

# McKinsey on Payments

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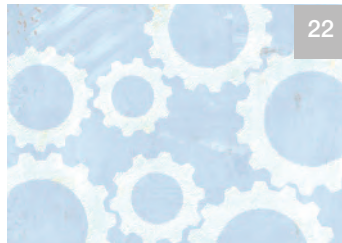
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## Technology innovations driving change in transaction banking

The environment for transaction banking in Europe is extremely challenging, with continued margin pressure and low interest rates making revenue growth difficult. Drawing on recent market research and conversations with transaction banking executives, McKinsey sees four key developments with the potential for system-level impact for the business: advanced analytics and machine learning (AAML); distributed ledger (e.g., blockchain) technology; FinTech challengers; and the Payments Services Directive 2 (PSD2).

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Some of these developments may have an impact within a matter of months, others will emerge over the mid- to long-term. Some will be driven primarily by banks, others will depend primarily on non-bank players and complex market dynamics. It is essential for banks to consider the business implications carefully and decide how to prioritize their investments, where to act swiftly and where changes can be implemented more gradually.

### **1. Advanced analytics and machine learning**








Corporate payments—including business-to-consumer (B2C), consumer-to-business (C2B) and business-to-business (B2B) transactions—generate more transactional data than any other area of banking, and recent advancements in AAML will have a particu-

larly significant impact on transaction banking. AAML surpasses the limits of traditional statistical approaches, enabling more precise description and prediction of real-world phenomena, thus optimizing market performance. These capabilities have become widely available in recent years thanks to the exponential increase in the data generated and a continued decrease in the cost of data storage and processing that makes it easier for banks of all sizes to leverage AAML-powered use cases.

Based on a survey of senior transaction banking executives representing financial institutions active across Europe, McKinsey expects the most important benefit of AAML to be the ability to identify new commercial opportunities through transaction analytics. Early results indicate that 75 percent of

Exhibit 1

## Advanced analytics and machine learning enable multiple use cases in transaction banking

Use case	Objectives	Potential impact	Level of support from EMEA transaction banking executives	
Value-chain analytics	Identification of commercial opportunities within the value chain of each customer through transactional analytics	75% of leads are relevant		
Transaction analytics	Identification of geographies and strategic sectors on the basis of client transactions	15-20% potential increase in customer base		
Netting	Enablement of payments netting between clients when the bank is on both sides of the transaction	Increase in commission income		
Data monetization	Sales to corporate clients of clustered information sets (e.g., transactions)	~3-5% EBITDA increase in acquiring business		
Transaction-based early warning system (EWS)	Loan portfolio monitoring through EWS based on transactional data	Reduction in gross inflow to NPL and in RWA		
Fraud detection	Detection of fraudulent transactions with no false flagging of legitimate transactions	+90% accuracy in detecting fraudulent transactions		

Source: McKinsey survey of ~20 transaction banking executives in EMEA

commercial leads generated by AAML tools are actionable, from the perspective of relationship managers and global transaction banking specialists (Exhibit 1).

In addition to value-chain analytics, AAML will enable banks to develop use cases for netting (between clients when the bank is on both sides of the transaction), data monetization (selling clustered data to corporate clients), portfolio monitoring (with early-warning systems leveraging transaction data) and fraud detection (aiming to achieve 90 percent accuracy). Some banks are using machine learning to increase the speed of processing.

## 2. Blockchain technology

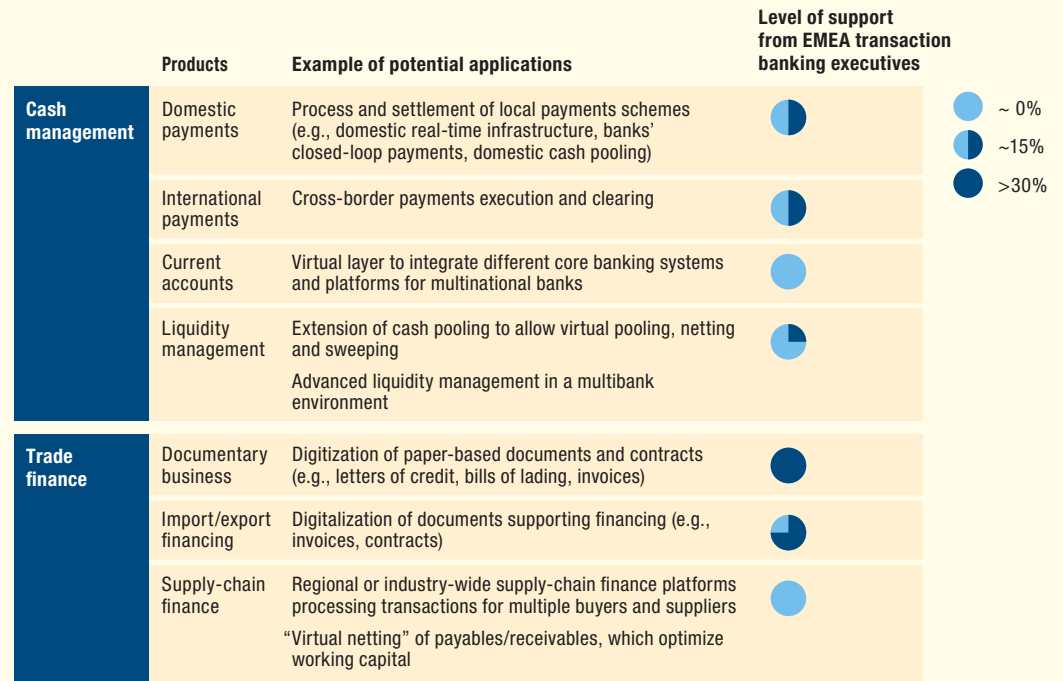
Blockchain technology leverages cryptocurrencies to develop a network of distrib-

uted ledgers, making it well-suited to processes and operations in which participants are part of a decentralized network, such as capital markets, securities services, retail payments and transaction banking. For example, the exchange of “smart contracts” (e.g., surety bonds, international guarantees, letters of credit, real estate contracts, or any other type of document that can be recorded and verified in the digital ledger) is a promising area for blockchain technology.

After several years of experimentation, many executives are confident that distributed technology could transform internal and external processes; however, there is also some skepticism about near-term applications of blockchain technology in transaction banking. Some executives believe technologies

Exhibit 2

### Distributed ledger technologies have potential in a number of transaction banking products



Source: McKinsey survey of ~20 transaction banking executives in EMEA

(e.g., cloud-based applications) other than blockchain may achieve the same objectives more efficiently and with less investment.

Transaction banking executives surveyed by McKinsey expect that the greatest impact of blockchain technology in the mid-term will be in documentary handling and import/export finance, with important revenue implications. Executives also expect that technology enhancements will lead to significant changes in diverse product areas and that blockchain technology could be one of the winning technologies. These innovations will likely transform the business model for core cash management services, including domestic payments (in particular real-time payments, closed-loop or "on-us" payments and domestic cash pooling) and cross-border payments. The increasing importance of dis-

tributed ledgers goes hand-in-hand with the overall trend toward end-to-end digitization. Indeed, a number of institutions have already made significant advances in digitizing cash management operations (e.g., know-your-customer and anti-money laundering activities, credit and lending scoring) and trade finance (Exhibit 2).

Full adoption of distributed ledgers will require time and a joint effort by industry players, regulators and technology experts. All parties to a specific transaction will have to build common technology platforms and implement operational procedures compatible with this shared technology. The blockchain may initially be adopted only by some financial entities and for specific transactions. However, once various issues, including the digitization of

financial assets, are solved, industry players will need to be ready for a steady acceleration in the adoption of this potentially revolutionary technology.

While the percentage of FinTechs focused on retail payments dropped from 25 percent in 2015 to 20 percent in 2016, those focused on corporate and commercial banking increased by about 15 percent.

### 3. FinTech challengers

The most important development in the FinTech space over the past 12 months is the increased focus on payments innovations for higher-asset sectors. Indeed, while the percentage of FinTechs focused on retail payments dropped from 25 percent in 2015 to 20 percent in 2016, the number of FinTech focused on corporate and commercial banking increased by around 15 percent.

This rapid growth has piqued the interest of executives responsible for a wide range of transaction banking product areas, from current accounts (with new solutions for multibank and multichannel environmental management) to payments (providing faster alternatives to established payments systems and enabling real-time payments) to documentary business (e.g., exchanging bills of lading through the blockchain).

While McKinsey expects FinTech innovation in transaction banking to continue to accelerate, the applications offered by FinTechs are still in an early stage of development, with no concrete examples reaching

large-scale adoption. Nevertheless, banks must stay abreast of the emerging innovations and their potential evolutions. Currently, there are two non-exclusive options for leveraging FinTech innovation in transaction banking: partnering with FinTechs (ranging from simply providing funding to deep commercial partnership to directly backing with equity stakes) or combining forces with other banks (typically through consortia, to benefit from network effects).

### 4. PSD2 access to account

In some markets, digital players referred to as “aggregators” are selectively entering the payments value chain with value propositions focused on improving the customer’s experience (e.g., Mint in the U.S., Centralway Numbrs in Germany and UK). In the European Union, the regulator aims to control these trends through a legal framework published under PSD2 at the beginning of 2016.

PSD2 builds and extends the consumer protection and standardization rules introduced a few years ago in PSD, but most of its impact is expected to come from a single rule: access to account. This rule is designed to support innovation by allowing third-party payments providers (TPPs) to develop offerings such as account aggregation services and transfer initiation services, without granting banks holding direct control the ability to charge for the service. Thus, under PSD2, banks will no longer have sole ownership of the proprietary transaction information associated with customer accounts, and they would be required to allow TPPs to initiate payments from those accounts, based on prior customer consent but without bank agreement or direct customer instruction to the bank.



The challenge for banks is that digital “giants” often have much closer relationships with their clients than banks do, and own the customer touch points. If these digital leaders can leverage access to account in apps integrated within the smartphone operating system, banks could cede their position as the leading gateway to payments and cash management services.

The strong relationships between digital “giants” and their customers could lead to the erosion of electronic payments volumes and revenues from established service providers.

In contrast to PSD, the overall impact of PSD2 on European payments revenue pool is expected to be substantially neutral for the industry as a whole. It will lead to increased volumes of electronic payments, while increasing competition and, hence, bring fees down. However, many banks will find the changes brought about by PSD2 to be anything but “revenue neutral” and “non-disruptive.” The strong relationships between digital “giants” and their customers could lead to the erosion of electronic payments volumes and revenues from established service providers. But the most relevant threat for banks is the complete loss of customer touch points and the risk of becoming pure providers of back-office commodity services, while digital players retain all front-end interaction with clients and are able to build value-added services on top of the bank “utility.”

As a result, banks need to act quickly to deal with the PSD2 regulation: slow movers will be at risk of losing both market share and share of wallet. Banks can turn the new regulation to their advantage by developing new interfaces that strengthen customer loyalty through improved customer experience, and gaining market share vis-à-vis both competing banks and digital players. Some banks are looking to replicate the “open environment” approach that has proven a winning strategy for some digital players (e.g. app stores) by opening their systems to third-party developers that build new applications upon existing functionalities. For instance, BBVA has developed an open API framework for their Spain and U.S. operations, while a group of UK banks is designing an industry-standard open banking protocol. In this sense, retail payments and transaction banking are moving to a more standardized, open and to some extent “crowded” value chain. This strategy, coupled with taking a lead in API development, should allow banks to develop a stable and economically sustainable outcome and would also position banks as organizers of the emerging TPP ecosystem.

To this end, it is crucial for retail payments and transaction banking executives to launch a PSD2 strategy effort promptly. McKinsey’s survey of transaction banking executives reveals that in many banks PSD2 is not yet a CEO-level topic and that often there is inadequate alignment between the head of global transaction banking/payments, the CFO and the COO regarding issues such as the level of investment required and project leadership. Consequently, there is a significant risk that, as happened with first waves of SEPA, the reg-

ulation will be treated as a technical topic with no business implications. In fact, PSD2 is all about business.

\* \* \*

The European transaction banking industry is undergoing a major transformation. Some innovations will succeed; others will fail. Banks should follow these developments closely, evaluate their potential impact and craft a strategy that enables them to respond promptly as winners begin to emerge.

Specifically, European banks should, first, act swiftly to define and implement a PSD2 game plan, adapting the payments platform to new open standards and developing a

strategy for leveraging the new rules for account access. Second, each bank must explore options and opportunities (e.g., evaluating different use cases) for implementing blockchain technology, for example by conducting pilots in trade finance. Finally, banks should leverage advanced analytical tools suited to their market strategy and evaluate potential FinTech collaborations to increase speed, cut costs and improve customer experience.

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