White Paper
How to Succeed in a World without Walls: Addressing Disintermediation Threats and Opportunities from the PSD2

By Stefan Dab, Olivier Sampieri, Kuba Zielinski, Pierre-Marie Despontin and Maarten Peeters

April 2016
Imagine a world where digital giants have unconstrained access to hundreds of millions of individual bank accounts. Imagine they unleash their brand, technology, data, and scale to bring new value propositions to these individual customers. Imagine that these giants are quickly followed by a multitude of agile new entrants. The promise of the Payment Services Directive 2 (PSD2) is to create this world by enabling new business models, emboldening new attackers, and fostering relentless innovation. There is some uncertainty on how things will actually play out, but the financial services industry should prepare for far-reaching competitive disruptions. The opportunities will be significant, but so will the pressure for banks and payment service providers to respond in a way that materially differentiates their customer experience and protects their revenues.

The PSD2 exposes established banking and payment institutions to increased attacks that get at the core of their primary relationships with customers: accounts and payments. The directive will create a more open environment, greater customer choice, and greater price transparency. For digital leaders in the banking space that can capitalize on customer-friendly interfaces and modern IT architectures, the regulatory openings will be good for growth. At the same time, institutions that focus solely on compliance and miss the larger customer experience opportunity will run the risk of seeing their role reduced to that of a utility.

This paper offers BCG’s perspectives on the impact of the PSD2, including the value propositions it will trigger and the risks it will create for incumbent banks. To compete effectively in this changed environment, banks must address critical pain points and redesign core journeys from the point of view of the customer. Beyond ramping-up their IT architectures to comply with new requirements, banks must make significant investments to defend their core offering and use the directive to go on the attack strategically.

THE FAR-REACHING IMPLICATIONS OF THE PSD2
The first Payment Services Directive (PSD1) was adopted in 2007 as part of a broad regulatory effort to harmonize the European payment sector and promote growth, competition and innovation. The PSD2 arose in response to the growing number of new entrants, the increasing importance of online and mobile payments, and rising security concerns. It came into force in January 2016 and EU member states have until January 2018 to implement the directive. Based on the experience of PSD1, most implementations will likely occur close to the deadline in early 2018.

Although the European Banking Authority (EBA) is working on the Regulatory Technical Standards that will complement the regulation, the core elements are already largely understood. (See Sidebar.) In short, the rules concerning account access and payment initiation services have the potential to break banks' exclusive control on customer data and create disintermediation in the payment space.

The rules expected to have the most sweeping implications include:

**Access to Accounts:** Banks and account-holder institutions must share certain account information with licensed third party providers (TPPs) that have received explicit customer consent. At minimum, this includes account balances, but the provision could expand to include other areas like transaction histories.
**Payment Initiation Services**: Licensed TPPs that are supervised by an appropriate authority are allowed to initiate payments over the secure communication channels that banks and account-holder institutions must build.

**Strong Customer Authentication (SCA)**: Payment Service Providers (PSPs) must require two or more "strong" authentication elements. Such authentication can be something the customer "knows," e.g., a password, "owns," e.g., a smartphone or "is," e.g., personal biometrics.

**Technical Requirements**: Banks and account-holder institutions must build Application Programming Interfaces (APIs) that facilitate secure and efficient information-sharing with third parties.

**Regulatory "gaps" left open by PSD1**: These include the prospect of increased transparency and information-sharing for “one-leg” transactions, i.e., transactions in which only one counterpart is located in a member state, as well as the banning of surcharging.

We also expect that certain environmental trends will amplify the far-reaching nature of the PSD2. While data privacy concerns and the reduction of interchange (which reinforces cards' place in the market and reduces the financial incentive for innovation) may have a dampening effect, other key trends will more than compensate for this and accelerate the impact of the PSD2. These trends include the increasing power and reach of digital giants and FinTechs, the growing shift towards mobile, and, in certain major markets, the implementation of real-time payments.

**Sidebar: Some regulatory uncertainties remain**

Although the main elements of the PSD2 have been published, some questions remain. These include:

- **How stringent will the EBA’s technical requirements on information access and SCA be?** Regulators must balance the need to promote innovation with the need to maximize security and mitigate implementation burdens.

- **How much information must account-holding institutions share?** The answers will define the types of value propositions brought to market.

- **How will standards vary geographically?** Differences in interpretation and timelines may vary across countries, with some countries potentially choosing to be stricter than the directive provisions, leading to implementation complexity.

- **How should institutions navigate the time gap from when the PSD2 comes into force at the country-level and when the EBA issues its standards?** To enter the market in early 2018, new players would have to make technological choices that comply with EBA requirements, but these requirements will only be finalized in September 2018 at the earliest.
A MORE OPEN MARKET WILL FOSTER DISRUPTIVE VALUE PROPOSITIONS
At least four disruptive value propositions are likely to emerge after the PSD2 takes effect. They fall into the areas of aggregation services, account-based payments, next-generation credit, and ecosystems.

1. Aggregation: In a post-PSD2 world, aggregation platforms can increase customer value by providing a comprehensive cross-bank view of accounts, new product recommendations and easy money transfers across institutions.

For example, the U.S. entrant, MaxMyInterest, has developed a service that allows users to gain a cross-bank overview of their holdings and transfer funds automatically to the account with the highest monthly returns. Services like these have the potential to lower switching barriers and increase fund flows, which will force players to engage in more intensive price competition. Some will attempt to become dominant aggregators, but only a few will be able to create a sufficiently differentiated value proposition to reach critical mass.

Given the large number of European institutions, and the even larger number of TPPs likely to enter the aggregation services arena, the PSD2 may also create an opening for intermediaries to offer a connection platform between banks and TPPs. The likelihood of such "integrator" offerings, similar to that of the US player Yodlee¹, will depend on whether entities can manage the complexity and cost of building scale and creating an economically viable business model. Integrators that succeed in tackling these issues would likely prompt other players to enter the aggregation space.

2. Account-based payments: By allowing authorized TPPs to initiate payments, the PSD2 opens up a new battlefield with two immediate applications.

First, it will give a boost to online players that have an accepted and established brand, such as PayPal. The ability to offer a safe, streamlined account-based payment alternative will improve the funding mix of these players and hence reduce their cost. New players that focus on account transfers as their main value proposition, e.g., Sofort² also stand to benefit, but these businesses will have to build a broad enough merchant and user base to create network effects.

Second, the PSD2, combined with the advent of instant payments in certain markets, may allow point of sale (PoS) providers to grow their base of small and micro merchants—allowing them to offer safer, cheaper and more convenient solutions while still providing a healthy margin. In the larger merchant segments, however, low interchange and significant market acceptance challenges will reduce the potential for profitable disruption at the PoS.

Overall, the payment initiation space is likely to become more fragmented in the near-term before ultimately consolidating. Successful players will focus on building merchant acceptance and consumer trust, with business models that factor in liability for fraud and counterparty risk. SCA will also have a

¹ Yodlee proposes its own retail financial management platform (showing customers an aggregation of their assets across banks), but has also developed a B2B "integrator" proposition, acting as the interface between banks and TPPs using customer account data into their own value proposition. Yodlee clients range from well-established institutions to FinTechs.
² SOFORT GmbH, was founded in 2005 in Germany; it facilitates the payment of online e-commerce transaction using customers’ online banking login details. It is part of the Klarna Group and is now active across Europe.
How to Succeed in a World Without Walls: Addressing Disintermediation Threats and Opportunities from the PSD2

significant impact: while final requirements and exemptions have not been formalized, the directive will advantage certain players based on the customer experience choices they have made in the past (e.g., single password versus smartphone-fingerprint).

3. **Next-generation credit**: Many new and established players in the lending space are looking forward to breaking up what has been a traditional monopoly for banks: fast, seamless and stable access to their customers' data.

Such access to account balances, transaction histories and in- and outflow patterns will unlock a key source of advantage for consumer lending specialists and peer-to-peer (P2P) lenders. They will be able to leverage their strengths in credit scoring to price risk in a more accurate and tailored fashion to compete more effectively with incumbent players. They will also be able to access prospects that might otherwise be out of reach due to the lack of reliable data.

Payment players will also be able to expand. Klarna\(^3\), for instance, currently extends free credit to their customers by fronting their e-commerce transactions and bundling those transactions into a monthly bill. Greater access to account data will enable Klarna to perform more sophisticated fraud detection and risk scoring and extend their services to more customers.

4. **Ecosystems**: the PSD2 creates the potential for large cross-industry players, such as e-commerce or messaging giants, to create product ecosystems that build off the main customer relationship to cross-sell other financial services.

Several high-profile examples exist outside Europe. Alibaba first launched AliPay in 2004 as a payment enabler for its retail business, but it has now become a major payment player in China, with more than 50 percent market share in online transactions and 80 percent in mobile transactions. Since then, Alibaba has moved towards an ecosystem model, with Ant Finance, their financial services arm, now providing merchant loans, consumer credit, P2P lending, and wealth management services to hundreds of millions of clients in China. In India, PayTM began in 2010 as a prepaid mobile recharge website before developing its wallet service. Thanks to India's payment bank regulation (which is similar to the payment initiation provision in the PSD2), that service has since gone on to become India’s largest mobile payment service platform and serves as a complete financial services marketplace.

Digital giants, including large merchants and marketplaces, could be attracted to this model. With millions of users across Europe, they have the scale and resources to become important payment players and offer additional services. While these services might be intended to support the businesses’ primary business models (i.e., offering a convenient platform to sell more goods), the strategy would attack profit pools that are traditionally reserved to incumbent players.

While predicting all the value propositions that the PSD2 will enable is not our objective, a few developments can be expected beyond these four categories. For example, access to richer customer spending data is likely to trigger innovations in the loyalty and rewards space. In addition, developments

\(^3\) Klarna was founded in Stockholm in 2005. Active across Europe and in the US, it offers payment solutions to e-stores based on the concept of after delivery payment: buyers receive ordered goods before any payment is due, while Klarna assumes the credit and fraud risk.
around digital identity—for example, using customer banking data for authentication purposes—will likely accelerate. Finally, with an additional number of providers wishing to access customer data, new services that allow customers to monitor and manage where and how their data is used are likely to emerge. That said, it’s not only new entrants that stand to gain. Incumbent banks also have a strong card to play—leveraging customer trust they hold.

**BANKS MUST BE PREPARED TO ADDRESS THE PSD2 AT A STRATEGIC LEVEL**

In a 2015 survey of European banks, more than 70 percent agreed that the PSD2 will force them to rethink their business models. But most banks mentioned that deadlines were too tight in the near-term for the PSD2 to serve as more than a compliance project. Few had actually set up a dedicated team to define a strategic response to the threats and opportunities from the directive.

Our recent discussions with banks have confirmed that the PSD2 is high on their agendas, but there is a varying sense of urgency with respect to preparing a concrete response. Our view is that banks cannot afford to wait. Unprepared institutions will be hit by customer attrition and severe price competition. We see three main risks for established banks.

First, while management attention is likely to focus on the FinTech threat, the PSD2 will heighten competition among *incumbents*. Banks that already have a digital advantage, through revamped customer interfaces, agile ways of working and a flexible IT architecture, will steal share with more targeted offers based on customer account data from other institutions. Likewise, product specialists, such as those in consumer lending, can take advantage of additional data sources to create specialized and increasingly tailored offerings.

Second, a select number of *digital players* will emerge as winners, by providing convenient, value-added customer experiences that ride on top of the banking infrastructure. In the near-term, the PSD2 is likely to open the floodgates, with many new FinTech players seeking to develop offerings and build scale. The result will be a fragmented, noisy and confusing landscape that will consolidate over time, with the potential for a handful of new FinTechs to develop strong brand recognition and large customer bases. In parallel, digital giants like Google, Apple, Facebook and Amazon may pose a bigger threat, by using their market position to increase customer "stickiness." These players may offer account-based payment alternatives, putting more pressure on banks’ interchange revenues, or offer targeted financial products that support their primary business models (e.g., merchant lending), attacking other traditional profit pools.

Third, increased competition and transparency will accelerate price erosion and may even prompt price wars in certain markets and segments. Should the result mirror that of aggregators and price comparison platforms in other markets, such as insurance, some products could see a 10-to-15 percent price drop in the near-to-medium term.

Rather than considering the regulation to be a "sunk" compliance cost, banks can turn the PSD2 to their advantage. Significant IT investments must be made at the outset to comply with new rules, for instance to develop the APIs that will allow TPPs to access account information securely, and to ensure sufficient

---

4 "PSD2 AND XS2A – Regulation or opportunity?", Report on a survey by Finextra and FIS, May 2015
operational resilience is in place to handle a large and continuous volume of data requests coming from TPPs. Banks must weigh these technology investments from a strategic point of view, since those investments provide an opportunity to develop the agile IT architectures they will need to enhance flexibility and speed to market. Beyond these investments, banks must focus their efforts on two fronts to fend off disintermediation: secure their defense and rethink their offense.

1. **Secure defense.** Before banks can fully leverage the new regulation, they need to assess how they can materially redefine the customer experience in order to match that delivered by FinTechs. Most will need to revamp customer journeys—streamlining and redesigning processes and interactions to remove friction, make better use of data, and provide greater convenience and engagement.

A strong defense has four imperatives:

- **Daily banking:** Lagging banks need to fix the basics and provide a highly intuitive and seamless digital interface for their customers. That interface must offer a complete and real-time view of customer accounts in a format that is personalized and that makes daily banking activities simple and efficient to manage.

- **Alerts and advice:** Banks can add value and convenience by delivering proactive messages to customers, in the form of simple alerts (e.g., going over predefined spending limits, warning of potential overdrafts, etc.), as well as advisory prompts, e.g., optimizing fund allocation between current and savings accounts based on typical spending patterns.

- **Data management:** Banks need to make better use of their underutilized data assets. Rigorous data management practices (both organizational and technological) must be in place to enable such things as the delivery of more targeted cross-sell leads and high-precision pricing through increased intelligence on price sensitivity and cost of risk. Effective data management is an especially critical prerequisite to prepare for PSD2, when far more data will become available.

- **Digital payments:** the PSD2 is a trigger for banks to define their digital payment strategy and their wallet offering. This should be based on four pillars: i) a highly convenient interface, ii) an integrated multi-channel capability with a focus on mobile, iii) payment convergence, i.e., providing the same customer experience irrespective of the underlying payment method, and iv) greater standardization—especially with respect to providing unified and convenient digital payment solutions to customers in partnership with other banks. With Apple Pay and Samsung Pay rolling out across Europe and with most domestic wallet initiatives failing to gain traction, it is time for banks to prioritize their options in digital payments.

2. **Rethink offense**

The PSD2 is likely to trigger new value propositions and business models from a variety of players. We argue that these same attacker plays are also available to incumbents.

High on the list for incumbent banks is the question of whether to adopt an aggregator model. It is difficult to provide a generic answer at this stage. However, should a major bank go down this path (in
an attempt to gain first-mover advantage, for instance), competing banks will have little choice but to follow with their own aggregation solution.

In that event—with major banking players and successful entrants all offering competing aggregation platforms—differentiation will come down to brand trust and loyalty, superior customer experience, and compelling products and services. The most competitively successful banks are likely to be those that provide a highly convenient interface and enter into selective partnerships with FinTechs to acquire best-of-breed solutions that can be provided in a one-stop-shop environment.

Regardless of which strategy a bank employs, the post-PSD2 environment will require incumbents to augment their innovation capabilities. They will need to embrace practices, such as ethnographic research, to discover unmet customer needs, use rapid, iterative development approaches to deliver a superior and continually evolving customer experience (starting with minimum viable products), and they must be strategic in securing selective partnerships, with FinTechs or others, to bolster their offerings.

***

Uncertainties around the actual impact of the PSD2 remain, notably with regards to the exact requirements on the types of data to be shared, as well as consumers' readiness to provide access to that data. Yet, the PSD2 carries real potential to breach traditional competitive barriers for banks.

Given the range of new services that PSD2 could generate, the financial services industry cannot afford to bet on the status quo lest they fall victim to potentially massive disruption by savvy new entrants, digital giants, stronger product specialists and digital-ready banks.

Incumbents have a strong opportunity to leverage the PSD2 and fend off disintermediation. That requires that they make the necessary investments to significantly revamp customer journeys and provide superior value and convenience. Those that don’t are likely to lose share and revenue.
About the Authors

Stefan Dab is a senior partner and managing director based in BCG’s Brussels office. He is the global leader of BCG’s transaction banking and payments segment. You may contact him by e-mail at dab.stefan@bcg.com

Olivier Sampieri is a partner and managing director in BCG’s Paris office. You may contact him by e-mail at sampieri.olivier@bcg.com

Kuba Zielinski is a partner and managing director in BCG’s Boston office. You may contact him by e-mail at zielinski.kuba@bcg.com

Pierre-Marie Despontin is a principal in BCG’s Brussels and New York offices. You may contact him by e-mail at despontin.pierremarie@bcg.com

Maarten Peeters is a knowledge expert in transaction banking and payments in BCG’s Brussels office. You may contact him by e-mail at peeters.maarten@bcg.com

Acknowledgments
The authors would like to thank their BCG colleagues for their valuable input and insights: Sébastien Albert, Matteo Luischi, Tim Monger, Sushil Malhotra, Tom Dye, Alexander Drummond, Mohammed Badi, Francesco Gaini, Kaj Burchardi, Stefan Humburg, Massimiliano Merlino, Perry Peng, Erande Yashraj, Nicolas Harle, Ugo Cotroneo, Matteo Radice, Rahel Lebefromm

About BCG
The Boston Consulting Group (BCG) is a global management consulting firm and the world’s leading advisor on business strategy. We partner with clients from the private, public, and not-for-profit sectors in all regions to identify their highest-value opportunities, address their most critical challenges, and transform their enterprises. Our customized approach combines deep insight into the dynamics of companies and markets with close collaboration at all levels of the client organization. This ensures that our clients achieve sustainable competitive advantage, build more capable organizations, and secure lasting results. Founded in 1963, BCG is a private company with 85 offices in 48 countries. For more information, please visit bcg.com.

©The Boston Consulting Group, Inc. 2016. All rights reserved. 4/16