase, decrease or stay the same. 70% predicted that usage will grow – a result that may seem surprising, given growth risks such as the looming credit losses and coming regulatory oversight examined below.

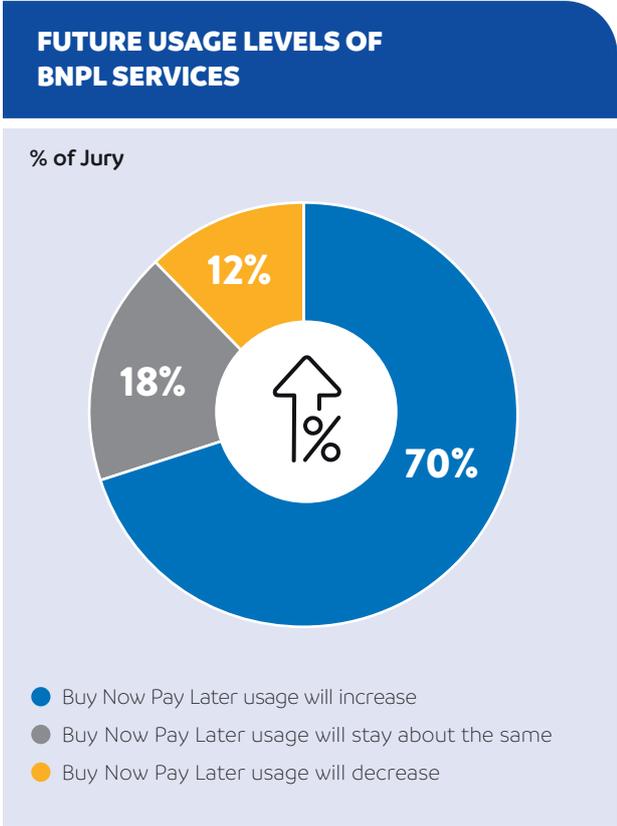
“Demand is there. Until more restrictive legislation is enacted (which feels increasingly around the corner), the offering of credit to those in need will be accepted.”

“The regulatory authorities will step in as default rates surge and make the decisioning stricter.”

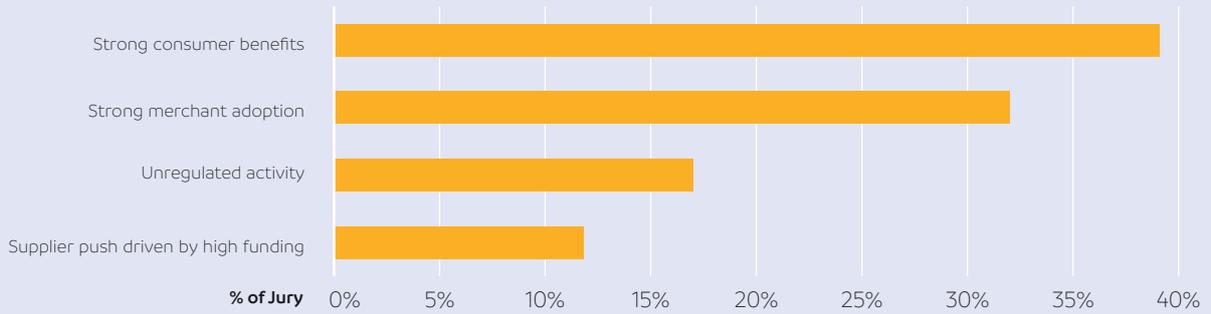
“BNPL exists in a regulatory loophole that will be closed”

Indeed, a deeper dive into jurors' comments suggests less enthusiasm. A significant number of responses imply that BNPL will continue to enjoy some investor-fueled market momentum in the near-term, but will eventually run out of runway as regulators, losses, and the wider economy catch up.

The jury believes merchant adoption and strong consumer benefits to be the driving factors behind the rapid growth of BNPL. Enthusiastic investor support and a lack of regulatory oversight were also deemed to be factors, but would not be sufficient without a strong value proposition appealing to consumers and merchants.



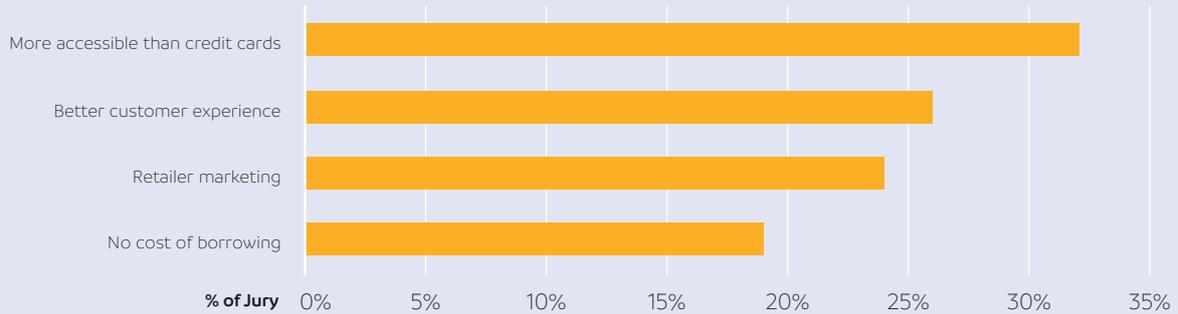
THE MAIN DRIVER OF BNPL EXPANSION



According to the Jury, for consumers, that value proposition is the improved experience of instant lending decisions without the need for a credit card. Nearly one-third (32%) ranked ease of access over traditional cards as the top driver of BNPL growth, while 26% believed

that the improved customer experience, including instant decisioning, is most important. Both factors represent an attractive experience for consumers without cards, or whose card accounts are 'maxed out'.

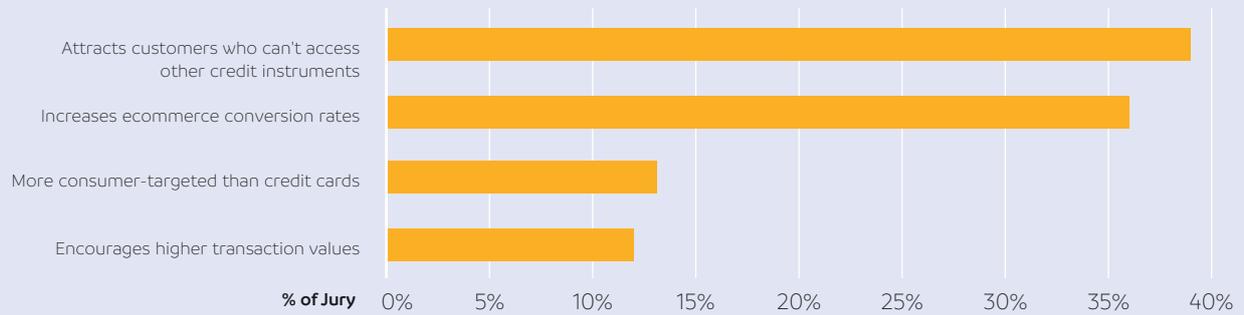
THE MAIN CONSUMER APPEAL OF BNPL SERVICES?



“Convenience is a big driver even when no actual credit is required.”

BNPL’s appeal to merchants has clearly been sufficient to overcome the fees charged by solution providers, which can be as high as 6%. Asked to rank merchant benefits in order of importance, the majority of the jury favored two factors in nearly equal numbers: increased e-commerce conversion rates, and acquisition of new customers who can’t access alternative credit instruments.

THE MAIN MERCHANT APPEAL OF BNPL



“It’s in effect a simple way to make credit more accessible to people, quickly, to keep them shopping and consuming...”

When asked to rank the biggest risks to BNPL growth, over half the Jury (62%) selected unsustainable credit losses. This should not be surprising, given recent media coverage of the rise of bad debt as a percentage of loans across the sector – and dire outlook predictions in an inflationary, rising interest rate economy.

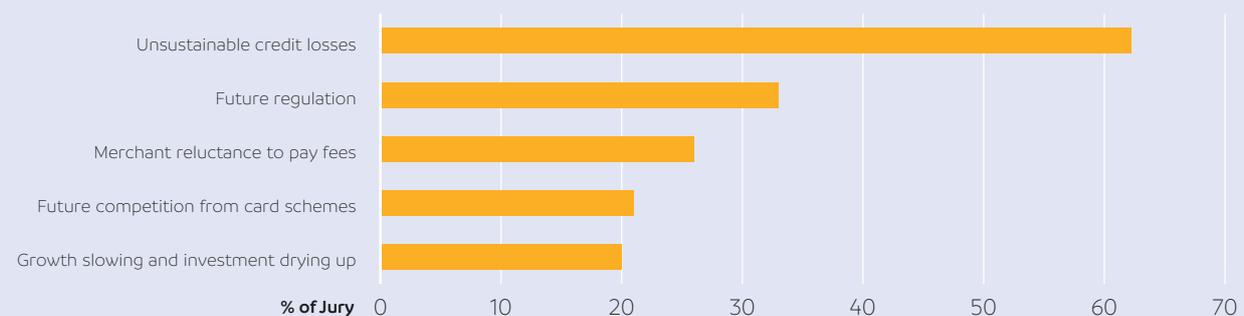
“Rising credit losses will reduce both VC funding and securitizations, reducing origination levels.”

32% of respondents ranked regulation as the top risk to further growth of BNPL services. Regulation, however, was beaten as the second biggest risk to further growth by the reluctance of merchants to pay fees. Of course, these risk factors are somewhat inter-related – the rankings may reflect the Jury’s recognition that, as bad debt write-offs and new regulations drive up operating costs, higher merchant fees may be an inevitable result.

“Usual bubble driven by expansionist macroeconomic policies - will slow along with credit in general as we slow down / enter a recession.”

“Regulators will react as consumer debt problems accelerate.”

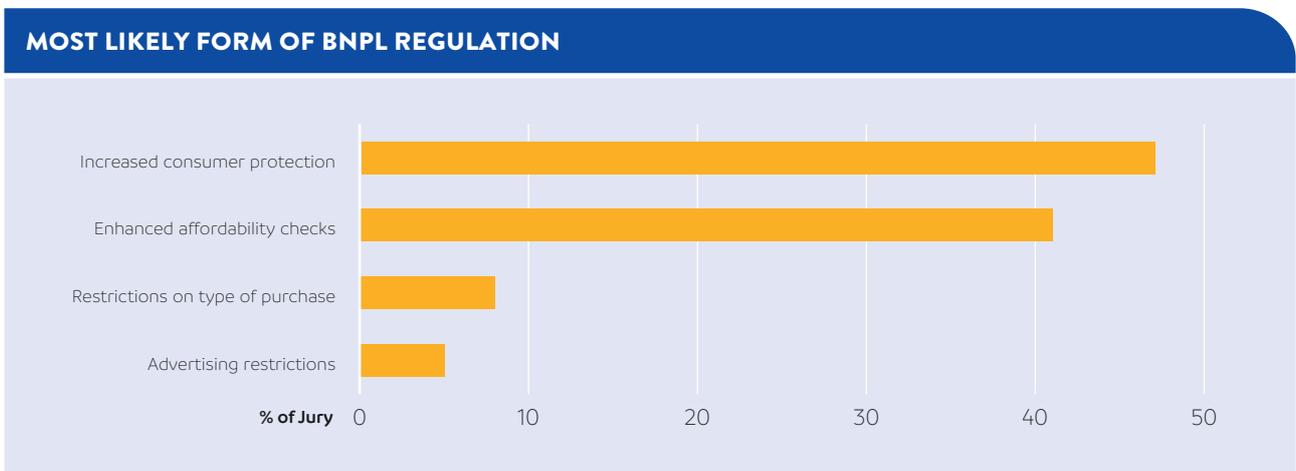
THE BIGGEST RISK TO SUSTAINABLE BNPL GROWTH



Another inevitable result is the waning of investor interest, along with available investment capital, as BNPL growth slows. Only around 20% of the Jury selected this as the top growth risk, most likely because this has already begun to occur – as evidenced by Klarna’s recent investment round at a valuation of \$6 billion, after raising \$600 million last year at a \$46 billion valuation.

Finally, only 21% believe competition from potential instalment features deployed by the card networks to be the top risk to growth. This may not imply the Jury’s lack of faith in the likelihood of such competition, but rather that, given all the aforementioned risks, this will be the least of BNPL’s problems.

We then asked the Jury about the regulatory changes on the horizon. It’s commonplace for new forms of financial technology to enjoy an initial period of freedom from regulatory oversight, but the jury clearly believes that the holiday is nearly over. Asked to identify the most likely form BNPL regulation will take, the jury overwhelmingly chose consumer protection laws.



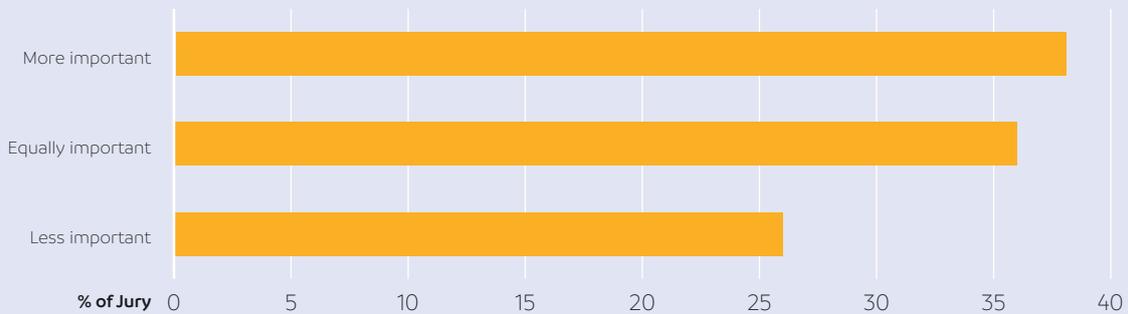
“As soon as BNPL starts impacting credit scores and consumers’ access to traditional financial products (mortgages etc.) then the regulator will have to step in and the fast growth will slow.”

“Will be regulated like the rest of credits.”

The nearly unanimous response suggests the jury believes that BNPL, at the end of the day, is just another form of credit, and should and will be addressed by regulators accordingly.

So what does all of this mean for developing markets? In these regions credit can be expensive and difficult to access, as credit cards are far less prevalent and consumers are often required to wait to make purchases until they can pay in full. The Jury was asked whether BNPL solutions would prove to be more or less important in developing markets, compared to developed markets.

BUY NOW PAY LATER IMPORTANCE IN DEVELOPING MARKETS VERSUS DEVELOPED MARKETS?



“BNPL is helping to give both ecommerce and in-store consumers more flexibility. With the right regulatory oversight and supportive financial education, these products can continue to play a valuable role in helping financially excluded consumers manage their budgets and access financial services. Going forward, further evolution is likely to leverage open finance to create an integrated picture of affordability and impact, building future credit worthiness and working towards the more sustainable Save Now Pay Later.”

Joanne Dewar, Vice Chair,
Global Processing Services

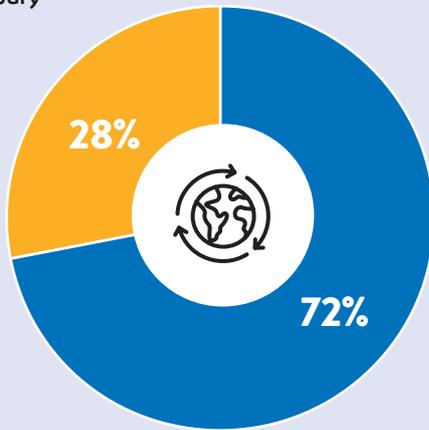
Nearly three-quarters (74%) believe that BNPL will be as or more important in developing markets, with 38% opting for more important. This suggests that BNPL could have a role addressing issues of financial inclusion in these regions, assuming a lack of independent credit reporting in some markets, as well as the associated potential for credit losses and rising merchant costs, can be solved. Indeed, recent figures from Juniper Research suggest that India will be a key growth market for BNPL.

BNPL’s recent growth, from adoption to valuations, has been explosive. The Jury was asked just how sustainable they believe this to be – is BNPL a fundamental market change, or a short-term phenomenon?

“BNPL is sustainable, especially in developing markets, as credit card penetration has struggled.”

SUSTAINABILITY OF RAPID BUY NOW PAY LATER GROWTH

% of Jury



- A short term phenomenon
- A fundamental market change

“Rising credit losses will reduce both VC funding and securitizations, reducing origination levels. Increasing cost of capital will also likely pressure BNPL providers to increase their fees, which will reduce volumes.”

Nearly three quarters of the Jury (72%) believe that BNPL, at least in its current form, is just a short-term phenomenon, fuelled by investor capital and lack of attention from regulatory agencies. The Jury offered a variety of individual opinions on the overall future viability of the sector, with some believing it will evolve into a new form of regulated instalment credit, albeit one with a smaller market than today, and others dismissing it entirely. But, regardless of BNPL’s future state, the majority believe that its rapid growth is not sustainable moving forward.

“BNPL will become established as a less flamboyant, but still significant offering, both in developed and developing markets - it won’t go away.”

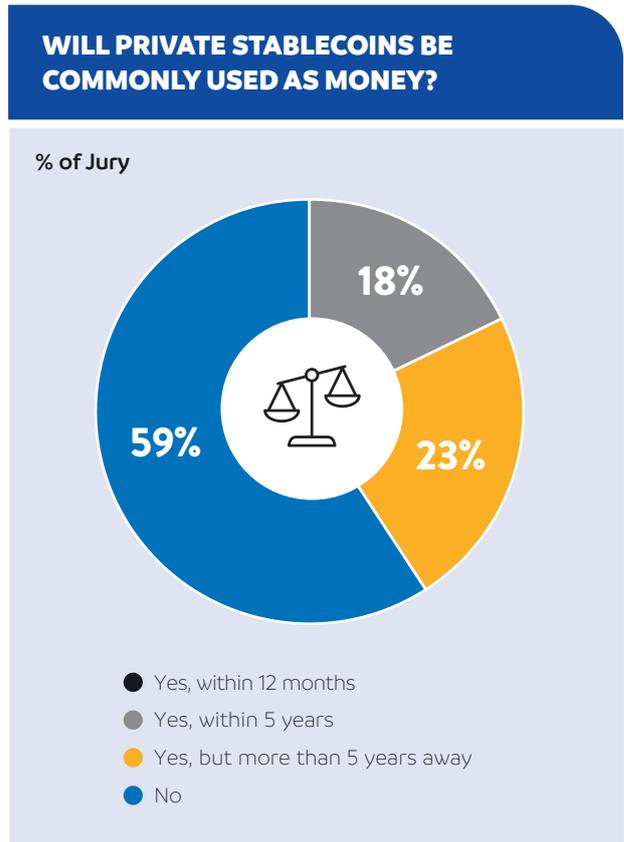
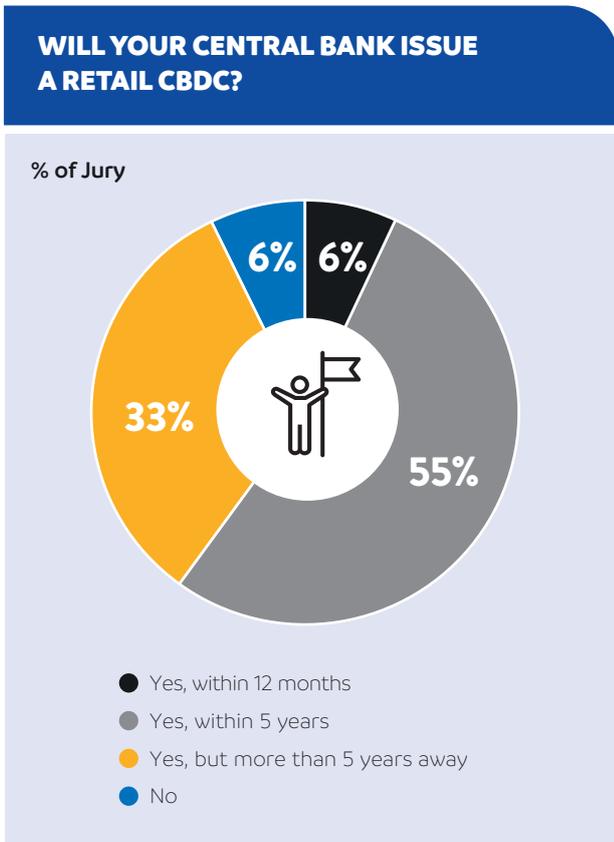
“I believe there is value in a regulated instalment program. I just don’t believe it will be a game-changer once regulators get hold of it.”

The Jury appears to recognize the value of BNPL to merchants and their retail clients, as well as its potential for developing markets. It understands, as well, that a more favorable economic climate and prolonged holiday from regulatory scrutiny have contributed as much to BNPL growth so far as its market adoption.

CENTRAL BANK DIGITAL CURRENCIES ARE COMING – BUT WHEN?

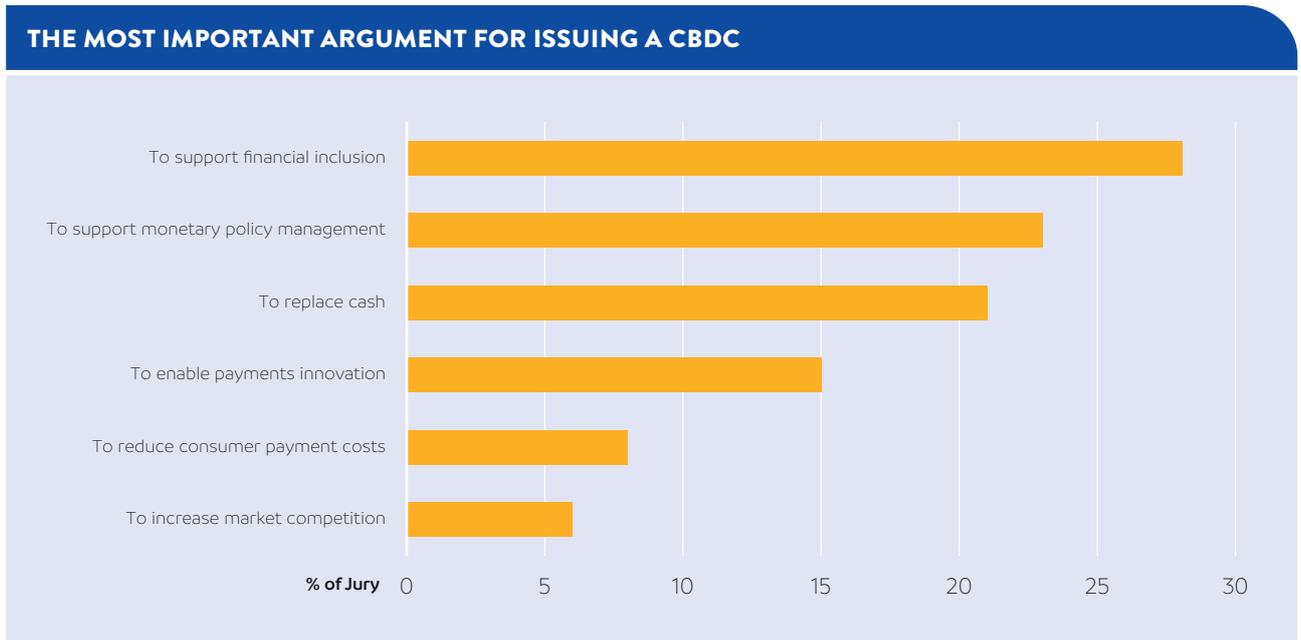
You can't attend a payments conference these days without hearing a great deal of discussion about Central Bank Digital Currencies or 'CBDCs'. They are possibly the most anticipated development in payments history. There are many design options, but for our purposes we can think of a CBDC as a purely digital currency issued by a central bank for retail use, which can be held and used like cash. So far, live experience of CBDCs is limited to only three jurisdictions (the Bahamas, Nigeria and China), meaning there is not much real-life experience to analyse. We asked the 2022 Jury for some expert views on the way forward.

They were clear that we will be seeing many more CBDC implementations. 94% of respondents expect their central bank to issue a CBDC, although how soon this could happen varies widely, as the chart below illustrates.

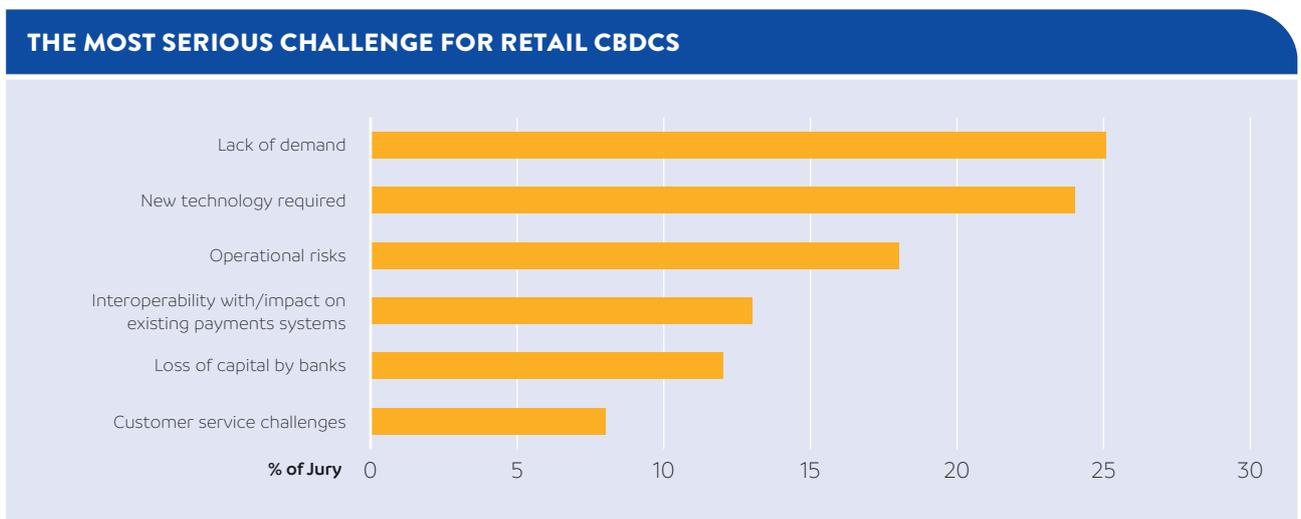


There is much less certainty around stablecoins, which 59% of the jury did not expect to see used as money – although a significant minority did, eventually. These results affirm the continued power of central banks to influence the evolution of currency and payments within their jurisdictions, whatever new technology arises. This was reinforced by the view of a large majority of Jurors (64%), who believe that stablecoins would suffer if a CBDC were issued. This is not good news for stablecoin enthusiasts, but by extension, Bitcoin maximalists might also take note.

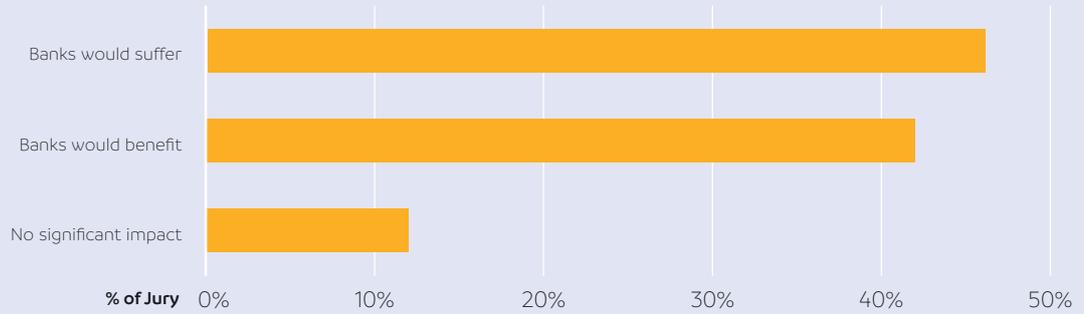
There is a great deal of debate about the underlying logic of CBDCs both in terms of public policy and the economic model. The Jury recognised multiple arguments for issuing a CBDC, including financial inclusion, support for monetary policy, cash replacement and payments innovation. Interestingly, there was less support for the arguments that CBDCs would increase competition or reduce costs for consumers.



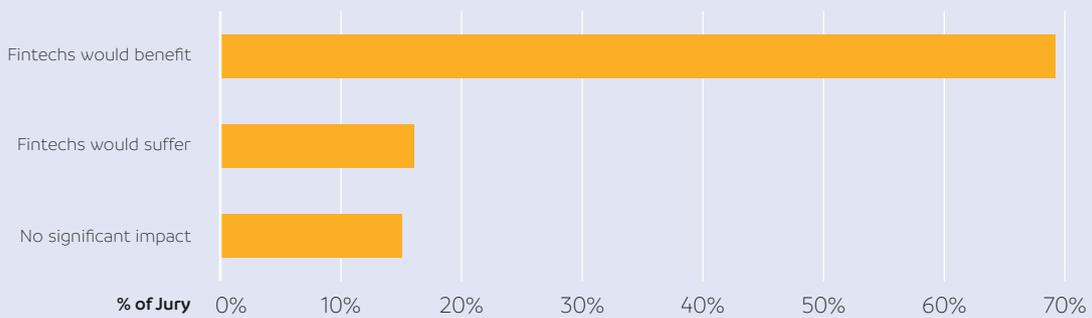
We wanted to understand these headline findings by seeking views on the likely impact of CBDCs on banks and fintechs. Two thirds of the Jury saw CBDCs as potentially beneficial to fintechs, but they were evenly split as to the impact on banks – some saw advantage, some disadvantage, and some saw little net impact.



IMPACT OF CBDC ON RETAIL BANKS



IMPACT OF CBDCs ON FINTECHS



Jury comments reveal a complex interplay of differing opinions driving these results. First, there are a few CBDC sceptics – they don't see the proposition as compelling, and so doubt significant impact on the market, at least for some time. Many of our less sceptical experts believe that it depends on the CBDC model chosen. Some models are perceived as bypassing bank balance sheets and/or bringing the central bank into direct competition with retail banks.

“Where is the economic model for any of this?”

“This really depends on how CBDC is deployed”

“Most Central Banks talk about limiting the value held in an individual CBDC account. [So]... there is little threat to retail banks”

But for the majority who see CBDCs having significant market impact over the next five years, it's all about relative competitive advantage. Banks are generally seen to be slower and less capable at innovating than fintechs, but through their much larger retail networks, they may still be better placed to take advantage of any new payment infrastructure.

“Fintechs would thrive on and lead the innovation”

“CBDC is still currency. Central banks won't magically give CBDCs to anyone that wants it. Rules and regulations for management of flow will always exist.”

““Cash with an API” has great potential”

There are certainly those who see CBDCs as essentially disruptive to the key bank competitive advantages: network, scale, and regulatory licensing. If you are in this camp, CBDCs are a major threat. But an equally vocal group take a more sanguine view – that banks will adapt, just as they always have done.

“Unless the bank holds the assets in its balance sheet there seems to be little upside.”

“I think banks would initially benefit as it would drive increased flows to them, but profitability will suffer in the medium to longer term”

“Banks should get into the wallet business before they lose it completely.”

“Despite the notion that banks will be disrupted away, it is far more likely they will adapt.”

“Banks would benefit from reduced costs and risk of paper money handling and new service opportunities.”

The likely impact on cash was an area of stronger consensus. 79% of the Jury thinks that cash will continue to decline, but will not disappear entirely. This is likely because there are simply too many use cases where digital payments, even CBDCs, cannot be relied on. Remote areas, lack of financial literacy, loss of networks through disaster, and plain old consumer habit are all factors.

One recurrent theme stood out: the traceability of digital transactions, CBDC or otherwise, is a disadvantage. Cash is used to facilitate illegal or tax-avoidant activity, but it is also used to protect legitimate privacy and security interests. Whichever side of the law you are on, our experts doubted that it was possible to guarantee non-traceability for CBDCs. This was seen as a key reason why cash will remain in the mix.

“The grey economy is the main reason for cash...”

“For a client who is digitally savvy, this will see the complete decline of cash in the private client market.”

“In the US, there are enough remote areas without high-speed digital access that cash still exists.”

“Would you trust government-issued digital cash to be completely untraceable? Me neither.”

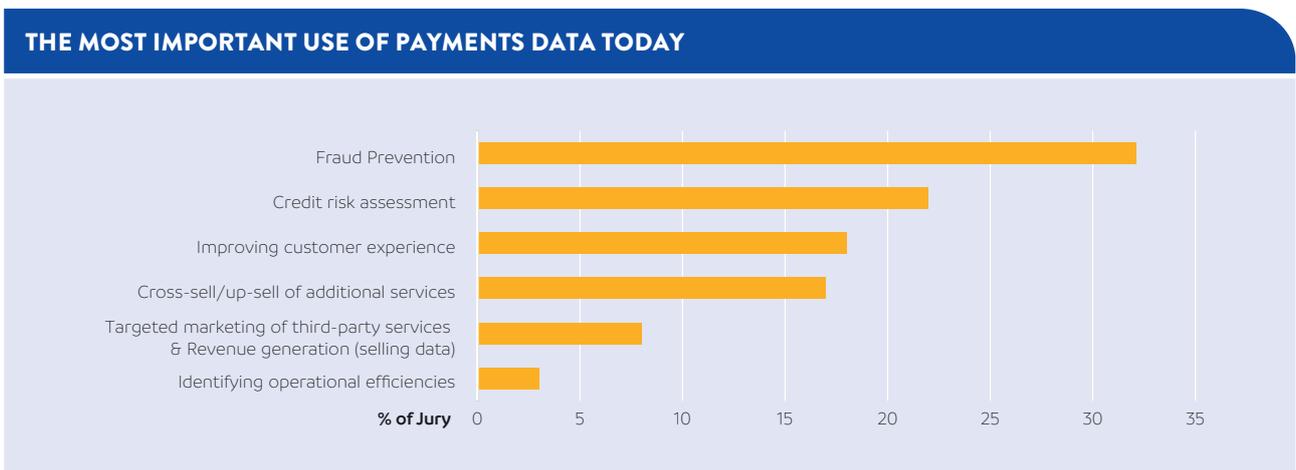
“CBDC might replace mobile payments more than cash or checks due to the behaviour of the various user bases and what they are comfortable with.”

PAYMENTS DATA: OPPORTUNITIES AND INERTIA

We were keen to understand the views of the Jury on the real value of payments data, both now and in the future. We also wanted to understand which types of organisations are best placed to exploit the advantages of access to this data.

The Jury was very clear on the most important use of payments data today. By a large margin, fraud prevention is the clear winner – unsurprising in countries like the UK, now known as the ‘Fraud capital of Europe’. Credit risk assessment comes in second. In both instances, the data is

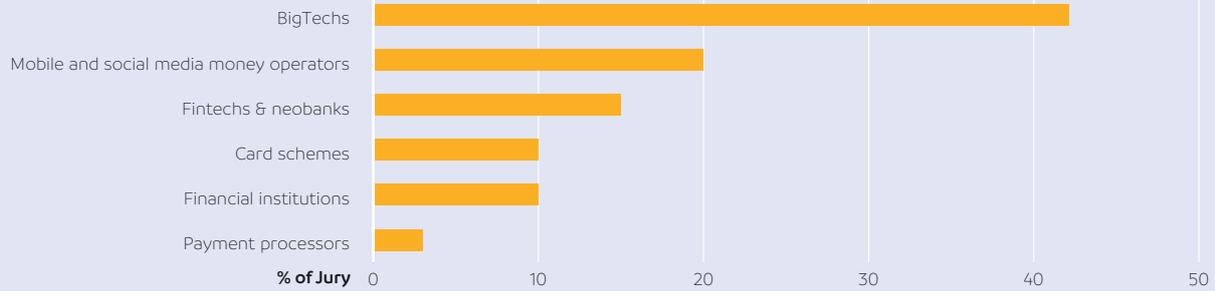
used to mitigate financial losses, so effectively the business case is paramount. There were also some significant scores for improving the customer experience and using data to cross-sell additional services. At the other end of the spectrum, revenue generation (i.e. selling data) is not seen as important, ranking only above operational efficiency measures. This implies that the wide range of organisations represented on the Jury have not managed to turn the theoretical opportunity that payments data presents into a tangible, revenue generating business.



In terms of the organisations making the best use of data today, the Jury clearly identified big techs and mobile & social media money operators as leading the way. This is not inconsistent with the first finding in that the business model of these organisations (such as Alipay and Google) is built on knowing as much as possible about the lives of their customers.

It is also worth noting that the Jury believes that fintechs and neobanks are making better use of payments data because they have superior technology to traditional financial institutions. The Jury was very sceptical about the ability of payments processors or schemes to use data.

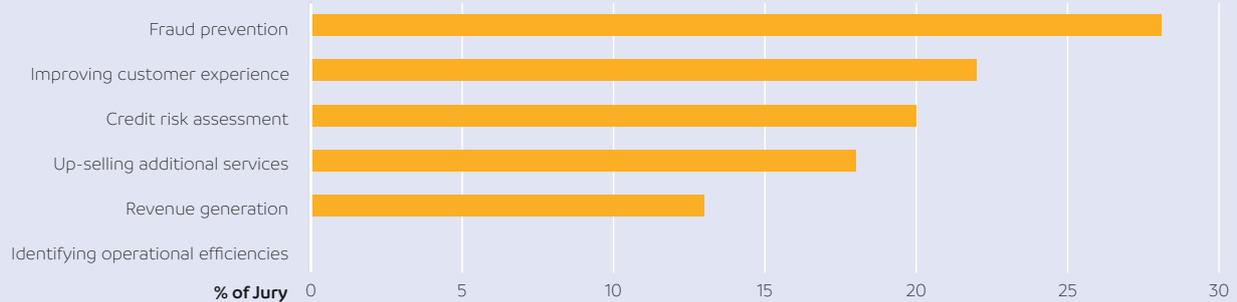
ORGANISATIONS MAKING BEST USE OF PAYMENTS DATA TODAY?



When the Jury was asked to imagine the situation in five years' time, fraud was still seen as the most important use case for payments data, but several of the other use cases also attracted votes from the Jury. The Jury is effectively

saying that more organisations will have updated their technology and will be able to extract value from the data. That said, selling access to the data still remains near the bottom.

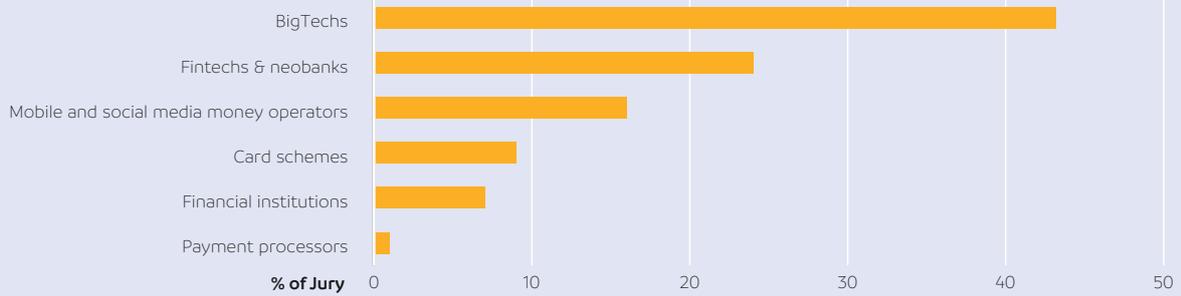
THE MOST IMPORTANT USES OF PAYMENTS DATA IN 5 YEARS' TIME



We also asked the Jury about which organisations would be the main exploiters of payments data in five years' time and the picture was fairly consistent with their assessment of today's situation. This suggests that despite advances in big data technology and machine learning, we are unlikely

to see major changes in the industry competitive positions. This either reflects a lack of vision on the part of the Jury or a sober reality that data usage is not going to be the game changer that many imagine.

ORGANISATIONS MAKING BEST USE OF PAYMENTS DATA IN 5 YEARS' TIME

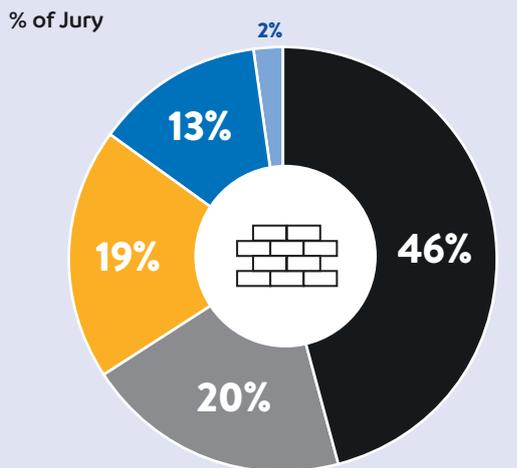


Against the background of the Jury not believing that payments data will be a game-changer for the industry, they were asked about the major impediments to greater use of this data. The Jury did highlight the problem of poor technology for many players but the capital expenditure required to create modern data infrastructures was not seen as a significant stumbling block. This suggests that the organisations concerned are failing to see strong business cases for developing enhanced data capabilities. The reason for this, according to a broadly unanimous Jury, is the increasingly tough regulatory environment relating to data privacy and customer consent.

The question that we originally set out to answer was whether data revenues could eventually become more important than traditional per-click processing fees for payment processors and schemes.

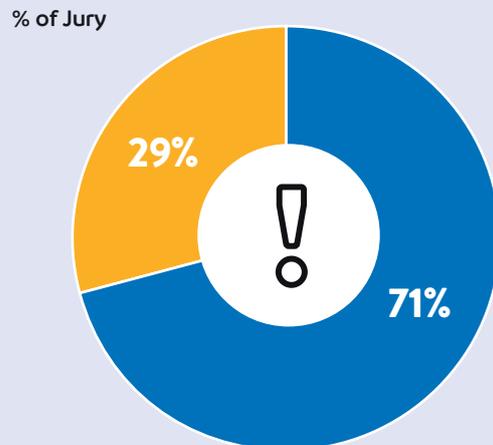
The results here are fascinating, because by a wide margin of more than 2:1, the Jury believe that revenue generation from data will ultimately become more important than straight processing fees. The implication here is that the Jury believes payments processors and schemes will succeed in developing the added value services, such as fraud and credit assessment, that rely on access to this data. This may mean that we will see processors attempting to extract a revenue share from the specialist providers of these services in future.

MOST SERIOUS BARRIER TO EFFECTIVE PAYMENTS DATA USE



- Data protection regulation
- Legacy and/or siloed technology
- Lack of coherent data strategy and culture
- Lack of big data and/or AI expertise
- Capital investment required

WILL PAYMENTS DATA USAGE BE MORE IMPORTANT FOR REVENUE GENERATION THAN PAYMENT PROCESSING IN NEXT 5 YEARS?



- Yes, more important
- No, equally or less important

We also asked the Jury about the adoption of ISO20022, because it is often argued that the data-rich standard will support innovation of new data services.

There is consensus across the payments industry that adoption of ISO20022 will take longer than initially anticipated; the two-year delay in the USA is a clear example of this. The migration of most of the card payment networks is not going to happen for at least a couple of years.

However, much as we expected, the Jury is still expecting widespread adoption within the next one to five years - although as the USA example shows, this may be closer to five years away than one.

“The challenges in development, overheads etc. are complex and difficult to overcome, particularly for some payment methods like cards.”

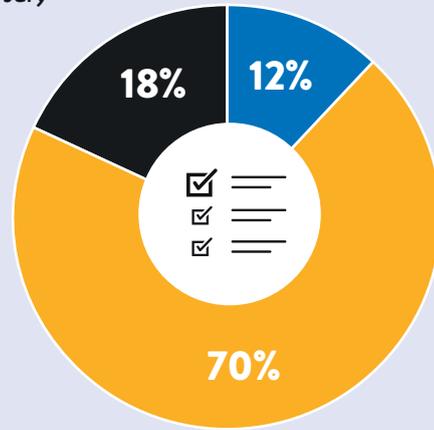
“The US adopts ISO20022 with NACHA this year, but the reality is that most people using the format won’t understand how to use it to improve. So, while adoption will occur this year, benefits of the data within the system will only be seen in the next 3-5 years.”

“ISO is being promised everywhere but is still going to take time to roll out technically and then be adopted and utilised.”

“Early adopters are way ahead; laggards will realise the benefits more slowly and painfully. There are huge and sometimes undiscovered opportunities in the large corporate world via ISO20022 adoption - this is not just a compliance issue.”

WILL ISO20022 LEAD TO BETTER PAYMENTS DATA USE?

% of Jury



- Yes, within 12 months
- Yes, within 1-5 years
- Yes, but it's more than 5 years away

“If data is the new oil, the payment engines it fuels will need to be robust and flexible enough to cope with the skyrocketing volumes expected over the next few years, and be ready to turn that data into actionable insights. Ultimately, whoever can interpret customer habits and behaviour can place valuable knowledge into the hands of the customer. This will enable greater control over their financial affairs.”

Joanne Dewar, Vice Chair,
Global Processing Services

INSPIRING INNOVATION

The nature and pace of innovation in financial services is increasingly dependent on the emergence of new, often disruptive players in the market. In some cases, government agencies have actively promoted competition from new entrants via regulations, examples of which include regulatory sandboxes, limited financial/payment institution licenses with lower capital requirements, and mandatory Open Banking. Solutions have also evolved in many markets to facilitate innovation and competitive growth, such as cloud computing, open source banking, and Banking as a Service (BaaS).

We explored the Jury's opinions on which initiatives are most effective at encouraging innovation, and how the presence or absence of these factors impacts the relative ease of market entry for new players.

Reaping Regulatory Rewards

It has become common for governments to take an active role in facilitating the emergence of new players through regulatory changes. This may take the form of new, special-purpose licenses, streamlining of the licensing process, or simply clarifying how existing regulations apply to new types of businesses.

Many markets have already updated public policy to address this need, while others have similar initiatives either planned or in development.

“In Europe PSD1 and 2 were very supportive through the introduction of Payment Institutions and EMLs, and then open banking.”

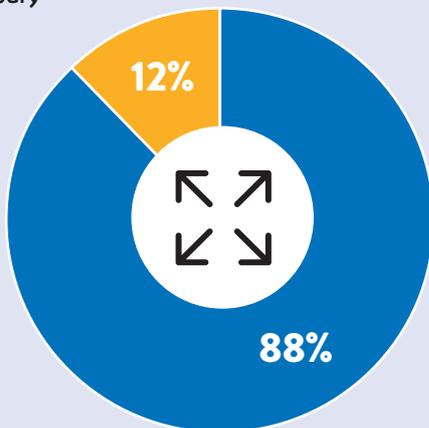
“Not willing to ease market entry – on the contrary, they are increasing barriers.”

“Very active regulator and government working to simplify licensing requirements and improve access e.g. open banking regulation.”

When asked about their own markets, the vast majority of the Jury affirmed that their region has a public policy objective to make it easier for new market entrants, and 58% indicated that their government has taken specific regulatory steps to enhance market access.

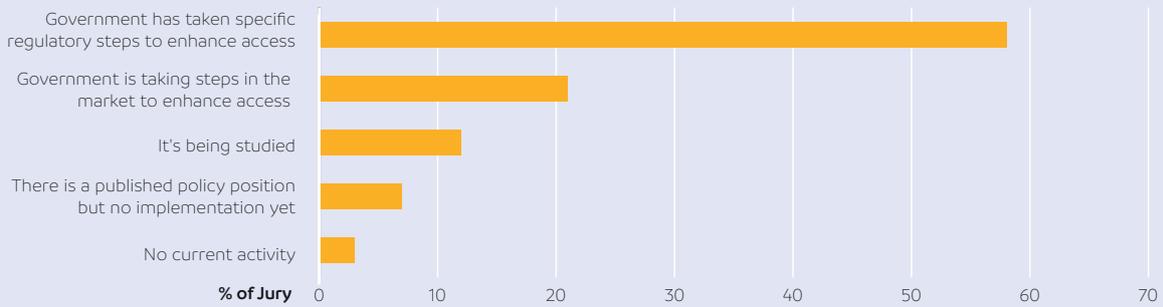
IS IT PUBLIC POLICY IN YOUR MARKET TO MAKE IT EASIER FOR NEW MARKET ENTRANTS TO OFFER BANKING AND PAYMENT SERVICES?

% of Jury



- Yes
- No

PUBLIC POLICY ACTIVITY TO MAKE IT EASIER FOR NEW ENTRANTS TO OFFER BANKING AND PAYMENTS SERVICES?

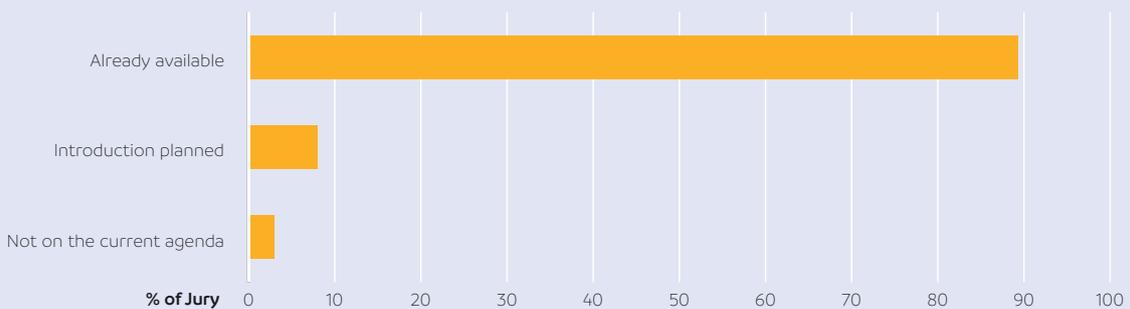


However, the path to regulatory reform can be long and arduous. For 19% of the Jury, new policies are still in the planning stages – i.e. being studied or published but not yet implemented. A further 21% are actively pursuing objectives that are not yet fully realized. The shape these policies take will vary in different markets, with some aggressively prioritizing competitiveness, and others moving more conservatively.

To dig deeper, the Jury was asked to evaluate several specific paths governments take to promote ease of market entrance by new payment innovators.

A common method is the introduction of limited-purpose licenses for payment processing. Such licenses have lower capital requirements than mandated for full-service banks, but are generally restricted to the offering of payment initiation and processing services.

AVAILABILITY OF PAYMENT INSTITUTION LICENCES THAT ALLOW THE PROVISION OF PAYMENT SERVICES BUT NOT CORE BANKING



“No real measure beyond communication yet.”

“The Government has announced a payments policy package, including a new licensing regime for payment service providers, which is in the process of being further developed ahead of implementation.”

“Support for fintechs is being hampered by banks / regulators in certain areas”

According to the Jury, Payment Institution licenses are available (or planned) in most markets. One consideration not specifically addressed by the Jury is whether these licenses are regulated under one standard in all jurisdictions across a market region – as is the case, for example, within the EU – or whether each jurisdiction has its own licensing requirements. The US market is an example of the latter, wherein a firm must apply for licensing both at the federal level and separately in each state in order to operate across the country.

“The South African Reserve Bank has a Fintech unit that is aimed at sandbox initiatives to test thinking.”

“Already introduced by Central Bank of Egypt and currently testing the EKYC, for example.”

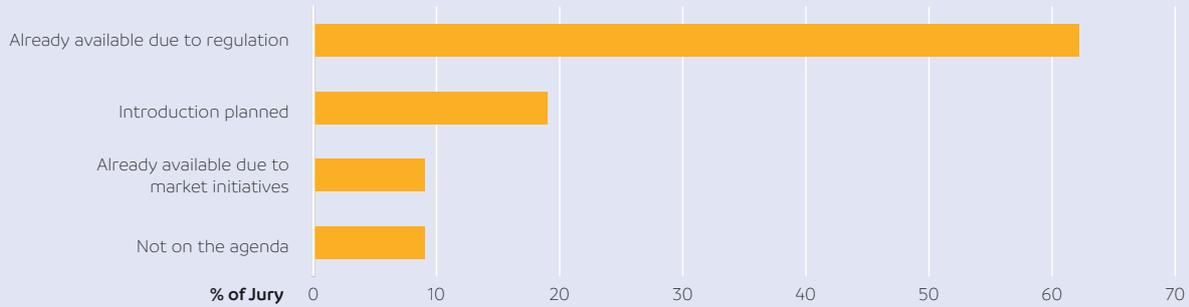
“Not sure how useful it is, but there is an FCA sandbox.”

Some governments also promote competition and innovation through Open Banking regulations, which require banks to provide third-party firms API-based access to account services and data on behalf of their shared customers. When asked whether this capability is available in their markets, nearly two-thirds (62%) replied that Open Banking is already available due to regulatory mandates – a majority that appears driven by relatively long-standing Open Banking rules in the UK and EU, as well as similar regulatory approaches in Asia Pacific, particularly Hong Kong, Singapore and Australia.

“Whilst there are schools of thought that generally view regulation and innovation as somewhat mutually exclusive, our view is that there has been significant progress, particularly in Africa, where FSI regulators (in countries such as Sierra Leone, Nigeria, Rwanda and South Africa) are increasingly facilitating the capacity of payments players to test innovative ideas through regulatory sandbox initiatives without being bogged down by traditional compliance bottlenecks, whilst still adhering to any regulations already in place. Examples abound of regulatory-enabled innovation in the fintech space in the last decade.”

Jonah Adams, Managing Director,
Digital Infrastructure & Managed
Services, Systegra, Interswitch Group

AVAILABILITY OF OPEN BANKING



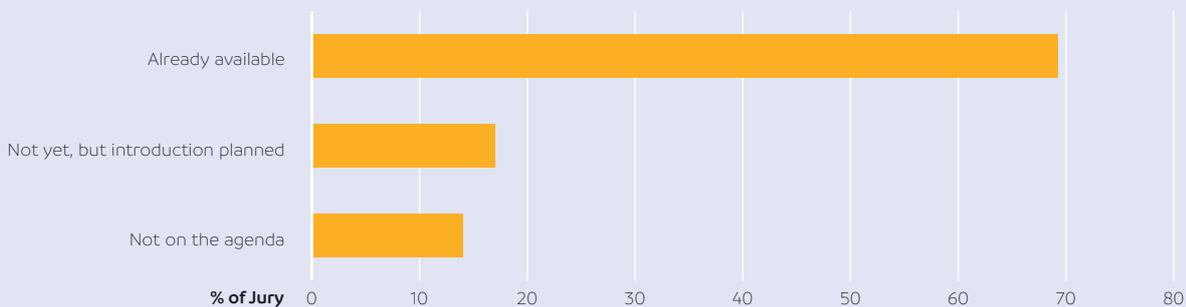
In markets like North America, Africa and the Middle East, regulators have been slower to act, although most are now at least planning, and in some cases have implemented, Open Banking rules. To date in these regions, Open Banking has been driven more by marketplace players and initiatives, such as North America’s Financial Data Exchange consortium, and open finance startups like Plaid in the US, Tarabut Gateway in Bahrain (now licensed under Open Banking regulations in the UAE), and Okra in Nigeria.

Overall, the Jury’s responses on this topic reflect the two alternative approaches governments tend to take on this and other forms of innovation: early and proactive guidance (EU, UK, parts of Asia Pacific), and delayed, reactive oversight (the Americas, MENA).

Another way in which governments can facilitate a fintech’s entry into a regulated market is to provide a regulatory “sandbox”. A sandbox provides a new or existing company an environment to safely experiment with new innovative products in a live environment, under a measure of regulatory guidance.

According to the Jury, regulatory sandboxes are available in some form or other in nearly three-quarters (69%) of their markets. And, of respondents’ markets where they are not available, over half are in the planning stages.

AVAILABILITY OF REGULATORY SANDBOX FOR FINTECHS TO TEST INNOVATIONS



Banking as a Service – Useful, but What is it?

Banking as a Service (BaaS) can be described as a model in which the services (e.g., deposit accounts, money movement) of a licensed bank are digitally integrated directly into the product offering of a non-bank firm. While accurate, this definition is somewhat over-simplified and can lead to a variety of interpretations depending on one’s perspective, as well as debate on the nature of integration and the relative roles of the players. Making matters more challenging, BaaS is sometimes confused with other models to which it can be related, such as Open Banking and embedded finance.

“I see BaaS as a layer providing programmatic access to banking services.”

“I think it is a combination of both, but the business model is more important. The technical model is just an enabler.”

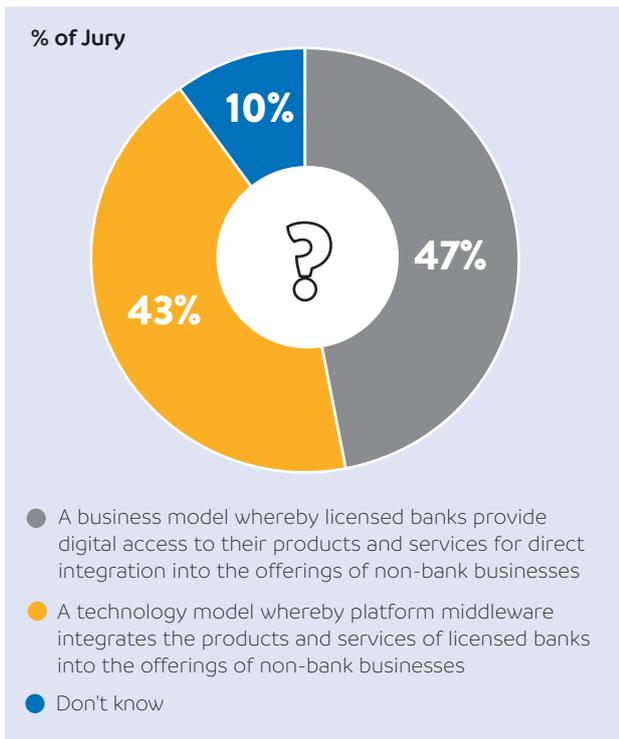
“The answer for me is both of the first 2 answers because in the first option, the bank could also leverage a technology model to enable access to its products and services.”

“Both are correct, however we always try to focus on the business models first.”

Most would probably agree that BaaS is one of the more significant innovations in the digital delivery of financial services over the last five years, but differ on its definition, what is driving it, the primary beneficiaries, and just how valuable it is relative to other innovations. We asked the Jury to provide some insight on these questions. We first asked them to choose between two different interpretations of BaaS, asking whether they define it as a business model, digitally integrating a licensed bank’s services with those of a non-bank, or a technology platform model performing that integration.

The majority were fairly evenly split between the two, with a slight edge towards the business model. While there is no “right” answer to this question, the virtual tie is best explained by the Jury’s comments – most believe that the two options reflect different perspectives of the same model. This creates the potential for confusion in discussions with partners and customers, so an important takeaway for the industry is to ensure that all stakeholders in a conversation on BaaS are using the same definition.

DEFINITION OF BANKING AS A SERVICE



“It is more complex than the above. It is not only a technology model, but a technology AND license model.”

“Banking as a service is offered by established banks, capitalizing on their experience, structures and processes to offer through technology and end user service to customers of their institutions.”

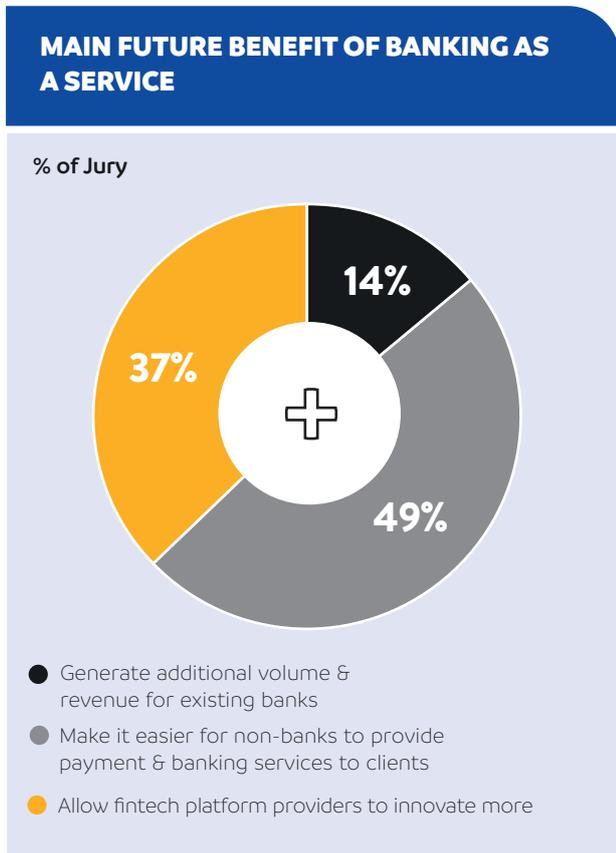
How available is BaaS, and which industry stakeholders are driving that availability? Just over half the Jury (51%) cited availability primarily from neobanks and fintechs. Another 30% responded that BaaS is available in their main market,

but were roughly split on who provides it, with a little over half (18%) stating that licensed banks are the primary providers, and the rest citing technical platform providers.



For banks, there are some clear benefits to engaging in BaaS, including an expanded deposit base and incremental fee participation. However, when we asked the Jury to identify who benefits and how, 86% selected non-bank beneficiaries (49% non-bank service providers, and 37% BaaS technology platforms). It seems clear that the non-bank sectors are driving BaaS in the Jury's main markets.

However we choose to define it, BaaS represents a banking value chain in which banks, fintechs and technology platforms all have a role to play. Regardless of its definition, the Jury clearly recognizes the model's potential contribution to continued innovation.

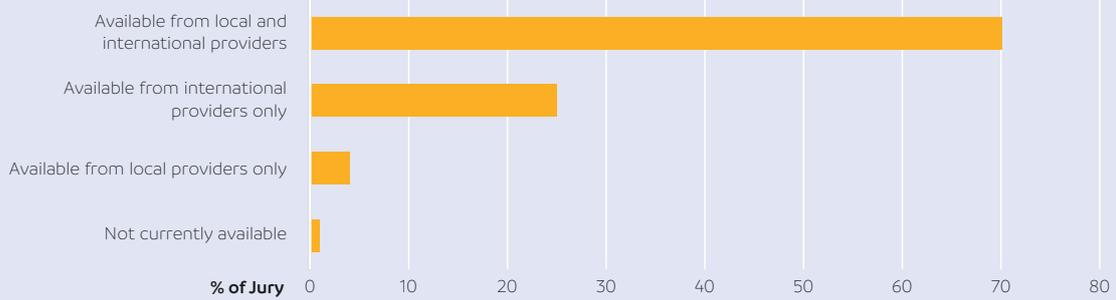


Innovation in the Cloud

Cloud computing is widely recognized as an enabling factor in financial technology innovation. The advantages of using cloud infrastructure to achieve improvements in security, flexibility, mobility, resiliency and many other areas, all at a considerably lower cost than on-premises solutions, are well-documented.

We were interested in the Jury's opinions on both the range of availability of cloud infrastructure solutions and their applicability in delivering payments and banking services in their primary markets. Cloud services appear to be fairly ubiquitous – 99% indicated availability of cloud solutions in their main market, with three quarters citing availability from a combination of global and local providers.

AVAILABILITY OF CLOUD TECHNOLOGY

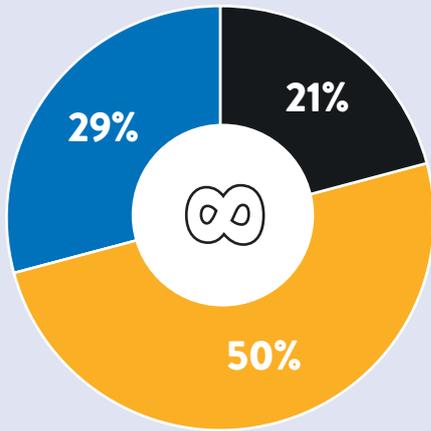


A quarter of the Jury responded that cloud services are only available in their main market from international providers. Given that there are only around ten cloud providers that can be described as “global”, with just three or four dominating global cloud services, we asked the Jury how they believe this limited number of global providers might affect payments innovation in the near future.

Half responded that this will have no significant impact on innovation, and another 29% felt the impact would be positive. There are various reasons behind the Jury’s optimism. Some felt a smaller field of choice would be simpler to understand and navigate, and/or that competition among the current crop of vendors is sufficiently competitive. Others felt that the point is moot, since the massive capital investment required to build and operate a cloud business on a global scale naturally limits the number of possible competitors.

FUTURE IMPACT OF LIMITED NUMBER OF GLOBAL CLOUD SERVICE PROVIDERS ON PAYMENTS INNOVATION

% of Jury



- Negative impact
- No significant impact
- Positive impact

“With 4 major players competing heavily for new use, competition that is clear and known is driving prices down, and innovation continues.”

“The limited number of providers also means that developers can understand a limited number of environments and be efficient... without having to understand large numbers of platforms with significant differences”

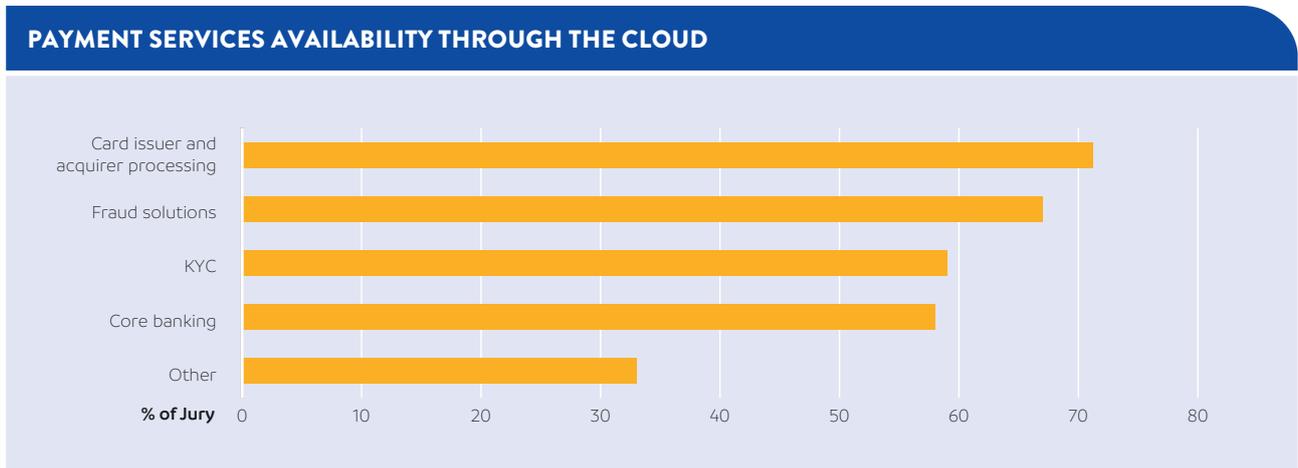
“This is a highly specialised field and massive investments are required by the service providers. Not expecting to see many more of them.”

“I think creativity is more likely to flourish in a market rich with service options.”

That being said, it's also true that 21% of the Jury believe the limited number of global solution providers does represent a risk to innovation.

Given that cloud solutions appear to be universally available, it may seem surprising that cloud-based financial

services are not quite as widespread. 71% of the Jury cited primarily card-related processing services as being available via the cloud, followed by fraud solutions (67%); KYC and core banking applications were selected by 59% and 58% of respondents respectively.



“The Central Bank still mandates that payment fintechs must have a physical data center.”

“The challenge is that the banking and payments regulators limit cloud services.”

“Only non-core (secondary) systems can utilize cloud services.”

“These are mostly available via fintechs.”

While many fintech services are natively cloud-based, regulated institutions have been generally slower to invest in cloud migration, for a variety of reasons. In some markets, government regulations can hamper, if not specifically prevent, certain financial applications and data's migration to the cloud. The regulatory risk, both real and perceived, along with the resources required to satisfy regulators on compliance, can act to impede adoption.

Open Source Banking & Payment Solutions

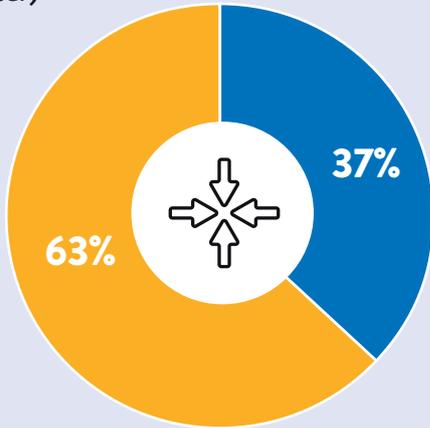
As the term implies, open source banking refers to a core banking software product for which the underlying source code may be used, modified and maintained by anyone, usually under the terms of an open source license agreement. Licensing terms for open source software can be significantly less expensive than terms for typical commercial banking products, although this may be offset by ongoing maintenance costs. The lower entry cost can make open source banking an attractive option for some smaller financial institutions and fintechs, as can the more modern design of some open source products (Apache Fineract CN, for example, is cloud-native and features Open Banking APIs).

“At Interswitch, we believe that standardised APIs would significantly transform payments in Nigeria and Africa as a whole. Nigeria is a global leader in payments and is expected to similarly lead with Open APIs. As an integral payment services provider at the centre of national payment systems across East and West Africa, we are committed to working with banks, fintechs and Central Banks across Africa to drive the deepening of Open Banking as a practical concept in Africa.”

Akeem Lawal, Managing Director, Transaction Switching & Payment Processing, Purepay, Interswitch Group

ARE OPEN SOURCE PROCESSING SOLUTIONS GAINING SIGNIFICANT TRACTION?

% of Jury



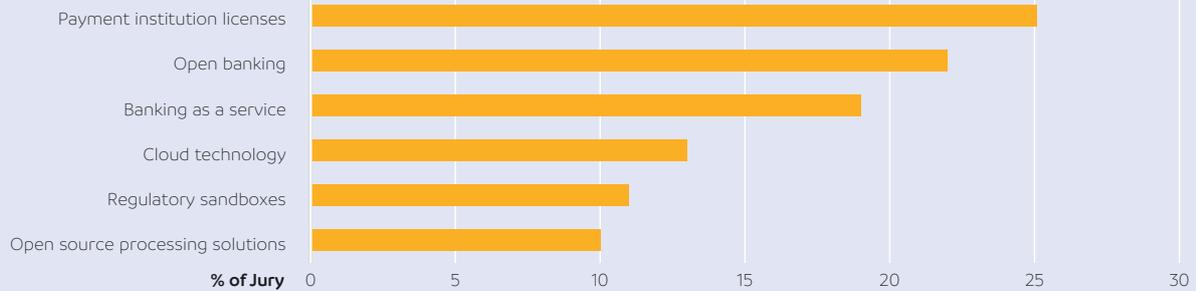
- Yes
- No

When asked whether they see open source solutions gaining traction, only just over one-third (37%) of the Jury responded positively. This may be because, while the open source approach can offer a less-costly head start for enterprises willing to take full ownership of banking and payment software, there are some tangible expenses and risks involved. In particular, firms taking the open source path must either contract with costly third-party software maintenance providers, or take full responsibility for maintaining currency in critical areas like cybersecurity and regulatory compliance. So far, it appears that open source banking is still a niche alternative in developing markets and among some fintechs.

The Bottom Line for New Market Entrants

After considering six factors that tend to cultivate innovation by facilitating the emergence of new payment solutions, the Jury was asked to rank these factors for effectiveness.

INITIATIVES FOR INCREASING PAYMENTS INNOVATION



Three of these factors can be characterized as largely government-influenced: payment institution licenses, Open Banking initiatives via regulatory mandates, and regulatory sandboxes. That two of these – payment licenses and Open Banking – were the clear winners with the Jury underscores the critical role that industry leaders believe government can and often does play in creating an environment conducive to emerging payment innovation.

On the other hand, not all forms of regulatory oversight are equal, and regulatory sandboxes garnered significantly less enthusiasm with the Jury. This may be a natural reflection of the tendency of any regulatory engagement to slow progress – sandboxes are still often viewed as more of a gatekeeper than a fast-track.

Cloud technology and BaaS ranked comparably in the middle, suggesting that both have a firm role to play in the future of payment innovation. Open source solutions ranked last with the Jury, possibly reflecting that these solutions are, as yet, being utilized by a relatively small niche of select fintechs and developing markets.

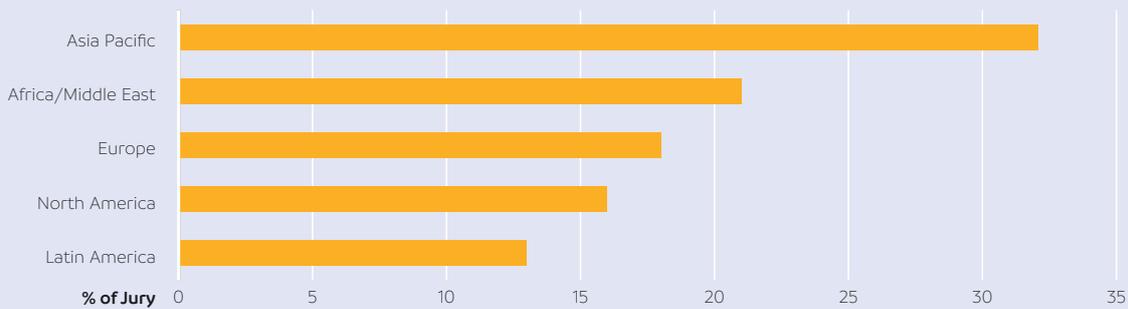
There is no single market condition, then, that can enable innovative new payment solutions to emerge and potentially flourish. According to the Jury, what's required is more of an open finance toolkit, which is most effective when reinforced by a supportive regulatory framework.

In addition to exploring the most impactful facilitators of innovation, we asked the Jury about which regions of the world they expected the most innovation to occur in over the next five years.

The picture was very clear in that Asia is seen as the most likely crucible for innovation. The continent has seen the growth of Alipay and WeChat Pay in China, the rise of NPCI in India, and the Grab and Gojek wallets in Thailand, as well as an array of new payment solutions. There is enormous consumer demand for digital payment solutions, a well-developed investor sector, and there are regulatory bodies with clear innovation agendas - all of which are driving the Jury expectations of regional innovation.

Second place in the view of the Jury goes to Africa. Again, there is massive demand from a young and fast-growing population. Regulators across the continent are starting to emulate their Asian counterparts and the availability of venture capital finance is improving, albeit from a relatively low base. For Africa to outscore the more developed and better financed regions of North America and Europe, even by a small margin, is tribute to the rise of entrepreneurs in the continent. Companies such as Fawry in Egypt, HPS in Morocco, Wave in Senegal, Entersekt in South Africa, Flutterwave & Interswitch in Nigeria and Ghipss in Ghana are all leaders in innovation.

WHERE MOST PAYMENTS INNOVATION WILL HAPPEN OVER NEXT 5 YEARS?



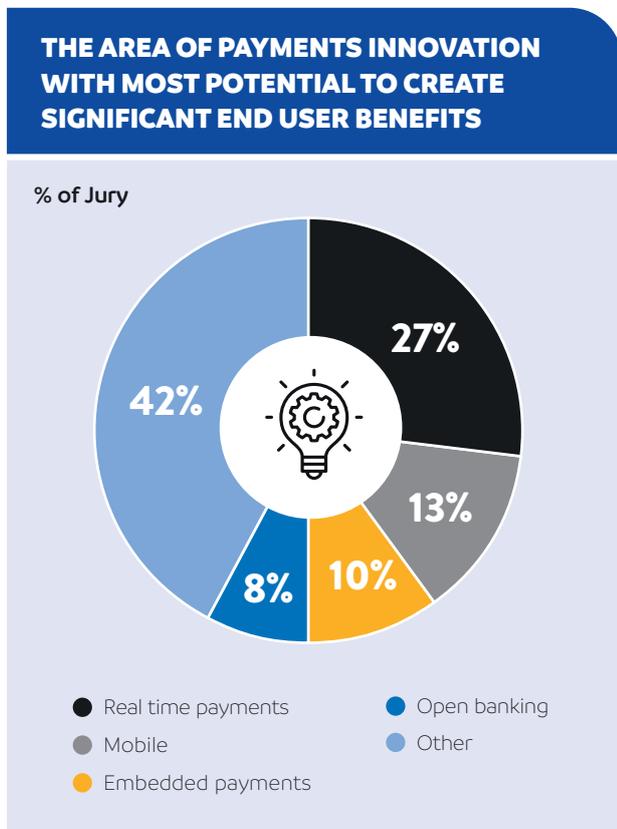
THE BEST OF THE REST

The Jury was asked some general innovation questions in addition to the main five topics.

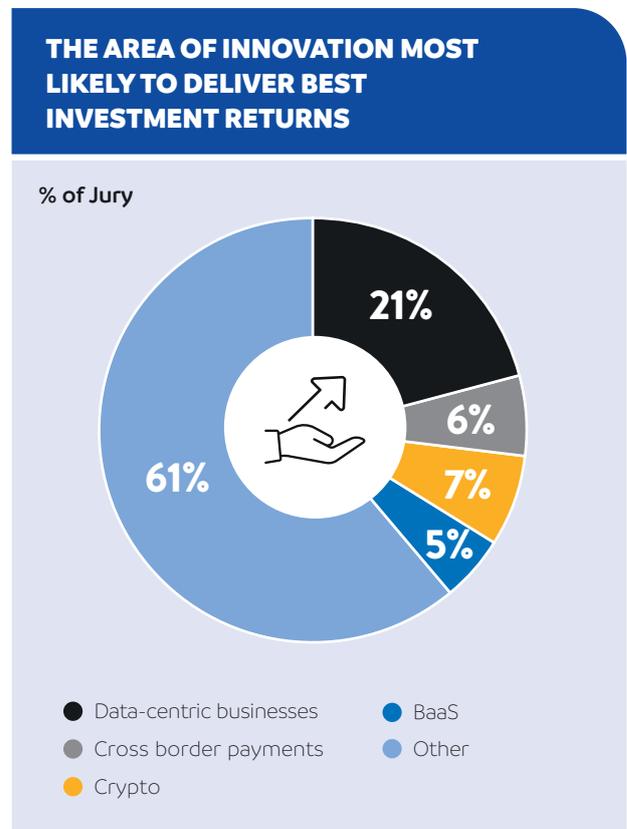
They were asked to share their views on which area of payments innovation has the most potential to create significant benefits for end users.

By a very significant margin, the Jury felt that real-time payments have the most potential. 27% of respondents considered real-time payments likely to deliver customer benefits.

We also asked the Jury to consider which areas of innovation would be likely to deliver the best returns for investors. This time, the picture was very different, with the Jury clearly believing that whilst real-time payments can deliver meaningful customer benefits, it is not an area where there are notable investment opportunities. There was a clear winner in that 21% of the Jury felt that businesses making innovative use of data were the most likely to generate good investment returns.



13% of the Jury favoured mobile payments; embedded payments and open banking secured votes from 10% and 8% of the Jury respectively. The other 42% of the Jury votes were spread across a number of other innovations, none of which was as significant as the top four choices.



No other area scored more than 7% of the Jury's votes, and the 'other' category (which combines several areas that scored less than 5%) accounted for 61% of votes. This shows that, apart from the opportunities presented by payments data, there isn't much consensus about where the most profitable opportunities lie.

There was much more consistency from the Jury about which innovations are the most over-hyped.

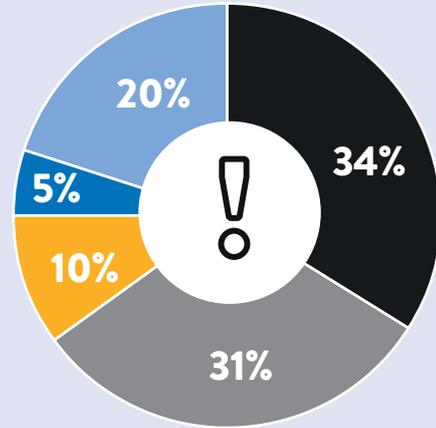
“Whilst ‘Digital’ is increasingly becoming a way of life in Africa, it is still imperative for players to objectively assess the varying levels of digital maturity across the markets they operate in, to be better placed to understand real risks vs. meaningful opportunities in innovation, as well as to identify potential innovation triggers. The dynamic buzz of activity on the African fintech/payments landscape, fuelled by pressure for growth accompanying increased investor funding, invariably means that there’s a lot of hype in the market which could lead to disillusionment.”

Mitchell Elegbe, Group CEO, Interswitch

BNPL received the most votes (34% of the Jury), in line with their views that although there are significant user benefits, the area has limited long-term potential. The high score (31%) for cryptocurrency also is not surprising given the recent market events and the collapse in values, which underscores that crypto is an asset class with high volatility and therefore not currently suitable for retail payments. CBDCs also attracted some votes (10%), with Jury members citing the lack of a business case for what is seen by some as a purely political project.

THE MOST OVERHYPED PAYMENTS INNOVATION

% of Jury



- BNPL
- Block chain
- Crypto
- CBDC
- Other

The ‘other’ category of 20% was significantly smaller than for ‘most consumer benefits’ and ‘best investment proposition’, suggesting that there is a high degree of consensus from the Jury about the areas where there is a major divergence between the claims and the reality.



JOHN CHAPLIN

John Chaplin is adviser to several leading payments organisations in Africa, Asia, Europe and Middle East.

He previously held senior roles at both Visa and First Data where he gained experience of providing card processing services in multiple markets. More recently he has advised domestic payments schemes and switches in Australia, India, Morocco, Nigeria, Norway, South Africa, Turkey, UAE and Vietnam. As Chairman of Global Processing Services in Europe, John steered the landmark acquisition by a consortium of specialist payments investors in 2022 and is still a board director. He is a board director of Interswitch in Nigeria, a board director of Sentenial in Ireland, and a former Chairman of TPAY MOBILE in MENA. He founded the Payments Innovation Jury in 2008 to provide not-for-profit research into how innovation actually works.



CHRIS HAMILTON

Chris is a specialist adviser in design of national payments infrastructure through his own consultancy, Hamilton Platform.

For more than 25 years he has encouraged competitors in financial services to collaborate for social good. He is quite patient. He has been the CEO of BankservAfrica, Africa's largest payments clearing house, and of the Australian Payments Clearing Association (now Australian Payments Network), Australia's payments self-regulatory body. He started his career in Sydney, Australia initially as a solicitor and then with the Australian Securities Exchange.



GREG BOUDREAUX

Greg is an independent consultant in Digital Banking and Payment services, for both retail and commercial applications.

Over a career of 30+ years, he has advised and supported numerous large financial institutions, payment firms and fintech startups across the US and UK on digital strategy and development. Greg began his career in software development for the Bank of America and Visa, before transitioning to consulting. Most recently, he worked in digital strategy and business analysis for First Republic Bank in San Francisco.

