3 PSD2, a Business Model Perspective: Financial APIs will foster business model innovations

The Takeaway

BBVA

PSD2 introduces major changes in the European payment landscape. From a business model perspective, financial services firms can become TPPs (Third-Party Providers: PISPs and AISPs) and bundle APIs to capture value by focusing on making payment systems "bigger & better"; or become ASPSPs and unbundle APIs to capture value by finding or creating "new" sources of revenue.

Recent Developments

On 16 November 2015, the Council of the European Union adopted the revised Payment Services Directive (PSD2). According to the European Commission, "the new rules will protect consumers better when they make payments, promote the development and use of innovative online and mobile payments and make European payment services safer". Member states now have two years to introduce the necessary changes into their national laws in order to comply with the new rules.

Key Concepts of PSD2

The revised payment scheme prescribes the disappearance of some traditional players; while the revised information scheme postulates the emergence of new players: TPPs (Third Party Providers). Also, in both the payment and information schemes in the post-PSD2 world, all interactions (Access to Accounts – XS2A) will go through APIs (Application Programming Interfaces); which, put simply, are rules that govern how applications "talk" to each another. Not only will APIs allow standardised interactions amongst the various players in the payments ecosystem, but they will also enable and empower business model innovations.

The disappearance of some traditional players. Given the changes laid out in PSD2, some traditional players such as the merchant acquirers (e.g. WorldPay) and card schemes (e.g. MasterCard) will be challenged. For consumers, the payment experience will stay much the same in both the pre-PSD2 and post-PSD2 world: go to anydigitalstore.com, shop, and pay. For firms who initiate the payment (aka "PISPs" – Payment Initiation Service Providers), the back-end relationship changes: instead of interacting with merchant acquirers, the PISPs will interact directly with banks that manage the customers' accounts (aka "ASPSPs" – Account Service Providers).

The emergence of new players: the TPPs. We have already discussed one of the two Third Party Providers (TPPs) described in PSD2 above; namely the PISPs (merchants). Then there are the AISPs (Account Information Service Providers), which aggregate information from multiple ASPSPs; effectively "rolling up" multiple relationships into a single touchpoint for the customer. A couple of proxy examples of this concept can be found today in services like Mint (US and Canada) and Fintonic (Spain). AISPs will access information from different ASPSPs via open APIs at the request of customers. This "access" is referred to as "XS2A" in PSD2, which we will discuss next.

XS2A will go through APIs. On a customer's request, ASPSPs must provide Access to Accounts (XS2A) to PISPs and AISPs via APIs under Regulatory Technical Standards (RTS) as defined by the European Banking Authority (EBA). Let's parse some of this alphabet soup for the sake of clarity. In the payments scheme, customers give PISPs (the merchants or retailers) permission to execute payments without having to divulge the ASPSP (the bank) login details; using tokens. In the information scheme, customers give AISPs (the information aggregators) permission to pull information from multiple ASPSPs (the banks).



Business Model Impact

BBVA

According to Raymond Kurzweil, a well-known technology futurist, "once any domain, discipline, technology or industry becomes information-enabled and powered by information flows, its price/performance begins doubling approximately annually" and does not stop as technology further advances technological development. The result is exponential growth, which begins slowly, then accelerates. Seen from this perspective, PSD2 will not only regulate payments (supporting linear change) but also will lead the payment industry into the future (supporting exponential change); thus ensuring the "dynamic" nature of payment systems in Europe.

The customers. Exponential technologies are directly responsible for the proliferation of smartphones (and internet devices). In Europe, there will be 815 million smartphone users with 90% broadband connections (3G+ speeds) by the year 2020; meaning that there will be literally hundreds of millions of customers for digital financial products, services and experiences in Europe. With the advent of PSD2, many players will aggressively pursue a relationship with banking customers by becoming AISPs, competing for a share of customers' wallets (economies of scope). Given the fact that payments are seen as a gateway product/service, the prevailing logic dictates that whoever offers the best customer experience (CX) in payments will own the customers for other products/services and create additional upselling or cross-selling opportunities. To do so, AISPs need to have intimate knowledge of customers (big data) and build experiences by bundling (using information from ASPSPs).

The infrastructure. When Amazon launched AWS in 2006, it changed the game by destroying the "economies of scale" advantage of large companies. Today, every start-up has the ability to reach two billion customers and access to digital infrastructure that can scale to serve those customers. In PSD2, start-ups and other entrants will take advantage of this scale and massive customer reach to build platforms; more specifically, to build Customer Experience (CX)-focused platforms (or "marketplaces") to lead the customer relationship as AISPs. The AISP that puts together the best payment experience (with APIs and in accordance with XS2A) will find business opportunities in the PSD2 world. As a result, they would be looking to ASPSPs to provide banking APIs. Given this focus, banks and other financial institutions (ASPSPs) are poised to offer banking APIs as a service to AISPs.

Bottom line

PSD2 will drive changes in the European payment landscape and banks, and other financial services players will have to make the necessary adaptations. Broadly speaking, banks and other incumbents will either have to lead payments CX by bundling APIs or be part of other CX platforms by unbundling APIs, or even do both.

Bank-led CX. Digital platforms are built with "Big Data" and APIs (bundling or unbundling key APIs). Under PSD2, banks could become AISPs by curating the "right" payment APIs for customers. Since banks have a wide array of data available, especially "decision data," incumbents should be well-positioned to compete. As mentioned, as banks accumulate more information they have opportunities to become exponential organisations.

Banks in every CX. PSD2 also forces the unbundling of business models and "products". In the Directive, banks have to choose a focus: own/operate a payment platform (AISPs) or offer payment infrastructure as a service (ASPSPs). As ASPSPs, it may be interesting for them to atomise or unbundle banking functions/processes into APIs so that they may be consumed easily by AISPs. By making the most banking APIs available individually, banks (or their APIs) can, in theory, be part of every customer experience.

DISCLAIMER

BBVA

This document has been prepared by BBVA Research Department. it is provided for information purposes only and expresses data. opinions or estimations regarding the date of issue of the report. prepared by BBVA or obtained from or based on sources we consider to be reliable. and have not been independently verified by BBVA. Therefore. BBVA offers no warranty. either express or implicit. regarding its accuracy. integrity or correctness.

Estimations this document may contain have been undertaken according to generally accepted methodologies and should be considered as forecasts or projections. Results obtained in the past. either positive or negative. are no guarantee of future performance.

This document and its contents are subject to changes without prior notice depending on variables such as the economic context or market fluctuations. BBVA is not responsible for updating these contents or for giving notice of such changes.

BBVA accepts no liability for any loss. direct or indirect. that may result from the use of this document or its contents.

This document and its contents do not constitute an offer. invitation or solicitation to purchase. divest or enter into any interest in financial assets or instruments. Neither shall this document nor its contents form the basis of any contract. commitment or decision of any kind.

In regard to investment in financial assets related to economic variables this document may cover. readers should be aware that under no circumstances should they base their investment decisions in the information contained in this document. Those persons or entities offering investment products to these potential investors are legally required to provide the information needed for them to take an appropriate investment decision.

The content of this document is protected by intellectual property laws. It is forbidden its reproduction. transformation. distribution. public communication. making available. extraction. reuse. forwarding or use of any nature by any means or process. except in cases where it is legally permitted or expressly authorized by BBVA.



December 2015

This report has been produced by the Digital Regulation Unit:

Chief Economist for Digital Regulation Unit Álvaro Martín alvaro.martin@bbva.com

Vanesa Casadas vanesa.casadas@bbva.com

Pablo Urbiola pablo.urbiola@bbva.com

With the contribution of: David Tuesta david.tuesta@bbva.com lsrael Hernanz israel.hernanz@bbva.com

Sang Gu Yim sanggu.yim@bbva.com

Alvaro Ortiz alvaro.ortiz@bbva.com Alicia Sánchez alicia.sanchezs@bbva.com

Tomasa Rodrigo tomasa.rodrigo@bbva.com Javier Sebastián jsebastian@bbva.com

BBVA Research

Group Chief Economist Jorge Sicilia Serrano

Developed Economies Area Rafael Doménech r.domenech@bbva.com

Spain Miguel Cardoso miguel.cardoso@bbva.com

Europe Miguel Jiménez mjimenezg@bbva.com

US Nathaniel Karp Nathaniel.Karp@bbva.com Emerging Markets Area

Cross-Country Emerging Markets Analysis Alvaro Ortiz alvaro.ortiz@bbva.com Asia

Le Xia le.xia@bbva.com

Mexico Carlos Serrano carlos.serranoh@bbva.com *Turkey* Alvaro Ortiz alvaro.ortiz@bbva.com

LATAM Coordination Juan Manuel Ruiz juan.ruiz@bbva.com Argentina

Gloria Sorensen gsorensen@bbva.com *Chile* Jorge Selaive jselaive@bbva.com *Colombia* Juana Téllez juana.tellez@bbva.com

Peru Hugo Perea hperea@bbva.com *Venezuela* Julio Pineda juliocesar.pineda@bbva.com Financial Systems and Regulation Area Santiago Fernández de Lis sfernandezdelis@bbva.com

Financial Systems Ana Rubio arubiog@bbva.com

Financial Inclusion David Tuesta david.tuesta@bbva.com

Regulation and Public Policy María Abascal maria.abascal@bbva.com

Digital Regulation Álvaro Martín alvarojorge.martin@bbva.com

Global Areas

Economic Scenarios Julián Cubero juan.cubero@bbva.com

Financial Scenarios Sonsoles Castillo s.castillo@bbva.com

Innovation & Processes Oscar de las Peñas oscar.delaspenas@bbva.com

Contact details:

Azul Street, 4 La Vela Building - 4 and 5 floor 28050 Madrid (Spain) Tel.: +34 91 374 60 00 and +34 91 537 70 00 Fax: +34 91 374 30 25 bbvaresearch@bbva.com www.bbvaresearch.com