

# **PSD2 and its influence on the relationship between Fintech companies and the banking industry**

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## **Abstract**

This essay describes the impacts of the PSD2 directive. It explains the basic context and terminology as well as the goals of this regulatory measure. In particular I focus on the consequences that it will have on the banking industry, which is approached from both the perspective of a banking institution and that of a fintech company. Then I discuss the current status of the progress of PSD2 and where we are on the timeline. This is closely connected to the RTS which have also already been published and provide us with additional details concerning the technical implementation. I proceed to discuss the trends that are closely related to this topic. I conclude the essay with my thoughts on the future of the banking industry after becoming familiar with the PSD2 directive.

## **Introduction**

The banking industry is a crucial component of our global economy and as such it won't be unaffected by the rapid technological advancement. It has previously steadily adopted to the digitization of its services which was driven by the needs of its customers.

Today innovative technologies like blockchain are coming faster than ever and there are many new players in the industry that want to take the advantage of them. There has however been a disconnect between them and the traditional banking institutions. Now the PSD2 is coming to change this and transform the competitive market of the banking industry.

## **What is PSD2?**

PSD2 is a shortcut for the revised Payment Services Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market (EU-Lex, 2015). This directive brings about significant changes to the area of digital banking services. It is a legislative measure that has disruptive potential for the digital channels of banks and their competitors. From the banks perspective this an event that requires adjustments and is also one of the main reasons to innovate. For the Fintech companies this represents a brand new set of opportunities.

## **Goals of PSD2**

The European Commission introduced the PSD2 directive as a successor and a replacement to directive PSD1 from 2007, which is being updated a developed further. The PSD1 has for example brought us the Single Euro Payments area which allows for SEPA payments. The European Commission (2018) has set out the following objectives for PSD2:

- Contribute to a more integrated and efficient European payments market
- Improve the level playing field for payment service providers (including new players)
- Make payments safer and more secure
- Protect consumers

## New mandatory services

The main change brought by PSD2 is the obligation for banks to allow access to information to so called TPP's (Third Party Providers). TPP's can be other banking institutions within the European Union or other companies operating in the financial industry that are commonly known as Fintech's.

This access to the client's information will be facilitated through the mandatory implementation of API's (Application Programming Interfaces). This can however only happen with an expressed consent given by the individual client.

PSD2 specifies two possible roles for the TPP's, which will be able to provide the following X2SA (Access to account) services to obtain the information about the client's accounts (Deloitte, 2017):

- **PIS (Payment Initiation Service)** enables the execution of a payment from a bank account without having the direct access to a digital banking channel such as internet or mobile banking. Currently the user would be typically redirected to one of these gates when performing a payment. The provider of this service that can initiate the payment on behalf of a client is described by the shortcut PISP (Payment Initiation Service Provider).
- **AIS (Account Information Service)** provides an overview of information about the clients account such the remaining balance. Through this service it is possible to aggregate information from several separate bank accounts in the interface of a single digital channel. Currently it is only possible to view this information via the proprietary channels of individual banks. The provider is known as AISP (Account Information Service Provider).

The directive is also concerned about the security issues regarding these services and thus there is an obligation to comply with predefined strict security requirements for the providers of these services as well as the banks that open their API's. The detailed requirements are however not included in the text of the actual directive as they are instead described in the RTS (Regulatory Technical Standards) on SCA (Strong Client Authentication) & SC (Secure Communication) created by the European Banking Authority [EBA] (2018).

## **The timeline**

The PSD2 has been approved on 8 October 2015 by the European Parliament after being previously proposed by the European Commission. It came into force on 13 January 2016 and since then the EU member states had two years to create their national regulations in compliance with the directive. The directive has therefore been transposed into the law of individual countries on 13 January 2018.

In the meantime, the RTS (Regulatory Technical Standards) that accompany the PSD2 directive, as they are an important documentation providing the technical details on its implementation, have gone through their own development.

RTS have been worked on by the EBA (European Banking Authority) and the final version of RTS has adopted by the European Commission in November 2017. On 13 March 2018 this final draft was approved by the European Parliament and the European Council and was published in the Official Journal of the European Union. The RTS will apply from 14 September 2019 leaving an 18 months transition period after this publication. (EUR-Lex, 2018).

This is somewhat later than initially expected as the preparation of RTS took a significant amount of time. Previous estimates on the effective application of RTS ranged from November 2018 to April 2019 (Deloitte, 2017).

## **Details from RTS**

As the Regulatory Technical Standards have already been released, we can take a closer look at what they bring. The devil lies in the details, so their impact is not to underestimated. Unlike the PSD2 directive itself, they do not translate directly into the national law of individual countries.

The rules set by RTS cover two areas (European Payments Council [EPC], 2018):

- **SCA** (Strong Customer Authentication) seeks to protect customers within the European Union by increasing the level of security surrounding payment processing and accessing account details, which corresponds with the new mandatory services.

- **CSC** (Common & Secure Communication) discussed how the access to client's information should be shared between the either PISP or AISP and ASPSP.

SCA has to be applied in the following scenarios: customer (doesn't matter whether individual or corporate) accesses their payment account online, making an electronic payment or instances when an action can lead to a situation that implies risk of payment fraud or other abuses. (EPC, 2018).

Customers identity must be verified by at least 2 of these 3 criteria (EPC, 2018):

1. Something the user knows (password, PIN ...)
2. Something the user possesses (payment card, mobile phone ...)
3. Something the user is (biometrical information including fingerprint scanning or voice recognition)

For all remote payment there must be an extra element of security in the form of unique one-off authentication code. Then there are some exceptions from these rules such as payments of low value (up to 30€ for online/mobile and 50€ for contactless cards) or payments to a trusted, previously identified beneficiary. (EPC, 2018)

ASPSP (Account servicing payment service provider) provides and maintains the client's payment account. This can be put into contrast with TPP, who takes on the role of PISP and or AISP but does not have direct access to client accounts. Banks can be ASPSP but also PISP and AISP. (EPC, 2018)

The access to customers account can only happen if they had given explicit consent to AISP or PISP to share their data or initiate a payment. This must be done through a secure communication channel provided by the ASPSP. (EPC, 2018)

This channel can be implemented as an API or via adapted dedicated interface, often described as advanced screen scraping (displaying data from one application in another). In this case there has to be additional security from the TPP and there must be a formal agreement with the customer while fulfilling all requirements set by GDPR. (EPC, 2018).

## Consequences of Open banking

PSD2 allows for the entry of many new subjects into the market and partially removes the barrier to entry represented by the need to have a banking license. The new reality of open banking allows users to access their accounts and perform payments through channels other than those that are proprietary to their bank.

The most commonly used actions, which is checking the account balance and the bank transfer (PwC, 2016), will now be possible to be entirely operated by the TPP's within their roles as AISP or PISP respectively. The banking institutions are therefore losing their monopoly on providing these services.

The main advantages of Fintech companies, as perceived by banks, are new technologies and a better overall customer experience. They identify secure infrastructure, existing customer base and knowledge of their customers as their own main strengths. (PwC, 2017) Bank's disadvantage in not being dynamic and flexible like Fintechs is an inherent property determined by their size.

In relation to the introduction of PSD2 directive and the changes that it brings banks will be faced with new risks but there will also be an opening of new opportunities. On the positives is the option to make new services and products accessible to their clients and widen their portfolio by doing so. This could be done with collaboration with third parties. Perceived risks include loss of direct contact with the customer and subsequent loss of data ownership about the clients and their behavior. (PwC, 2016)

## Banks reactions

There are several approaches and strategies that the banks can follow in reaction to the implementation of PSD2 directive. Experts from Innopay divide them into four categories (Cortet, Rijks & Nijland, 2016):

- The minimal requirement is the **compliance** with the PSD2 directive. Following this as a strategy does in itself imply a quite defensive approach that suggests that the given banking institution perceives PSD2 primarily as a threat and not as a source for new opportunities. Nevertheless, banks



are still forced to open up their interfaces to AIS and PIS services and thus cannot completely avoid the consequences of PSD2.

- The second option is to **compete**. This differs from the mere compliance in commitment to create new innovative services that will be able to directly compete against the third-party providers. The banks applications should therefore become the preferred option to perform payments even for clients of other banks through aggregation of data via their respective API's. As far as the banks own customers are concerned, this strategy represents more or less a preservation of the status quo.
- **Expanding services** is yet another option that lies in opening services beyond the scope of what is required by the PSD2 directive. As a consequence of this strategy, the bank becomes provider of a platform that is based on open API's. The banks internal organization has to reflect that and therefore there is a need to adapt it to the new context. This should allow for effective mutual cooperation between the different organizational units. An opportunity that arises is the creation of new revenue streams as a result of facilitating access to extended amount of information about client's accounts. These services can of course only be provided with an explicit consent given by the client, who should in turn see in improvement in the comfort and ease of use when in context of the banks digital environment.
- **Transformation** is a strategy that combines all above stated options. Bank then becomes a platform providing not only its own services, but also those of third parties, which could be other banks or Fintech companies acting as TPP's. This approach requires to create partnerships with these entities be it banks, non-banks including Fintech or communities of developers.

PSD2 is likely to bring about radical changes. These will however probably won't demonstrate themselves immediately, but the banks expect them to manifest over the period of several coming years. A possible strategy for now is then also to wait. Some banks are also still evaluating the impacts of the PSD2 directive. (Deloitte, 2018)

## **Opportunities for Fintechs**

With the implementation of the PSD2 directive, the barrier to entry the market that was previously predominately serviced by banking institutions was lowered significantly. This results in a creation of new business roles in the whole ecosystem. As increasing the competition in the banking industry in order to enhance customer experience was one of the goals of PSD2, this is not surprising.

Fintechs can take on the roles created by providing any combination of the new mandatory services (Mariani, Pillard & Tan An Ping, 2017). Those however do not cover the customers experience to a large extent and Fintechs should therefore seek to develop partnerships with existing banking institutions going beyond what is mandated by law. This will allow them to broaden their options in the spirit of open banking.

Direct competition with banks is also an option. I would nevertheless argue that the strengths of Fintechs lay elsewhere, namely in their technical expertise and flexibility with which they are able to produce new solutions more efficiently in smaller multidisciplinary teams. Focusing on solving a specific issue without covering the full breadth of banking services seems to be a more viable model.

## **Related trends**

With the new players entering the industry as a result of the PSD2 directive, so are the new trends and technologies that they bring with them. This increases the pressure to innovate on banks that usually do not tend to be on the cutting edge of technological advancement. They are also looking for partnerships that would allow them to integrate these new technologies (PwC, 2017).

Their behavior can be seen as a way to mitigate risks by not implementing solutions that have yet to be proven. Striking the right balance between innovation and trustworthiness, both of which are desirable, is an ongoing challenge for them and in this new context it is definitely not going to get any easier.

## **Digitalization**

More and more services are being provided end to end in the digital environment. Banks wouldn't be able to compete today without having their online banking applications. This trend however does not stop there as more segments of the customer journey are moving online, for example opening an account or mobile payments.

Even though finance sector is at the forefront of digitalization together with the media industry, Europe as a whole only reached 12 percent of its digital potential (McKinsey Global Institute, 2016).

## **Data sharing and Big data**

Banking industry does produce huge amounts of data and the is increasing its investments to take advantage of it (International Data Corporation [IDC], 2016). Analyzing this data can provide banks or Fintechs with useful insights about their customer and will allow them to offer better services and products. Therefore, the ownership of such data is an important asset for the future and giving up direct contact with clients can be costly. On the other the more data you have, the better insights you can get, so there is an incentive to share this data between banks and Fintechs. Nevertheless, facilitating this sharing could prove to be challenging as PSD2 or RTS do not include a standard for the API.

## **Customer experience**

As customers we got used to a certain quality of experience that our interactions with banks do not always satisfy. It has therefore been a way for Fintechs to differentiate. Now though we might see banks catching up to meet the customers' expectations by adopting a more customer centric approach (PwC, 2018).

## **Blockchain**

Blockchain is a technology surrounded by hype predicting that it will replace the whole banking industry. Even though that might not happen any time soon, we are definitely seeing business models built around it coming into reality and the banks themselves plan to include in their systems and processes (PwC, 2018).

## **Conclusion**

PSD2 is not just a one-off change but rather a beginning of a new era in the banking industry. It has disruptive potential, but the sole compliance with the directive won't deliver on these revolutionary predictions.

There are many factors that we have to look at in order to predict the future implications of this regulatory measure. I see the cooperation between the banks and Fintech companies as crucial. Only when they will be working together, will we as customers see real tangible impacts on their experience when interacting with the institutions within the banking industry.

Most banks are aware of both the risks and opportunities that are coming, and it would therefore be unwise to underestimate them. It is highly unlikely that they would be replaced by Fintechs. We can however expect a wave of innovation in the industry with its roots in the Fintech companies that is going to spill over into the banking industry through a network of partnerships. The banks that will manage to build these networks to their best ability will benefit the most in the future.

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