

August 2018

# Need For Speed: Racing Against Real-Time Payments And APIs

Digital technologies — cloud, mobile, and APIs — have empowered consumers who now demand **speed and personalization** from the companies they interact with. For the banking sector specifically, digital executives are seeing retail and corporate customers expect to make **real-time payments wherever they are and whenever they want**, in ways that they prefer.

However, banks struggle to serve these empowered customers as they contend with **legacy payment systems that are inflexible**. And this struggle is exacerbated by **mounting business requirements and regulatory pressures** such as real-time payment mandates, SWIFT gpi, and an ever-increasing transactional load.

The **emergence of non-bank digital entrants** is also forcing banks to prioritize payments transformation in order to fill the gaps left by empowered customers who are flocking to the companies that are specifically catering to their rapidly changing demands, i.e., Dwolla, Ripple, and Stripe.

As banks globally undergo payments innovation and transformation, they are also under pressure to ensure that security and privacy requirements are met.

**Successful payments transformation hinges on the ability to change antiquated processes, to modernize existing legacy systems (to ensure integrability and interoperability), and to safeguard data security and privacy.**

82% of digital banking executives said that serving empowered customers is the key reason for payments transformation.

## KEY FINDINGS

- › Banks are focusing on payments transformation to drive operational excellence and improve customer experience.
- › Antiquated processes and existing legacy systems are major barriers to payments transformation.
- › Success hinges on overcoming legacy and security challenges.



Oracle commissioned Forrester Consulting to evaluate the preparedness and expectations of banks for payment transformations. Forrester designed a survey with the hypothesis that payments transformation will be a key initiative that banks will undertake to not only handle increasing volumes of payments in real-time, but to also fend off disruption and gain competitive advantage in the market.

## METHODOLOGY

Forrester conducted an online survey with 103 decision makers and influencers responsible for payments transformation strategy in their banks. Surveyed respondents included technology leaders, chief digital officers, and senior digital executives from banks across three regions: Asia Pacific (AP), Europe, and the US.

# Focus On Payments Transformation To Achieve Business Outcomes

With the shrinking business transaction timeframes of the global digital ecosystem, banks are compelled to provide payments processing in just a few minutes. Globally, various countries have recognized this need for speed and are setting mandates to enable real-time payments, such as SEPA Instant (SCT Inst) in the eurozone, real-time payments (RTP) testing for clearing and settlement in the US, and the new payments platform (NPP) in Australia. Sixty-five percent of US banks and 53% of European banks see real-time payments as an opportunity to provide value-added services to their retail and corporate customers.

Survey results show that:

**Asia Pacific (AP) and EU banks are putting the pedal to the metal with payments transformation.** Technological disruption, competition from both banks and non-banks, and regulatory pressure are driving AP and EU banks to make payment transformation a priority. The majority of AP banks (73%) and EU banks (70%) are implementing or plan to implement payment transformation initiatives in the next 12 months.

**Driving operational excellence, improving CX, and developing brand differentiation are key outcomes that banks want to achieve.**

Operational inefficiencies in existing payments systems have resulted in poor CX. With payments transformation, banks want to achieve interoperability and simplify the payments value chain, all of which will help to improve both their CX and brand differentiation (see Figure 1).



There is a **need for speed** as customer expectations for faster transaction times continue to evolve from taking many minutes to just happening in real time.

Figure 1

## Business outcomes that organizations want to achieve with payments transformation and innovation



Base: 103 decision makers/influencers from AP, Europe, and US markets who are responsible for banks' payments transformation strategy  
Source: A commissioned study conducted by Forrester Consulting on behalf of Oracle, July 2018

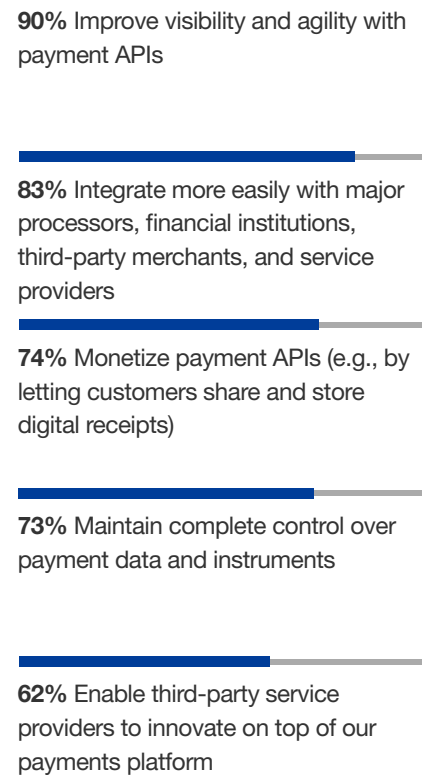
**Payment APIs are central to payments transformation.** At the heart of banks' payments transformation are payment APIs. Payment APIs are not just a technical tool but they can help global banks improve integrability and accelerate digital transformation.<sup>1</sup> In particular, payment APIs have the power to unlock new revenue streams, transform how you design and deliver change, and extend your value proposition via digital ecosystems. Some global banks are already looking for innovative ways to monetize APIs, for instance, through richer payment information where an ISO 20022 message provides extensive information to be embedded into payment messages.

Our survey results show that the majority of global banks have a clear business case for investing in payment APIs. These banks see payment APIs as crucial for driving operational excellence and creating new revenue streams (See Figure 2):

- › **Nine out of 10 banks are building payment APIs to improve payment visibility and agility.** Eighty-three percent of banks want to enable integrability with other financial institutions via payment APIs. Seventy-four percent of banks want to monetize payment APIs — for instance, providing services that let corporate and retail customers share and store digital receipts. Some of the opportunities for banks serving corporate clients include better understanding of customer behaviors and spending patterns through richer data.
- › **Banks believe that payment APIs will have a significant impact on businesses.** Eighty-eight percent of banks believe that payment APIs can help them streamline payment processes for businesses. Eighty-four percent of banks believe that payment APIs can shorten settlement time for businesses (see Figure 3). This enables better cash flow management as a result of more efficient and automated reconciliation processes.

**Figure 2**

**“My organization want to . . .”**



Base: 103 decision makers/influencers from AP, Europe, and US markets who are responsible for banks' payments transformation strategy  
 Note: Not all responses shown, showing percentage of respondents selecting “strongly agree” or “agree”  
 Source: A commissioned study conducted by Forrester Consulting on behalf of Oracle, July 2018

**Figure 3**



**73% of banks believe that the greatest customer value that payment APIs bring is to allow customers to receive, store, and send digital docs.**



**88% of banks see the greatest value to corporate clients lie in streamlining payment processes; reducing settlement times (84%).**

Base: 103 decision makers/influencers from AP, Europe, and US markets who are responsible for banks' payments transformation strategy  
 Source: A commissioned study conducted by Forrester Consulting on behalf of Oracle, July 2018

# Banks Expect Emerging Technologies To Revolutionize Payments

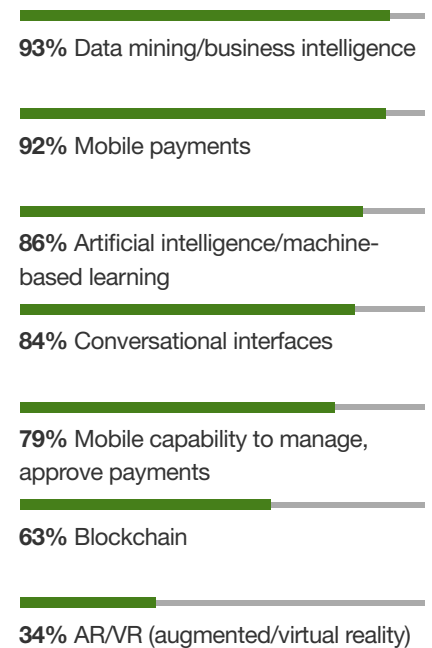
Emerging technologies such as data mining/business intelligence, mobile payments, artificial intelligence (AI), and machine learning are expected to have a significant impact on the payments landscape (see Figure 4).

Digital banking executives are:

- › **Focusing on data mining and business intelligence.** Ninety-three percent of survey respondents consider data mining and business intelligence to be the most important technology for their business in the next 12 months. Banks are seeing the ability to transform data into actionable insights to be a source of competitive advantage. With payments transformation and innovation, digital banking executives are on the lookout for value-added payment-related services that can help them cater to various user groups who have diverse needs. For instance, helping retail customers purchase a car with all-in-one registration transfer and finance check using the rich data contained within payment messages.
- › **Prioritizing mobile.** As consumers make the mobile mind shift, banks are accelerating efforts to serve these empowered customers anytime and anywhere. Ninety-two percent of banks said that mobile payments are critical to payments transformation. Nearly eight in 10 banks believe that the mobile capability to manage and approve payments is central to payments transformation. As mobile payments are poised for rapid growth, banks are expanding mobile payment capabilities to enable customers to make easy and speedy transactions.
- › **Expecting AI to drive operational excellence and deliver business insights.** Eighty-six percent of banks expect AI to be important to their organization’s payments transformation journey. Banks expect AI technologies such as machine learning, natural language processing, and robotic process automation (RPA) to play an important role in improving efficiency, accuracy, and helping them make better business decisions. Digital banking executives believe that AI will drive automation (83%), deliver faster insights (75%), and enable speedier payments (72%) (see Figure 5). Operational inefficiencies in existing payment systems are ripe for AI-infused automation; for instance, banks are looking to improve CX by automating back-office payment processing or accounts payable.
- › **Developing conversational interfaces initiatives.** Eighty-four percent of banks find conversational interfaces important for payments transformation, as customers begin to get comfortable with using voice to interact with intelligent agents who can help them conduct payments in an easy and convenient manner. Many global banks are still in the experimental stage when it comes to conversational interfaces, for instance, they face challenges with intelligent agents that are still learning to understand context and intent.

Figure 4

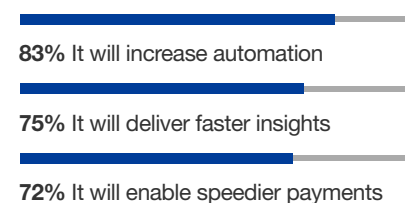
“Which technologies will be important to your organization’s payments transformation and innovation over the next 12 months?”



Base: 103 decision makers/influencers from AP, European and US market who are responsible for payments transformation strategy in banks  
 Note: Showing percentage of respondents selecting “Vital/Must have” or “Important”  
 Source: A commissioned study conducted by Forrester Consulting on behalf of Oracle, August 2018

Figure 5

“How do you expect artificial technologies/machine-based learning technologies to impact your business over next 12 months?”



Base: 103 decision makers/influencers from AP, Europe, and US markets who are responsible for banks’ payments transformation strategy  
 Note: Showing top three responses  
 Source: A commissioned study conducted by Forrester Consulting on behalf of Oracle, July 2018

- › **Seeing the importance of the blockchain technology.** Almost six in 10 banks have said that blockchain technology will be important to their payments transformation in the next 12 months, specifically when it comes to making payments more secure (82%), eliminating the issue of currency fluctuations (69%), and enabling speedier payments (63%). This is an important area of opportunity for banks with large corporate clients who now expect faster and more secure cross-border payments at a lower cost.
- › **Exploring augmented/virtual reality (AR/VR) technologies.** Close to one-third of banks globally see AR/VR as an emerging technology to focus on for payments transformation. Digital banking executives are exploring the impact of AR and VR on payments transformation and innovation specifically when it comes to influencing customers' purchase decisions. An AR/VR-assisted shopping experience requires banks to be able to seamlessly integrate payments into the customer journey.

## Antiquated Processes And Legacy Systems Are Major Barriers

The path to payments transformation is a long and arduous one, beset by multiple challenges. Integration continues to be a key challenge for most banks, due to various formats, disparate systems, and data siloes. Successful payments transformation requires banks to overcome (see Figure 6):

- › **Antiquated processes.** Seventy-five percent of banks see lengthy compliance and risk evaluation processes as one of their biggest challenges in payments transformation. Traditional ways of evaluating risk and compliance must evolve. The challenge is to find the right balance when it comes to experimenting with emerging technologies that require banks to take some level of risk.
- › **Legacy systems.** Seventy percent of bank respondents cite that legacy systems and processes are barriers to payments transformation. Banks are still tied down by aging legacy technology and processes, as well as complex process architecture.<sup>2</sup> Some banks are using service hubs built onto service-oriented architectures to overcome legacy issues without touching their core systems, but this is only a temporary fix.
- › **Data security, data privacy, and data integrability are top concerns.** Eight-five percent of respondents believe that data security, privacy, and technical integration into existing systems (76%) are top concerns in payments transformation. Specifically, eight in 10 banks responded that data breaches and theft identification are top security concerns.



**Figure 6**

**“What are the barriers to your organization's payment transformation?”**

(Showing percentage of respondents selecting “One of our biggest challenge” or “Major challenge”)



Base: 103 decision makers/influencers from AP, European and US market who are responsible for payments transformation strategy in banks  
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# Key Recommendations

Empowered customers and the increased competition and regulatory pressures are driving banks to embrace payments transformation. Banks that are embracing transformation expect to drive operational excellence and improve CX, but the path to transformation is fraught with challenges. To succeed, banks must:



**Modernize legacy systems.** Banks today are still saddled with legacy systems that make it difficult to enable real-time payments and build payment APIs. Those that overhaul core banking systems and create microservices, using APIs that can be easily integrated with third-party providers, have a better chance of addressing increasing customer needs in the long term. When working with third-party providers, ensure that services are modular in nature and can be easily integrated. You will also need to gain organizational buy-in, and while you create that vision internally, do not fear leaning on a third-party provider to help you with both technical implementation and organizational change management.



**Improve antiquated processes.** The most advanced technology will not reach its potential for success if processes are not also optimized or even restructured. Lengthy procurement and compliance and risk evaluations still largely exist in payments transformation and innovation. Bring compliance colleagues into the conversation early on so they can better understand the initiatives that you're working on. Ask third-party providers if they have an existing framework that you can leverage to evaluate risk and compliance.



**Leverage the opportunity that payment APIs bring.** There is an opportunity for banks to provide value-added services that they can monetize above and beyond enabling real-time payments. With payment APIs, banks can explore potential partnerships with third-party providers to augment the data they have to deliver actionable insights to both retail and corporate customers.



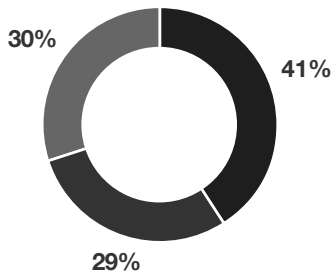
**Address potential security and privacy concerns.** Banks have to build on governance and set up guardrails for how payment APIs and data will be accessed, stored, and distributed. Potential data breaches and theft will be inimical to banks' brand and reputation. Not only are fines, lawsuits, and incremental professional audit fees expensive, the impact of lost trust can have a lasting effect. Organizations must transform capabilities and evolve security measures in lockstep to gain the full potential of payment transformation without taking a step back due to security breaches.



# Appendix A: Demographics

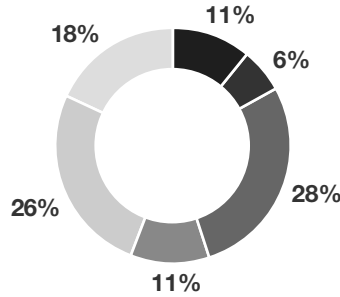
## SURVEY COUNTRY

- AP
- Europe
- US



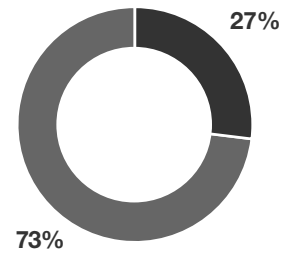
## TARGET RESPONDENTS

- CDO
- Senior digital executive
- CIO/CTO
- VP in IT
- Director in IT
- Manager in IT

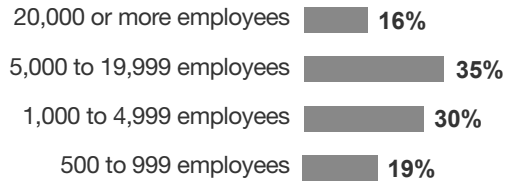


## LEVEL OF DECISION MAKING

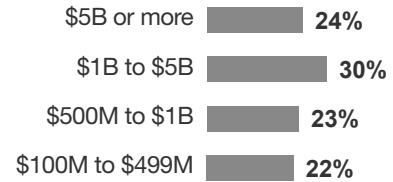
- Final decision maker for payments transformation strategy
- Influence decisions related to payments transformation strategy



## EMPLOYEE SIZE (WORLDWIDE)



## \*ANNUAL REVENUE (IN USD)



Base: 103 decision makers/influencers from AP, Europe, and US markets who are responsible for banks' payments transformation strategy

\*Note: Percentage may not total 100 because of rounding.

Source: A commissioned study conducted by Forrester Consulting on behalf of Oracle, August 2018



# Appendix B: Supplemental Materials

## RELATED FORRESTER RESEARCH

“New Tech: Payments For Platform And Marketplace Businesses, Q2 2018,” Forrester Research, Inc., April 20, 2018

“Banks Must Embrace Digital Business Models To Redefine Their Value To Customers,” Forrester Research, Inc., April 16, 2018

# Appendix C: Endnotes

<sup>1</sup>Source: “Brief: Four Ways APIs Are Changing Your Business,” Forrester Research, Inc., June 17, 2015.

<sup>2</sup>Source: “Managing change and risk in the age of digital transformation,” Ernst & Young Global Limited, 2016, <https://www.ey.com/Publication/vwLUAssets/EY-managing-change-and-risk-in-the-age-of-digital-transformation/%24FILE/EY-managing-change-and-risk-in-the-age-of-digital-transformation.pdf>

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