PAYMENTS IN THE DIGITAL AGE

How the digital payments paradigm is redefining banking
The emergence of digital transactions has disrupted the payments market. Simply put, payments are now possible without banks.

These changes have been brought about by FinTechs, which have created real-time, seamless payments solutions and, consequently, grabbed a significant market share.

Globally, these modern business models could impact up to 80 percent of existing banking revenue pools by 2020.¹

Banks and financial institutions are now determined to get back their share of the pie. Can they reinvent themselves to stay relevant and meet the demands of a fast-forward future?

Yes, if they act now. This whitepaper outlines some of the key strategies banks and financial institutions need to focus on.

Encashing payments in the digital era

The new-age customer expects transactions to be quick, seamless and personalised. The simplicity and convenience offered by e-commerce has altered consumer behaviour, and this has extended quickly to the payments market as well. Consequently, the segment has undergone drastic changes in the past few years. Payment companies have been increasingly capitalising the power of big data, analytics and the cloud to create customer-centric models. This has created a new marketplace, ushering in a new era in the payments market.

However, legacy financial institutions have been slow to catch up due to a complex core infrastructure and lack of agility in their operations. As a result, the digital service offerings from new-age competitors—FinTechs and challenger banks—are now threatening the existence of traditional players.

Today, the global payments market has reached an inflection point—largely driven by years of under-investment by traditional players and a wealth of new opportunities capitalised by new competitors. Regulations such as the Payment Services Directive (PSD2) and capital prudential norms, consumer protection, data privacy, digital trust and security have acted as catalysts driving innovation and investments, and are enabling next-generation banking and payment services. Top-tier challenger banks are investing heavily in digital channels that offer an omnichannel presence. They are also exploring collaborations with FinTechs to co-create, expand and identify sources of value and revenue multiplication. Revenue streams have also shifted from an “interest-based” model to a “fee-based” model that delivers tailored services, a rich experience and insights.

Innovative payment methods introduced by non-banking players such as Google, Apple, Facebook, Amazon (GAFA) and Alibaba have further raised the bar by changing the way consumers “experience” payments. These players also have an inherent advantage—they’re closer to the customer by way of the other services they offer. This has enabled them to keep an ear to the ground and develop the much-needed agility to stay on top of the game. Now, they are increasingly being seen as natural partners for FinTechs, quickly gaining a financial niche as well.

Consequently, these new-age players have been able to grab a significant share in the payments market. Globally, modern business models could impact up to 80 percent of existing banking revenue pools by 2020.3 Accenture Research4 on future growth value (FGV) of industry participants shows financial institutions lagging in digital transformation. They recorded a discounted FGV of -7 percent and were trailing behind digital leaders (financial institutions that have launched an aggressive digital transformation program) at more than 16 percent, FinTechs at more than 46 percent and GAFA at 52 percent in 2017 (see figure 1).

Figure 1: Accenture Research analysis of Capital IQ and Citi data

Future growth value analysis (% of enterprise value, average CY 2017)

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Note: Survey sample: 40 FinTechs, 22 digital leaders, 51 digital laggards. Future value = enterprise value less value of current operations.

On the other hand, digitisation also presents a host of new opportunities for banks and financial institutions—a potential of 30 percent growth in revenue by 2022 along with increased customer loyalty—provided they invest strategically in their payments ecosystem.5 The time to act is now.

GROWING MARKET

According to Accenture Research analysis of CB Insights data, investment in FinTech collaborations is increasing, especially in the lending and payment segments, globally. In 2017, investment in these segments increased by 30 percent (see figure 2).

Similarly, according to Accenture Research based on ProgrammableWeb’s application programming interface (API) dashboard (see figure 2), there’s been a cumulative growth of APIs in financial services since 2011, with payments APIs claiming a major chunk.

These trends put further pressure on legacy infrastructure and their ability to deliver personalised payments experience.

According to Accenture Research based on Statistica, Visa Digital Payments Study, 2016, the global mobile payments market has grown 24 percent year-on-year since 2015 (see figure 4).

Figure 4: Accenture Research based on Statistica, Visa Digital Payments Study, 2016

Global Mobile Payments Market
(2015–2019e, US$ billion)

These trends put further pressure on legacy infrastructure and their ability to deliver personalised payments experience.

*Value-added services include coupons, rewards, monetisation, marketplace and insurance.
Global dynamics transforming the payments landscape

Today, payments have become a “commodity,” with consumers embracing models that offer greater value. A combination of consumer demand, emerging technologies, market competition and regulatory push has boosted the electronic payments segment. Some of the global dynamics and trends that are transforming the payments value chain are:

**DIVERGENCE IN PAYMENTS ACCEPTANCE AND NON-PHYSICAL INTERFACES**

Advancements in technology continue to disrupt the market. Traditional payment methods, channels and interfaces are fast becoming obsolete, thanks to innovative methods introduced by GAFA. Payments are converging into embedded value processes—termed as “invisible payments.” For example, smart assistants such as voice-first solutions or virtual reality (VR) with improved natural language processing and image recognition are pushing out physical interfaces and mobiles in payments initiation and acquisition.

**EMERGENCE OF REAL-TIME PAYMENTS AND ALTERNATE TECHNOLOGIES**

The need to process payments faster and in “real time” is rooted in the “anytime, anywhere” demand from the new-age consumer. This is complemented by the availability of mobile devices; next-generation, non-physical interfaces; and a host of network infrastructure services. There’s also a regulatory push for developing fast and frictionless services. Players, including FinTechs and GAFA, are continuously exploring new technologies such as open API, blockchain and Internet of Things (IoT). This is further adding pressure on traditional payment service providers.

Real-time payments systems and new technologies will provide banks the functionalities and features to innovate and meet customer demand. Examples are the Single Euro Payments Area Instant (SEPA Inst) credit transfer scheme and The Clearing House (TCH)’s Real-Time Payments (RTP).

**HARMONISATION OF STANDARDS AND SIMPLIFICATION OF PAYMENTS**

Global adaptation of the data-rich ISO20022 universal financial industry message scheme is perceived as a way to improve payments efficiency and, thereby, unify and streamline communication for financial institutions. This also opens a host of new possibilities for innovations in payments, effective competition between providers of payments services, more efficient cross-border payments, enhanced fraud detection, better service integration for businesses and more streamlined operations.

The New Payments Architecture (NPA) initiative in the UK, for example, will bring in a host of new overlay services such as the “Request to Pay.” This will enable the shift from traditional “pull payment” models as direct debits to “push payment” models, simplify the payments workflow and increase customer control. This will phase out mandate management and provide indemnity from reversals, rejections, returns and refunds. Similar ongoing payments modernisation initiatives across the globe will help address many shortcomings arising from the lack of sufficient control, flexibility and transparency in the current payment mechanisms, to meet the evolving needs.

The increasing transfer of information from electronic payments, has increased the possibilities for data analytics, higher automation and improved efficiency. It is also facilitating the development of new data-rich, personalised products and services.

**EMERGENCE OF INTEGRATED DIGITAL PAYMENTS AND THIRD-PARTY ECOSYSTEMS**

Banks are constantly looking to deliver integrated digital solutions to offer the best customer experience, either by building in-house capabilities or by collaborating and leveraging FinTech partnerships. Open APIs, combined with advanced technologies, are being used to deliver more personalised and cross-device payment options. API-enabled networks are enabling mobile payments and driving real-time payments.
For example, the Unified Payments Interface (UPI) by National Payments Corporation of India is an open-source payments platform powered by a single payment API and a set of supporting APIs—offering a completely new payments model to the financial services industry.

Similarly, new platforms such as Zelle in the US, Internet Banking Payment System (IBPS) in China, MoneyTap in Japan and New Payments Platform (NPP) in Australia and the UK—adopted by various banking consortiums globally—are redefining the rules of the game. The emergence of open banking is also helping banks that are exploring ways to monetise data and customer information.

**EVOLUTION OF CROSS-BORDER PAYMENTS**

The emergence of Distributed Ledger Technology (DLT) and Society for Worldwide Interbank Financial Telecommunications (SWIFT)’s global payments innovation (GPI) initiative has revolutionised cross-border payments, enabling transactions within minutes. These technologies facilitate end-to-end tracking of payments—just like tracking a courier—offering transparency and ensuring that remittance data remains unaltered. Cross-border payments will become cheaper as enquiry costs are likely to be halved. These changes will also allow companies to optimise liquidity and explore innovative add-on services.

**TIGHTER REGULATIONS**

New, stringent regulations continue to haunt the banking and payments industry at all levels—global, regional and country. For example, the revised Payment Service Directive (PSD2) in Europe is boosting competition, innovation and transparency across the region while enhancing the security of electronic payments and account access.

However, some of these regulations are data and technology driven, creating positive pressure and driving innovation among traditional payments players.

The emergence of real-time payments is likely to add challenges in regulatory compliance related to anti-money laundering (AML) and transaction monitoring. Players will have to move from a post-transaction batch-based analysis and reporting model to a contextual, early warning-based preventive framework.

Banks may be behind the curve but are trying to catch up

Even though traditional players are being forced to reimagine the payments ecosystem, even today, majority of large banks across the world are burdened with legacy systems at their core. This has become the primary roadblock to innovation and attaining scalability and agility for implementing new payments models.

For example, while the banking transaction systems benchmark demonstrates over 15,000 transactions per second as peak volumes, new entrants and challengers like Alipay have touched more than 250,000 payment transactions per second—a far cry for banks from being globally competitive.

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CHALLENGES

Financial institutions are faced with a host of internal and external challenges that need to be considered when planning their strategic roadmap for payments.

EXTERNAL

INCREASING MARKET COMPETITION

Many banks are facing tough competition from new digital payments providers and digital disruptors, payment initiation service providers (PISPs) and account information service providers (AISPs).

To catch up with disruption in technology and innovative services offered by these new entrants, banks need to be more agile in implementing innovations. However, most banks today lack the technological ability to implement at scale.

INCREASING REGULATORY PRESSURE

Financial and regulatory reforms are only increasing and will continue to stimulate competition between banks, requiring them to respond quickly to market trends. According to FinTech research firm Medici, banks and financial institutions spend approximately US$80 billion globally on governance, risk and compliance, each year. This figure is estimated to touch US$120 billion by 2021.9

Regulations such as AML and the Foreign Account Tax Compliance Act (FATCA) require banks to further strengthen infrastructure and controls.

INCREASING DATA AND FRAUD RISK

Increased real-time transactions will expose banks to potential and new cyber threats in the form of real-time fraud and money laundering.

INCREASING PAYMENT CHANNELS

Voice first, augmented reality (AR), VR, contactless and open payments are fast gaining importance and forcing banks to upgrade their ageing acquisition service models.

INTERNAL

INABILITY OF LEGACY SYSTEMS TO TAP INTO NEW REVENUE STREAMS

In most legacy systems, existing business process layers are unable to accommodate futuristic demands. The technology landscape in most banks is also no match for the newer, modular systems. The core of most payments systems (execution layer) in banks was built for a different era in banking—when bandwidth was scarce, processing was not done in real-time and the networks were closed—therefore, banks are unable to accommodate futuristic demands.

While harmonisation of messaging standards with ISO 20022 will bring in enhanced data capabilities, most financial institutions lack the ability to translate this into insights and new services.

LACK OF EFFICIENCY AND CAPACITY

Transaction margins are threatened by cost increase and revenue reductions due to higher competition and pressure on traditional commodity services. For example, SEPA is responsible for 5–10 percent of the cost increase. The cost increase is also due to the need to provide additional business functions and mandated capabilities and resources. New regulations and interchange fee also add pressure on traditional commodity services.

Diversification of portfolios have only made banking systems and processes more complex. Most banks still have a substantial number of manual and duplicate processes (for example, uploading data to an online portal or reporting platform), several redundant functions and point-to-point interfaces that choke their efficiency. The situation is likely to pose a challenge while implementing payments modernisation initiatives and moving towards enhanced ISO 20022 messaging standards for payments.

**STEPS TAKEN**

To bridge this service gap, banks have been experimenting with various new payment models (open APIs, microservices, lean architecture) and intelligent automation solutions. These include the adoption of real-time payments, the SWIFT GPI initiative, and the reinvention of domestic and cross-border payments with new and alternate networks. In addition, data analytics, artificial intelligence (AI) and machine learning are being introduced across the payments value chain.

Banks and FinTechs are also collaborating for asset mutualisation, products and services distribution, and cross-selling to capture uncharted business opportunities. Further, banks are also forming national consortiums to build new infrastructure solutions and create alternate rails. For example, Japan’s banking rail system for domestic payments had limited flexibility for transactions (weekdays between 8.30 a.m. and 3.30 p.m.). In March 2018, a consortium of Japanese banks covering more than 80 percent of all banking assets in the country, announced the adoption of the smartphone application “MoneyTap,” powered by Ripple’s blockchain technology. Once implemented, it will provide instant and on-demand transactions across the customer base and help shed the costs currently applicable on domestic money transfers.

**Anticipating what’s next**

Banks must learn to adapt and find their feet in the constantly evolving market. The future holds great opportunities for banks, cards companies and new entrants, alike. Those that made the first move are using it to their advantage by transforming business strategies, operating models and systems to stay relevant.

**TRANSITIONING TO THE NEW**

Banks and financial institutions are now trying to make up for lost time by creating a market differentiation with services that provide a seamless client engagement. They are looking at new payment models to:

- Bring in efficiency and agility, and enhance customer experience.
- Accommodate new regulations and reduce compliance cost.
- Achieve greater economies of scale through platform optimisation and enhanced operational efficiency.

While there’s no monolithic approach or solution for banks, targeting strategic areas can help (see figure 5).

Figure 5: Focus areas for banks

Banks must prioritise and define a strategic roadmap for future business models and push investments in the right direction to build a long-term position in payments. While it is evident that current frameworks can no longer sustain growth, up to 80 percent of bank IT spend go into maintaining these legacy systems. The future lies in creating a competitive edge by adopting emerging payment models.

Currently, most global banks need a roadmap for modernising payments and de-bundling the monolithic core before taking the next steps in the emerging payments value ecosystem. To meet their long-term goals, banks must redefine their payments problem statement and strengthen their current position through strategic investments to secure profitable growth. Initiating a step-wise approach and accommodating the necessary structural changes are critical.

ADOPT a strategic direction and de-bundle the monolithic core

Forsee payments market evolution beyond 2025 and identify strategic opportunities for growth and value
Establish digitalised* and differentiated customer experiences for priority segments (for example, tailored service packages for commercial payments)
Drive cross-organisational cost improvements and synergies (for example, by automating payments exception processing, real-time fraud monitoring and suspicious activity reporting [SAR])

*Target-level digitisation requires developing select digital capabilities (for example, analytics, connectivity, cloud, applications, automation/robotics, enabling platforms).

PREPARE for future business models

Based on the chosen strategic direction, identify the impact on banks’ business model
Identify the target value propositions, offerings and target customer segments
- Develop scalable, digital payment service offerings as shared utility models for the payments market
- Establish digitally enabled add-on services (for example, preventive maintenance)
Build future-proof operating, ownership and partnership models to effectively deliver services and digital capabilities
Build internal start-up incubation units, isolated from legacy processes to boost innovation (for example, innovative solutions in person-to-person [P2P] transactions, wholesale, corporate payments solutions and services)

BUILD long-term position in the payments segment

Identify net benefits, costs imperatives and investments
Create a short-term plan and long-term roadmap for deploying a payments strategy:
- Expand into contactless, mobile, instant payments to capture new revenue streams and build a long-term position in payments
- Build an aggregator role in the online, mobile and instant payment segments, and develop cross-channel payment platforms (for example, PoS, APIs and microservices)
- Develop payment analytics and data monetisation services to add further value and lock-in (for example, fee or processing time charges for bank and customers)

EXPLORE unchartered business and deliver value-at-scale with new digital capabilities

Improve the core system:
- Deliver better, new products faster to boost top-line growth
- Build in agility in business services, rationalised infrastructure from multichannel to omni- and opt-channels, and Information Technology (IT) for key payments functions
- Build customer-centric and value-added services as opposed to product-centric solutions
- Establish zero compliance failures, increased flexibility and improved operations using machine learning and smart automation (for example, bots for acquisition, reporting, customer service, advisory services, customer inquiries and investigations; smart automation for STP acceleration; machine learning to prevent payments exceptions and intelligent reporting)

Ecosystem powerplay:
- Be open to connecting with the ecosystem (for example, AISP, payment initiation service providers [PISPs], invisible payments for connected home solutions)
- Achieve network multiplier effect through platforms and partners
- Use data as an asset and insights with monetisation streams (for example, predictive analytics and ML for compliance, AML screening, and liquidity projection)

Uncharted business:
- Explore new business models and revenue streams
- Experiment with plug-and-play platforms
- Go beyond financial relationships
How Accenture can help

Accenture Payments helps banks and payments providers transform their payments systems and operations to grow and win in the digital ecosystem. We offer services that support the entire payments value chain and can help improve provider costs and value outcomes.

Here’s how we can help:
• Develop strategy, provide business function and technology consulting (including deploying open APIs, cloud services, and real-time, distributed ledger technology and working with FinTechs).
• Develop new mobile and digital services, maintain payments as a revenue generator, reduce costs, improve productivity, and help meet new regulatory requirements.
• Simplify and integrate payments systems and operations with proven delivery execution.

To learn more, visit www.accenture.com/payments.
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