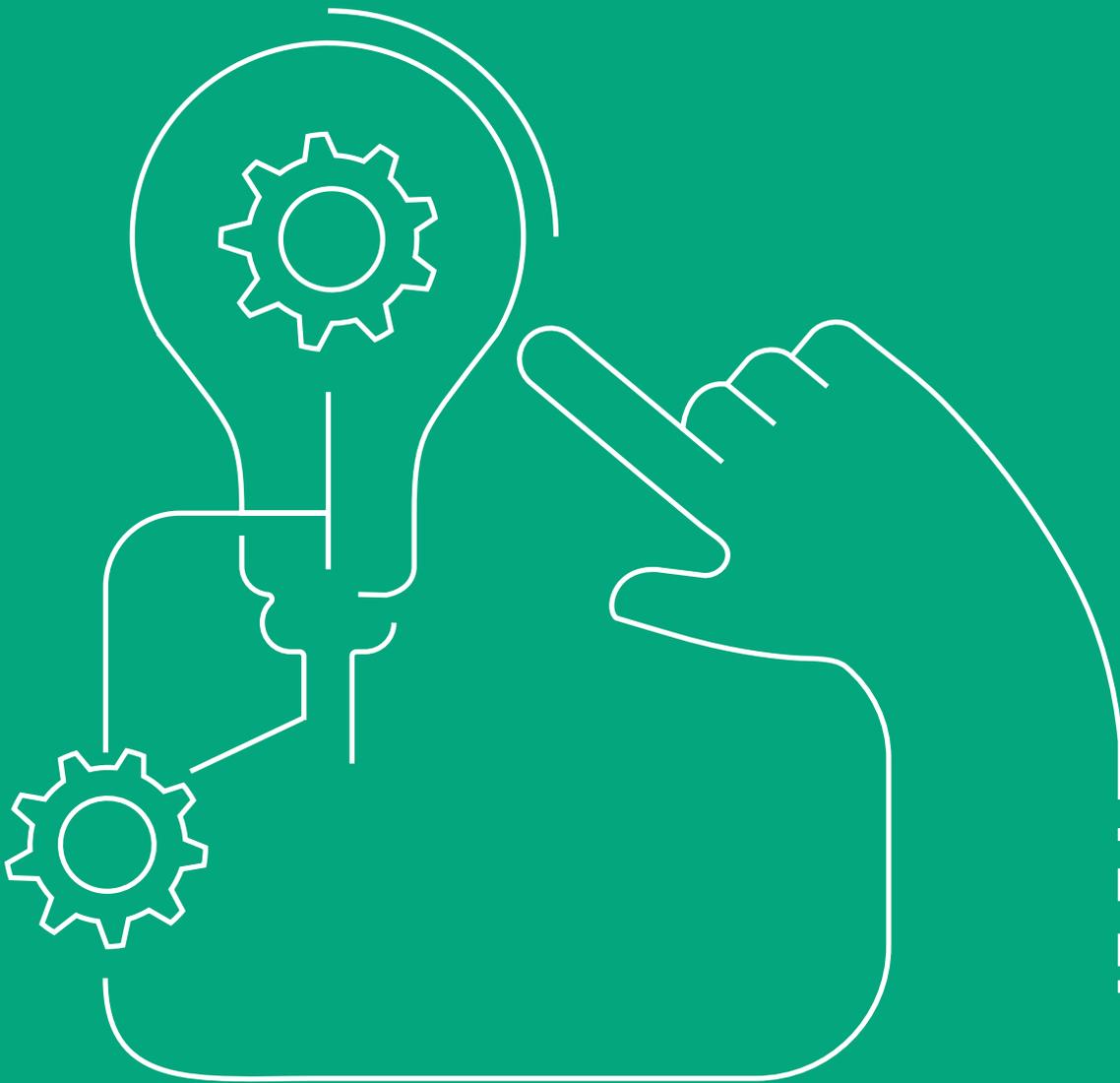


INNOVATION IN REAL TIME

A new wave of payments innovation

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Executive summary

The COVID-19 pandemic has dramatically accelerated change in the payments industry. Digital payments have soared as the world has worked and played from home. Innovation has ramped up as the payments industry has raced to meet demand and develop new products and services. And organizations' resilience has come under greater stress as they scramble to meet their payments obligations while mitigating risks such as the cyber threat.

Against this backdrop, this research looks forward rather than backward. It charts what lies ahead using the results of a quantitative survey of 1,500 public and private sector organizations across Europe and the US and qualitative interviews with industry experts.

Will the way organizations make and receive payments go back to how things were before the pandemic, or has it changed for good?

TRANSFORMATION CONTINUES

The short answer from the research is that transformation is continuing at pace and most organizations are now even more determined to invest in their payments infrastructure. The lessons from the pandemic have been invaluable: organizations identified shortcomings in their payments capabilities and placed a higher priority on determining innovative solutions.

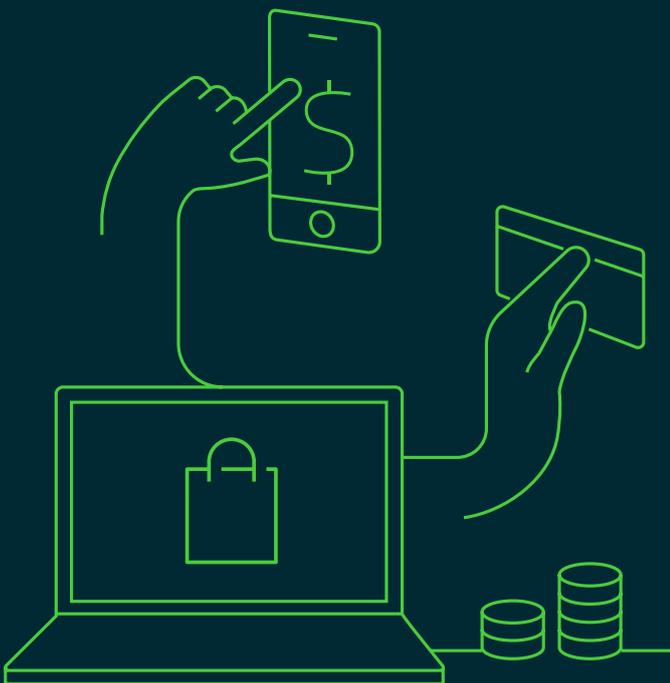
In particular, the research suggests that real-time payments are at an inflection point. Demand from customers and suppliers is growing, and providers are now overcoming their previous challenges of fragmentation and technology blockages. As the real-time payments model matures, businesses will increasingly see benefits beyond speed and cost reduction. They will also apply real-time payments to a diverse range of innovative use cases.

KEY FINDINGS

- Payments investment is set to increase: 70 percent of organizations plan to increase spending
- Spending will focus on skills (a key priority for 44 percent) and technology (37 percent)
- Speed of payments is now companies' leading challenge
- Organizations recognize a range of drivers for real-time payments and led by new technology advances (35 percent), increased availability of offerings from third parties (35 percent)
- Real-time payments adopters expect to see benefits that include improved communication with counterparties (41 percent), better liquidity management (35 percent) and access to transaction data (30 percent)
- Adoption is limited today, but it is accelerating: 14 percent of organizations have already embedded real-time payments
- Organizations are currently using real-time payments domestically for accounts receivable and payable, cross-border payments will follow
- Organizations are looking for support with implementation: 77 percent would outsource at least part of the work of developing real-time payments capabilities
- The biggest challenges in shifting to real-time payments are fragmentation and issues with legacy infrastructure (both cited by 30 percent of respondents)

PART 1

The payments landscape today



As businesses focus on recovery from the COVID-19 pandemic, there is widespread acceptance that now is the time to invest in new payments innovations and upgrade capabilities.

In this research, a large majority of companies plan to increase

spending on their payments infrastructure, because they recognize the wider benefits this can bring to their businesses (see **Figure 1**).

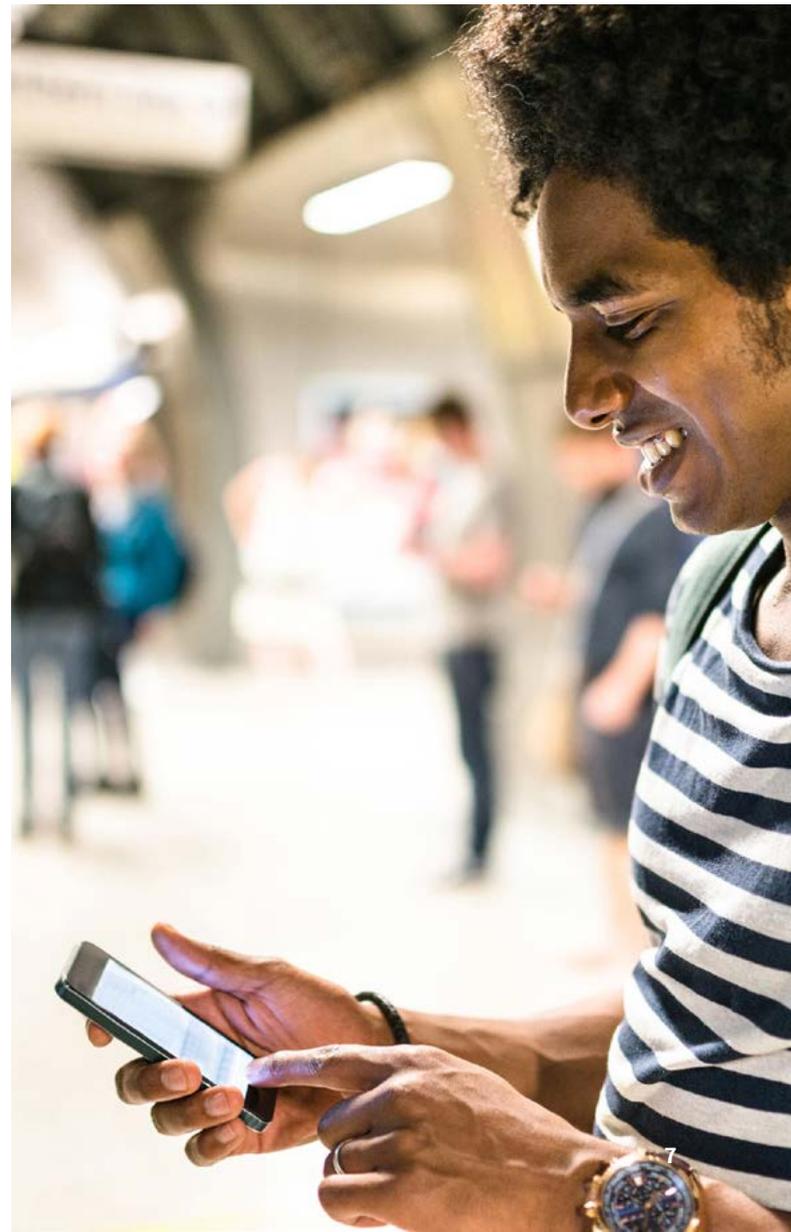
In part, this reflects the rapid evolution of payments technology, which has been driven by innovation from both existing payments providers and new entrants to the sector. But it also reflects the accelerant effect of the pandemic: the growth of e-commerce and digital services more broadly has shown how much businesses need these technologies.

READY FOR A NEW CHAPTER?

“We are at a really important and interesting point in the development of payments, and the industry is on the cusp of a new chapter in terms of what is possible,” says Gareth Lodge, a Senior Analyst at the research firm Celent. *“The past decade has seen more change than we’ve seen in the previous 40 years – driven by technology and regulation, but also by consumer expectations based on experiences outside of the banking industry. And we expect the pace of change to accelerate further.”*

Figure 1: Businesses are ready to invest in payments

Which of the following statements best describes your organization’s current appetite for investing in new payments innovations?





SKILLS RENEWAL IS A PRIORITY

Against this backdrop, businesses are preparing for a step-change in their payments capabilities, with clear priorities for action over the year to come (see **Figure 2**). Many have identified a need to improve their skills to better understand where to focus on innovation and to exploit the most attractive investment opportunities. These improvements will come both from investment in skills in the existing payments team and through partnerships with third parties such as technology providers.

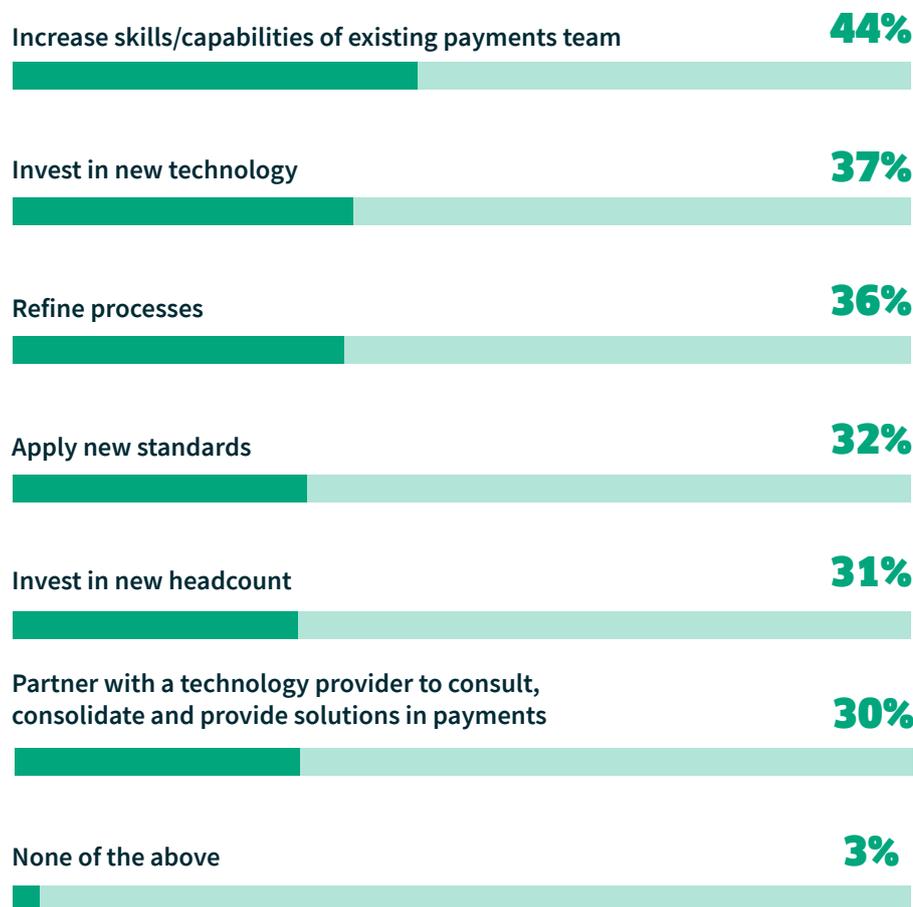
“Our first priority is to receive payments from our customers, and they want to be able to pay in any number of ways,” says a senior executive from an airline interviewed for this report. “Once, that was fairly straightforward, but we are consistently seeing new types of platforms, new wallets, and new rails coming through; we have to be able to handle that and to do so safely and securely.”

Skills renewal will go hand in hand with investment in new technologies. *“Technology is the*

priority, because that will drive process and people,” says Aman Cheema, SVP Global Real Time Payments Strategy & Innovation at FIS. “Companies need their tech stack to be lean, mean and effective. If not, they will need a lot more process, which means they require a lot more people. They end up spending on human capital to manage a business process as opposed to a client experience or client interaction, where more value could be added.”

Figure 2: Existing skills are the top priority for payments innovation

What are your key payments priorities over the next 12 months?



INVEST TO OVERCOME CHALLENGES

These investments will help businesses overcome their payments challenges. At the top of their list is the need to accelerate, and significant numbers point to the need for better visibility of liquidity and fair service charges (see **Figure 3**).

FIS's Cheema reflects on the growing number of respondents who cite challenges such as the risk of cyber attack and fraud losses. Payments innovation can also help to protect organizations from these dangers.

“ The constant theme has always been that it needs to be cheaper, faster and better. But in the past few years we have added secure to that list. ”

Aman Cheema, SVP Global Real Time Payments Strategy and Innovation, FIS

Figure 3: Speed leads a wide range of payments challenges

What are the biggest challenges you currently face with your payments infrastructure?



PART 2

Real-time payments: Why now?



Real-time payments will be at the heart of the next stage of payments innovation. Available 24 hours a day, seven days a week and 365 days a year, real-time payments offer near-instantaneous initiation and settlement, as well as broader functionality – such as the transmission of richer datasets alongside transactional instructions.

Why has their time arrived? One driver is simple: technology is finally making real-time payments possible and accessible. Previously, the main barriers to real-time payments were complexity and fragmentation. It was technically challenging for any business to address these problems individually, and the costs were too great.

But this is changing at pace: real-time payments rails – the digital infrastructure necessary for these transactions – are maturing in markets all around the world.

Policymakers are supportive of such advances, and are prepared to intervene to offer support if necessary. Support from regulators in the U.K. has facilitated the introduction of the faster payments system, and similar initiatives are taking place in the U.S.





In the European Union, Eric Duclombier, Head of the European Commission's Directorate-General for Financial Stability, is leading an inquiry into whether reforms are needed to pave the way for instant payments in the bloc. *"Instant payments have the potential to fulfil all our objectives across our digital agenda,"* he says. *"It is not just a means of paying faster, but also has benefits from innovation to strategic autonomy."*



WHAT IS DRIVING RESPONDENTS TO REAL-TIME PAYMENTS?

The survey respondents are taking advantage of such advances. More than a third say they are exploring real-time payments in the context of technology developments – such as the introduction of APIs that offer simple links into payments infrastructure. The same number cite the growing number of offerings available from the financial services sector (see **Figure 4**).

There is also a growing awareness of the risk of being left behind. Many businesses are feeling the pressure to keep up with their competitors in the race to adopt real-time payments.



Figure 4. Tech and financial developments drive real-time payments adoption

What are the biggest drivers behind a greater shift toward real-time payments?

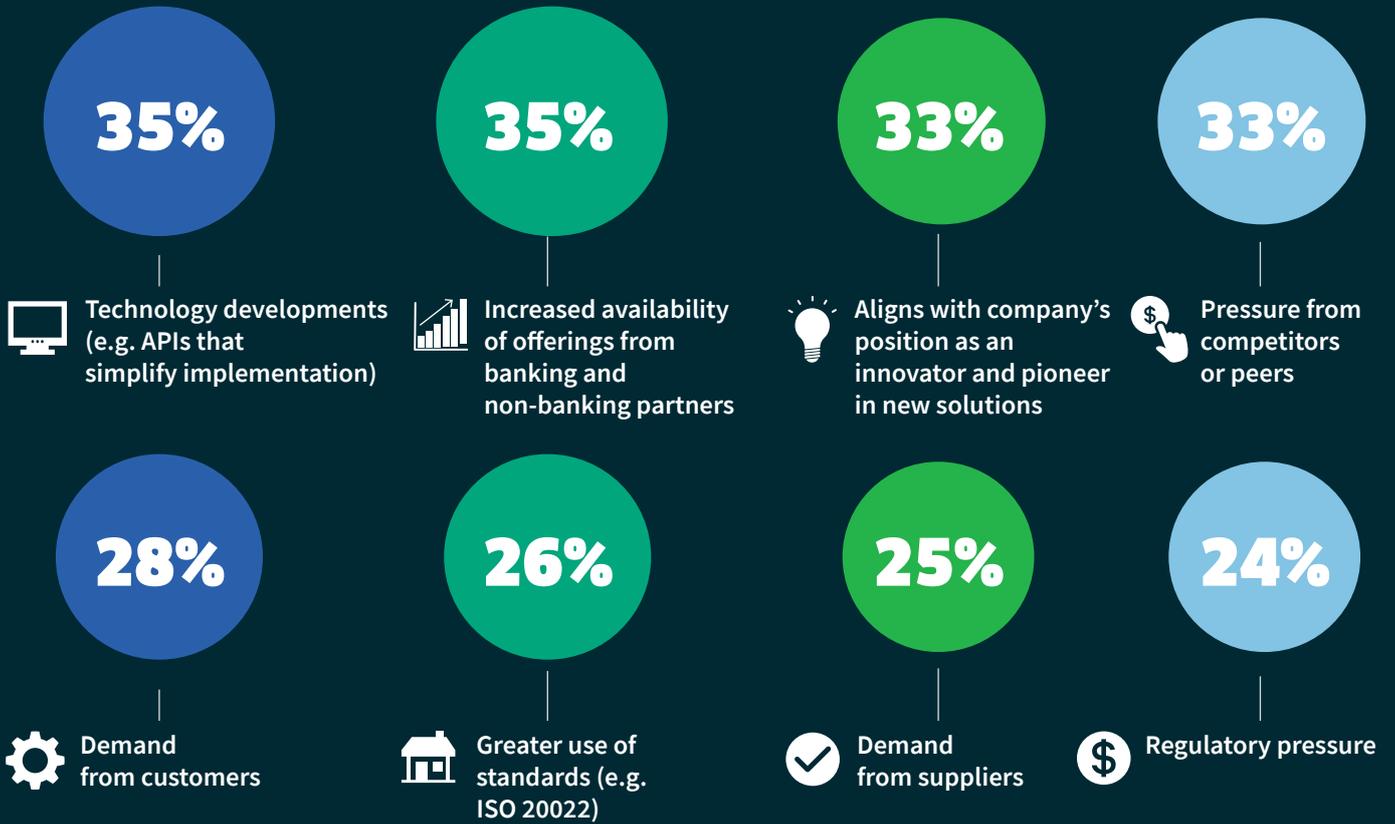


Figure 5. Real-time payments are accelerating

Please indicate whether you agree with the following statements (chart shows percentage who agree)





HOW BUSINESSES BENEFIT FROM REAL-TIME PAYMENTS

Businesses should not underestimate the benefit of being able to reduce delay and improve communication – and therefore strengthen relationships with partners.

“Payments are built on trust,” says James Butland, Vice-President of the payments innovator Airwallex. “As a merchant or consumer, you have to trust the financial system in order to use it. If you’re sending money to the US and it arrives within seconds, that

gives you confidence. But if you send that money to the US and it disappears for three or four days, that trust is eroded and you might hesitate to send your payment next time.”

“ The whole financial infrastructure is trust-based, and that’s why real-time payments help. ”

James Butland, Vice-President, Airwallex

Figure 6. Communication and liquidity management are the biggest winners from real-time payments

What would you consider to be the main benefits of a greater emphasis on real-time payments?



Another benefit is improvements in liquidity management. *“Because we don’t have real-time settlement of payments, there are still, in 2021, treasurers in many organizations who spend their days calling their bank on a regular basis throughout the day to understand where large payments actually are,”* says Naresh Aggarwal, Associate Director Policy & Technical at the Association of Corporate Treasurers.

Carlos Madrona, Internal Control & Compliance, Payment Methods and Fraud Director at Spanish fashion retailer Mango, believes that real-time payments will increasingly be an integral element of customer service. He points out that shoppers expect to be able to pay instantaneously for their purchases, whatever channel they use – including in-store. They do not expect to be held up by security controls and other checks.

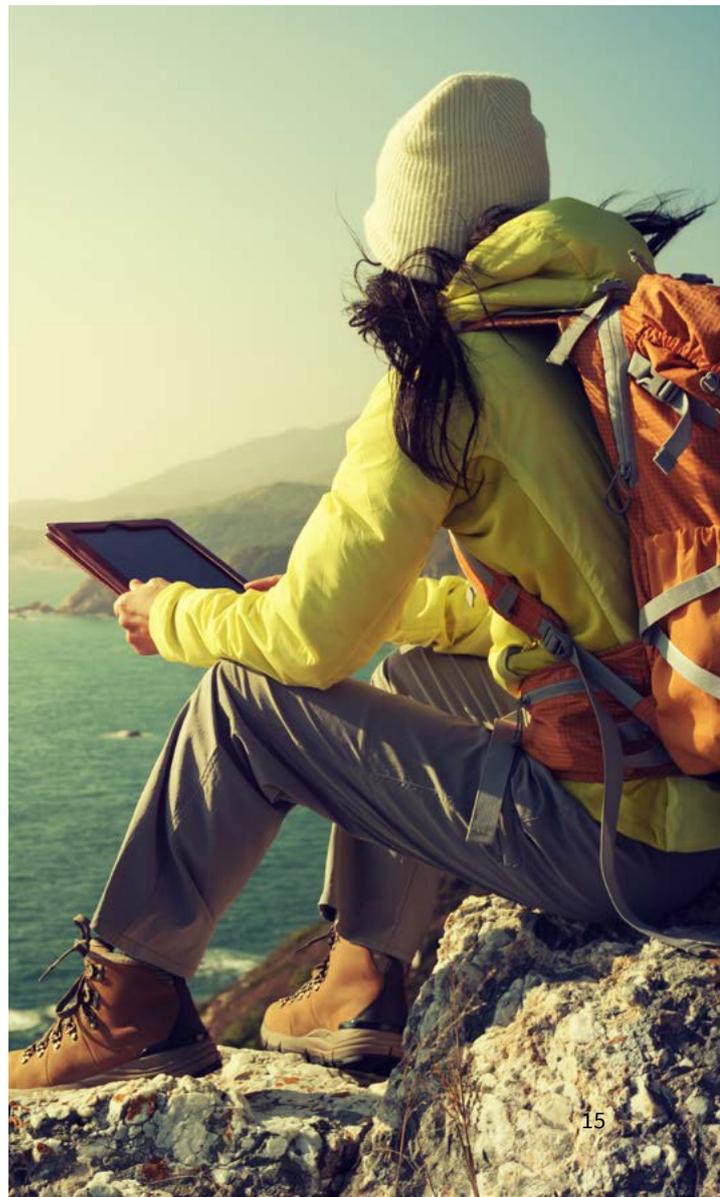


“ Real-time payments provide a good experience for our clients, offer simple authentication and reduce the risk of fraud. ”

Carlos Madrona, Internal Control & Compliance, Payment Methods and Fraud Director, Mango

In this context, COVID-19 is proving to be a catalyst for adoption of real-time payments technologies: 68 percent of respondents believe the pandemic will accelerate adoption.

Consumer-facing businesses are introducing new capabilities as e-commerce soars. But even in non-consumer sectors, individuals who have benefitted during the pandemic from digital transformation in their personal lives now expect the same sort of functionality in the work environment.



HOW REAL-TIME PAYMENTS UPTAKE VARIES BETWEEN SECTORS – AND WHY

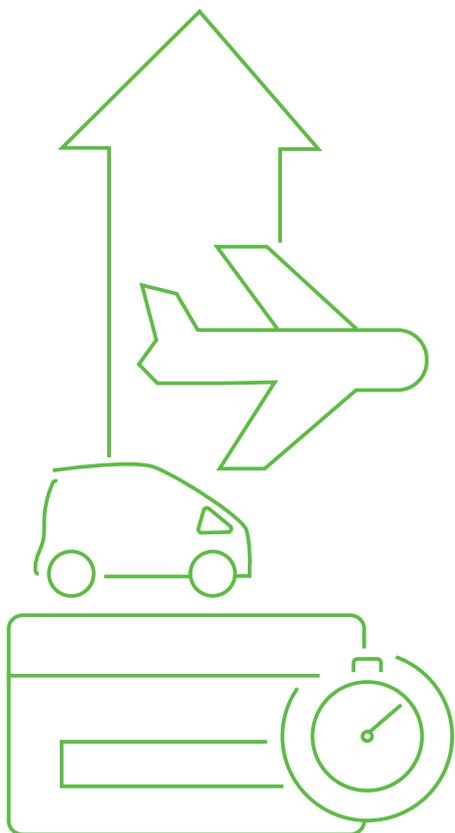
Some sectors are moving faster than others to implement real-time payments.

17%

of automotive and transportation respondents in the research have already embedded real-time payments in their organizations, while only

7%

of government and public sector respondents say the same



DIFFERENT STRATEGIES

The sectors that have moved quickest on implementation appear to be less focused on immediate gains such as cost and efficiency savings, and more focused on broader benefits that will accrue over time. Respondents from the **hospitality and travel** sector, which is second in embedding real-time payments, are more likely than those in other sectors to see benefits such as improved liquidity, easier communication with counterparties and stronger relationships with suppliers.

DIFFERENT MOTIVES

Drivers of the shift to real-time payments also vary. Impending regulation is an impetus in certain sectors – notably for **government and public sector** respondents. But respondents in the **automotive and transportation** and **hospitality and travel** sectors are more likely to say that customer demand is pushing them to move more quickly on real-time payments. The need to keep customers happy may be another reason why these sectors are at a more advanced stage of implementation.

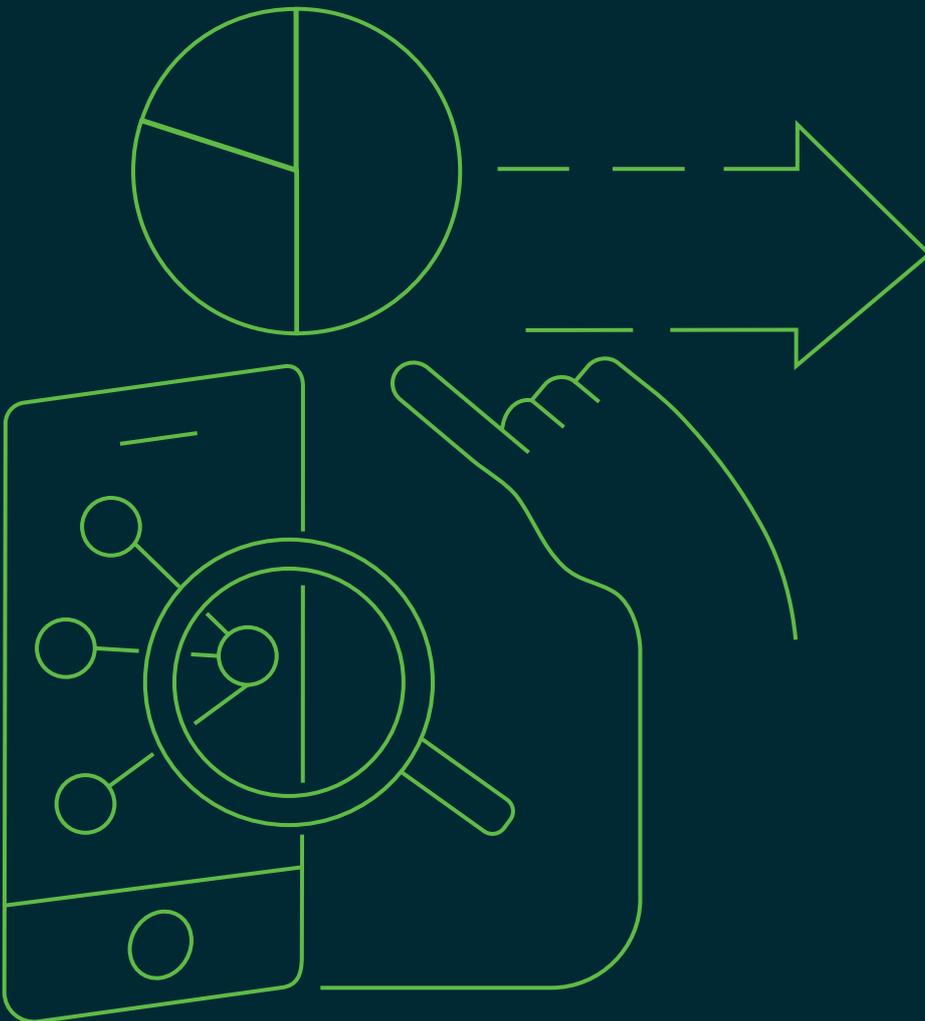
DIFFERENT CHALLENGES

Respondents in certain sectors are more challenged by current issues with their payments infrastructures. **Life sciences** is the stand-out example: 28 percent of respondents from the sector complain of excessive administration and manual processes, compared with 22 percent overall, and 27 percent are struggling with liquidity management, compared with 23 percent overall.

Businesses are working hard to solve these issues – life sciences respondents are more likely than those in other sectors to be prioritizing skills improvements in the payments team – but their difficulties may get in the way of speedier adoption of real-time payments. Forty-five percent of **life sciences** respondents do not expect to get to implementation for at least three years. However, they may find that speeding up their adoption of new technology helps them to tackle their challenges.

PART 3

Opportunities and use cases



Only a minority of organizations have fully embedded real-time capabilities, but the pace of implementation is now accelerating.

The majority of businesses in this research – 59 percent – will have real-time payments capabilities in place within two years (see **Figure 7**).

One interesting nuance in the research is how the pace of adoption varies between sectors.

42%

of respondents among consumer-facing (B2C) businesses have already embedded real-time payments or are currently piloting the changes required.

The figure for business-to-business (B2B) organizations is only

33%

B2B BRINGS UP THE REAR

It may be that customer demand and the more obvious use cases in B2C – particularly in a multi-channel world – are driving earlier adoption. *“I cannot obligate the customer to pay in a certain way,”* says Mango’s Carlos Madrona. *“I have to adapt to their needs, to put the customer at the center of everything.”*

In the longer term, however, B2B organizations may secure broader, more valuable benefits from implementing real-time payments.

“The thing I try to impress on my clients is that they should not only be thinking in terms of speed,” says Celent’s Gareth Lodge. *“There are all sorts of opportunities to embed payments into the value chain to drive automation – with real-time payments triggering a particular response, for instance. Think about automatic release of shipments at the docks or qualification for particular payment terms according to when you pay.”*

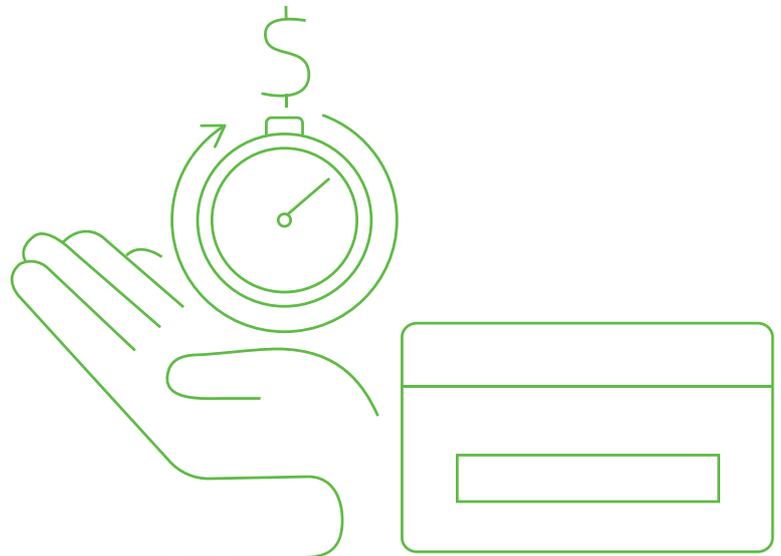
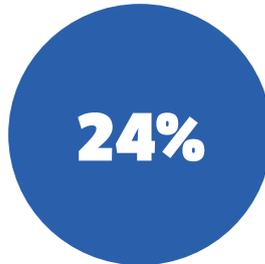


Figure 7. How businesses are progressing toward real-time payments

What is the current state of your organization’s investment in real-time payments?



We expect to implement real-time payments in the next three to five years



We are currently piloting real-time payments



We expect to implement real-time payments in the next one to two years



Real-time payments are embedded within our organization



We expect to implement real-time payments in at least five years’ time



We have not yet implemented real-time payments and have no intention to do so

There may be differences, but the trajectory across different types of organization reflects the growing recognition of the internal and external benefits of real-time payments – and the significant number of use cases.

THE OPPORTUNITIES OF REAL-TIME

Many organizations see a broad range of opportunities across their payments operations, both payable and receivable, and both domestic and cross-border (see **Figure 8**).

The potential to improve customer service and strengthen relationships with suppliers is an important part of the equation. They will help to enhance competitiveness and the perception that an organization is a reliable and efficient entity with which to do business.

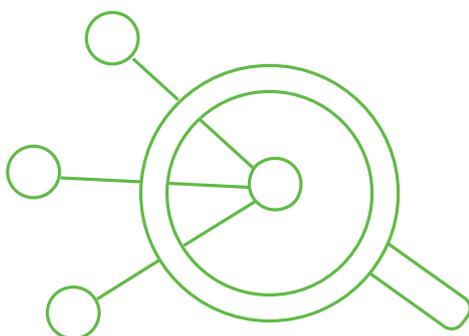
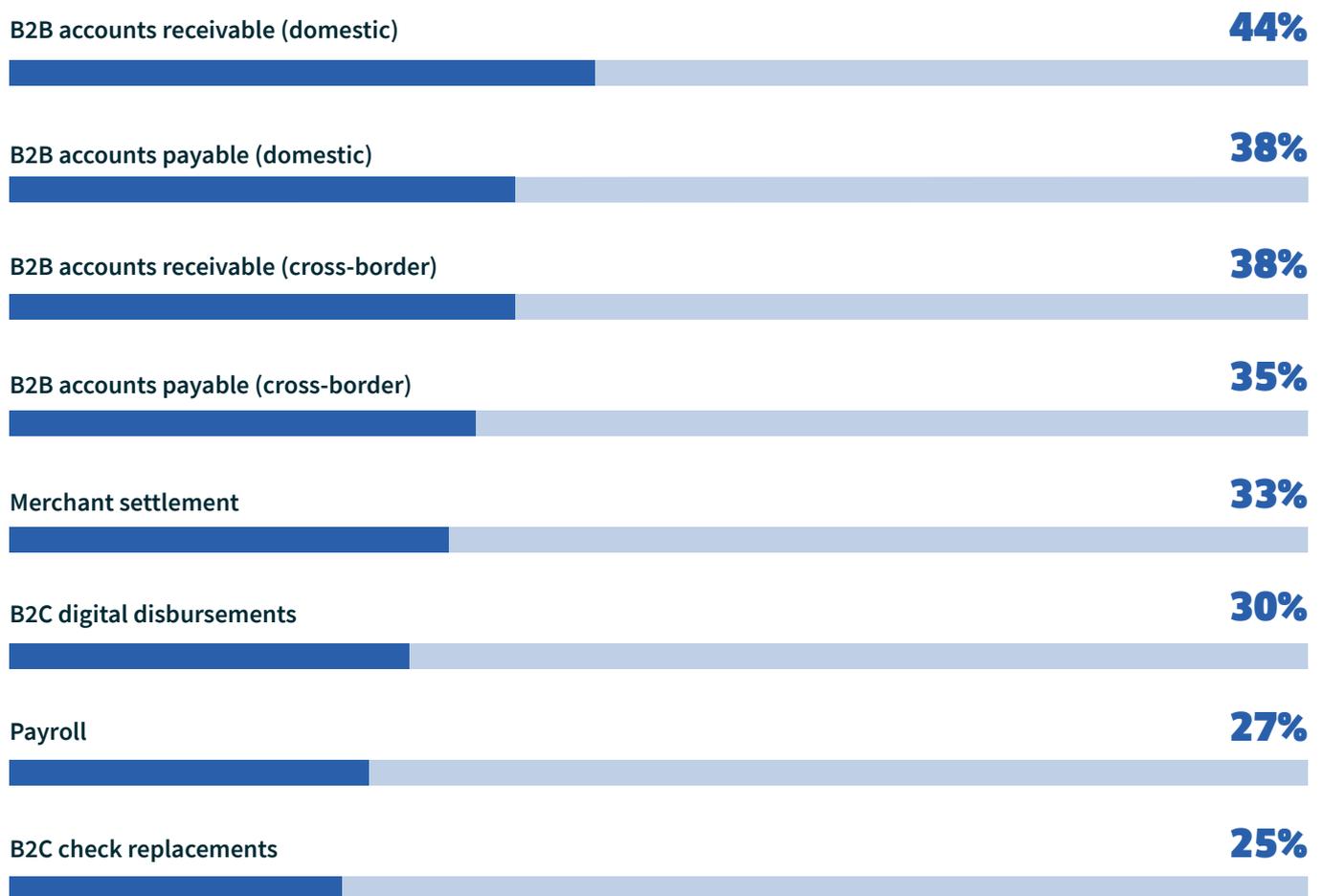


Figure 8. Domestic accounts receivable is the top use case for real-time payments

Which of the following use cases for real-time payments do you think will be most attractive to your organization?



“As a customer, I want lots of options,” says FIS’s Aman Cheema. “The winners will always give choice to the customer. They will figure out how to deal with the complexity that sits behind the payment and now there are certain players in the market that can help to solve that problem.”

These issues apply at a cross-border level, too, with real-time payments having the potential to unlock increased flows of international commerce as organizations serve global customer bases. *“Historically, a UK business that wants to sell goods in the US, Australia and Hong Kong would need to open an entity in each of those countries,” says Airwallex’s James Butland. “We can now help that client operate a*

global business without leaving their home country.”

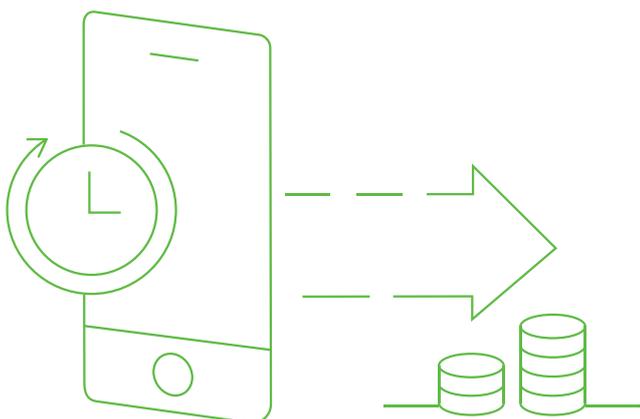
Moving beyond customer service, many organizations see other use cases for real-time payments. James Colassano, a Senior Vice President in the Product Development and Strategy group at The Clearing House, says there is the opportunity *“to move to a just-in-time payment capability”* that benefits both seller and purchaser. *“If I want to take advantage of a payment discount, I can do that with precision,”* Colassano explains. *“I can pay at a time of my choosing in order to get that discount and the seller will know immediately that the money is in its account.”*

Colassano also singles out supply-chain gains. *“From a seller standpoint, I know that the money has settled with finality so I can release merchandise immediately at the point I get the payment. That makes the whole supply chain experience much more efficient,”* he says.

“ This is why businesses are interested in real time: the precision of the payment eliminates all the uncertainty and all the cash forecasting. ”

James Colassano, Senior Vice President, Product Development and Strategy, The Clearing House

More broadly, real-time payments can be a key enabler of innovation. *“Whether you are looking to build a marketplace to connect customers and suppliers, or to enhance competitiveness by enabling rapid payments to release credit lines and enable customers to buy more quickly, we can provide the platform to use as the basis for innovation,”* says Berndt Richter, SVP and Group Executive, Global Real Time Payments Network at FIS. *“There is so much opportunity out there.”*



THE PUBLIC SECTOR CAN BENEFIT TOO

Nor should we overlook the potential of real-time payments for non-commercial entities, from countries to public sector organizations. *“We are looking beyond our own borders as we move to real-time payments,”* says the European Commission’s Eric Ducoulombier. *“Because we know how important services such as remittances can be for the economies of certain countries.”*

In the UK, meanwhile, Nick Down, Head of Payments at HM Revenue & Customs, suggests that businesses’ and individuals’ payment data, shared through open banking, could make it easier for them to make sure payments are set against the correct tax or account.

“This means that our customers can pay their tax quickly and with much less risk of making mistakes by having their payment data prepopulated,” says Down.

“ The UK is making rapid strides in payments, such as planning to use structured payment data that will make it easier for organizations like ours to improve services and systems. ”

Nick Down, Head of Payments, HM Revenue & Customs, UK

“We want to use these advances to help customers – for instance by allowing them to show as part of the payment which tax, client account or PAYE scheme they want us to set their payment against, and using the structured data to do that for them automatically.”

HOW TO TAKE ADVANTAGE OF INNOVATION

Exploring these use cases and securing their benefits will require organizations to think more holistically. They will need a strategy for adoption built on internal drivers and an execution model that takes full advantage of new technologies.

Outsourcing to third parties will be key here. Most companies recognize that they need to work with a partner to make real-time payments a reality (see **Figure 9**).

It is too complex to take on themselves, and partners have the economies of scale and relationships to make change happen.

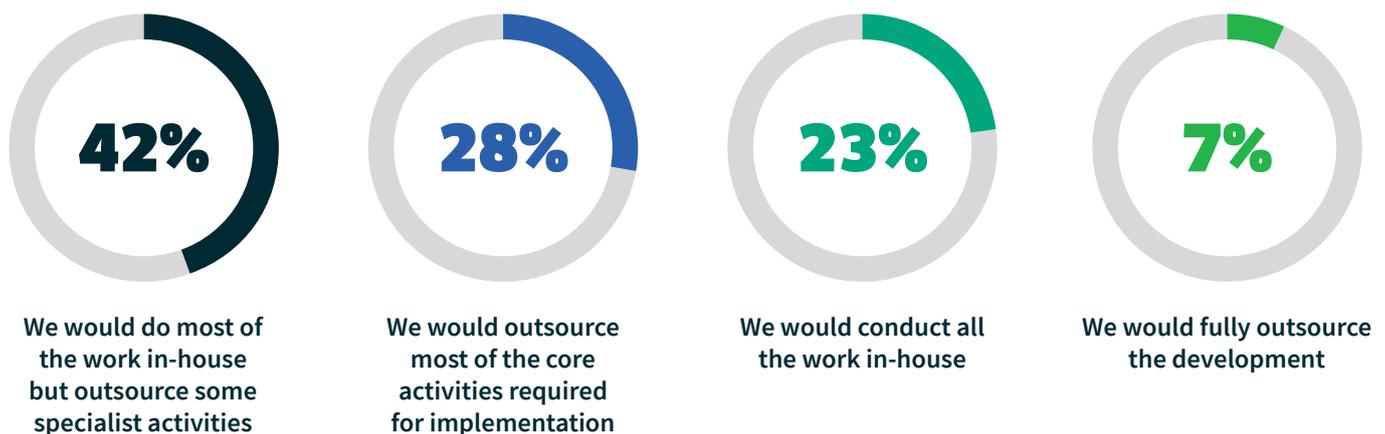
“When you first install the system you have to implement an architecture, and that’s where we have used consultants and third parties,” says the airline executive interviewed for this report. *“Then we’ve invested in expertise in-house to run it.”*

But while outsourcers will have a role to play, the Association of Corporate Treasurers’ Naresh

Aggarwal urges organizations to think about who will drive innovation from within. *“Organizations need a payments strategy that pulls together all the elements of engagement, both money in and money out,”* he says. *“You need to consider that from the perspective of both company infrastructure and culture. There should be a payment champion who is looking at treasury payments, salary payments, procurement cards, credits and bringing it all together in a unified environment. You need a central hub.”*

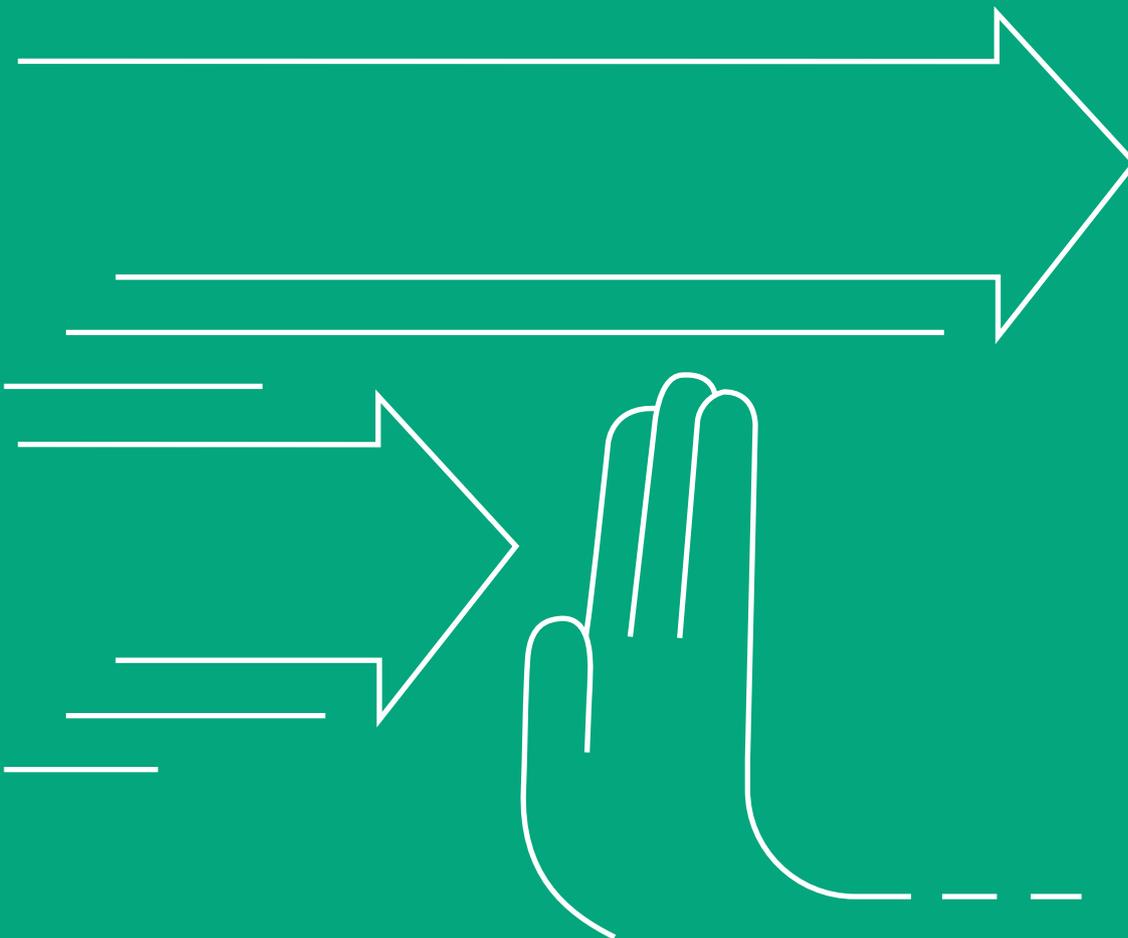
Figure 9. Respondents are most likely to outsource specialist activities as they develop a real-time payments infrastructure

How would you approach the development of real-time payments infrastructure in your organization?



PART 4

Barriers to change



The shift to real-time payments will not be easy, and many organizations say that a series of challenges stand in their way (see **Figure 10**).

At the top of their lists are fragmentation and legacy systems. When it comes to the former, there are different systems in place even in individual markets – and no clear view of which real-time payments rails will provide all the functionality required. While organizations accept that these issues are now being addressed, the challenge remains to be solved and is particularly pressing when it comes to cross-border payments.

THE BURDEN OF LEGACY

Legacy systems are also an issue, says the Association of Corporate Treasurers' Naresh Aggarwal. *“Many organizations have legacy systems that been built on patch work,”* he says. *“They recognize they need to be more flexible, more configurable and to use APIs, but some mainframe systems cannot connect in this way. These organizations are recognizing they have to go through transformation.”* Smaller organizations with more agility may have an advantage here.

Inertia and perceptions of complexity are other key issues. Without sponsorship from senior leaders and a strategic program led by a payments champion, it may be difficult to set out a vision of the future and to drive change across the organization.

Figure 10. Legacy IT and fragmentation are holding organizations back from real-time payments

What are the main obstacles preventing greater shift toward real-time payments in your organization?





Conclusion: a roadmap for progress

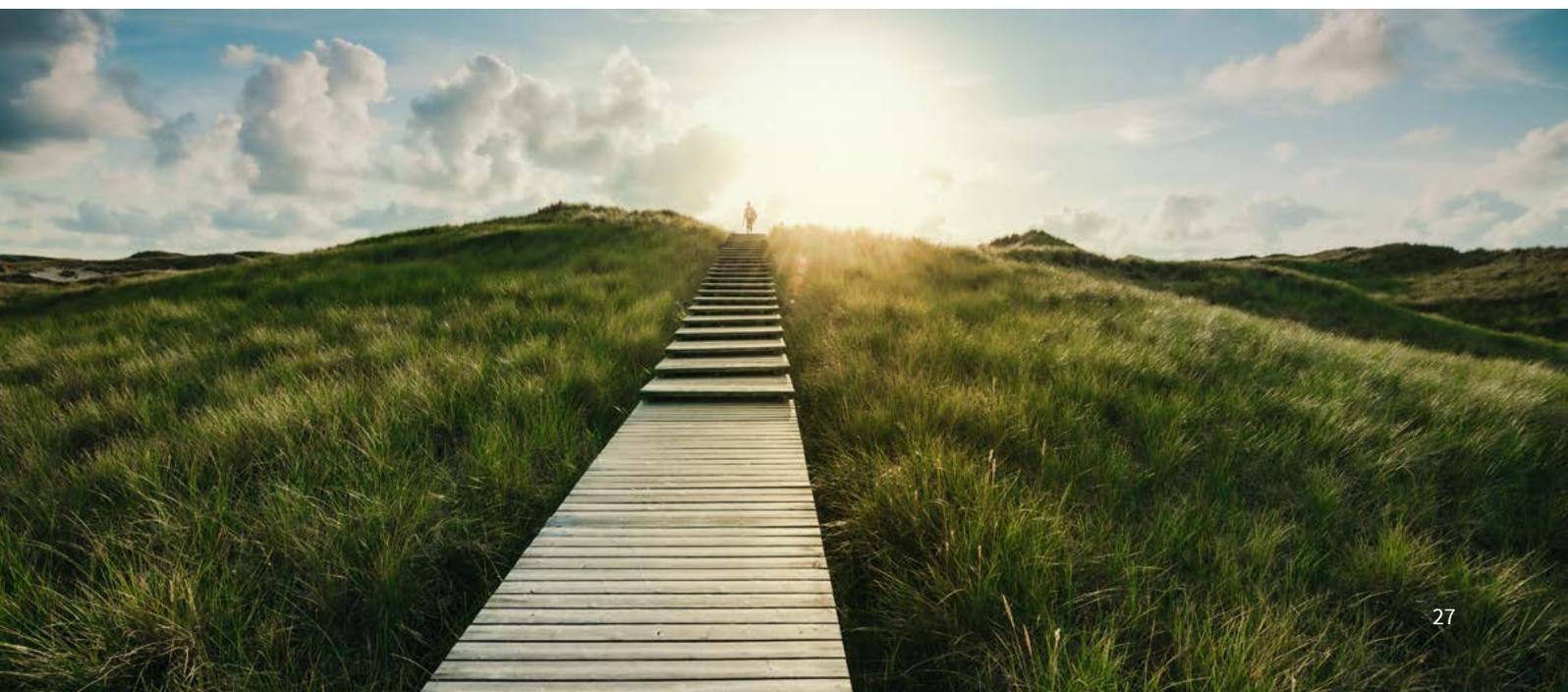
Many payments leaders now recognize how important it is to invest in their competencies and to move toward adoption of real-time payments.

But to translate aspiration into reality and accelerate transformation, organizations will need to build a compelling business case for investment.

That case will rest on:

- **The need for more than speed.** Given that real-time payments offer more than enhanced speed and reduced cost, businesses should focus on how to deliver the broadest-possible range of benefits.
- **The danger of indecision.** Demand for real-time payments is growing; organizations must respond to customer and supplier needs, and in certain industries to regulatory pressure as well.
- **Solutions to fragmentation.** While the fragmented state of global payments infrastructure has been a major barrier to progress, new real time payment platforms are dramatically changing.
- **Support for innovation.** New platforms are enabling a range of innovative use cases, helping businesses to expand their footprints in the value chain and increase competitiveness.
- **Security gains.** Real-time payments offer significant gains in terms of reduced fraud and, in time, reduced spend on anti-money laundering and anti-fraud activities through increased use of machine learning.
- **The potential for differentiation.** Customers and suppliers will begin to see adoption of real-time payments as a reason to do business with a company; it will become a source of competitive advantage and help to build stronger relationships across the supply chain.

Importantly, organizations do not have to build this case alone. Investment in new technology and particularly in new skills will be important for organizations themselves, but third-party partners will support them as they seize the benefits of payments transformation.





About FIS

FIS is a leading provider of technology solutions for merchants, banks and capital markets firms globally. Our more than 55,000 people are dedicated to advancing the way the world pays, banks and invests by applying our scale, deep expertise and data-driven insights. We help our clients use technology in innovative ways to solve business-critical challenges and deliver superior experiences for their customers. Headquartered in Jacksonville, Florida, FIS is a Fortune 500® company and is a member of Standard & Poor's 500® Index.

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