Describing PSD2 rules and the consequence threats and opportunities

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چکیده (فارسی)

در پی تغییرات رخ داده در صنعت پرداخت بازارهای امریکا و انگلیس، اتحادیه اروپا نیز قانون PSD2 را جهت اجبار بانکها به بازکردن سرویسهای شان به روی ارائه دهندگان ثالث سرویس پرداخت تصویب کرد. این ارائه دهندگان ثالث شامل سرویس دهندگان آغازگر پرداخت و سرویس دهندگان اطلاعات حساب می باشند. این امر عصر جدیدی در صنعت Fintech را رقم خواهد زد و تراکنشهای "بدون حضور کارت" را رونق خواهد بخشید و بخت بیشتری به کسب و کارهای پرداخت خرد، بررسی تضمین[۱] و بررسی اعتبار خواهد داد. این قانون که از ژانویه ۲۰۱۸ برای بانکها جهت شروع انطباق با آن الزامی خواهد شد، فرصتها و تهدیدهایی را با توجه به نحوه تطابق با آن به ارمغان خواهد آورد. نحوه تطابق می تواند از تطابق اولیه و باز کردن تنها سرویسهای ضروری و متعاقبا از دست دادن حجم زیادی از تبادلات مشتری، تا استفاده از فرصتها و فراهم کردن سرویسهای ارزش افزوده و متعاقبا افزایش وفاداری مشتریان و گشایش درآمدهای جدید برای بانک و ارائه دهنده ثالث سرویس پرداخت، متغیر باشد.

در این مقاله قصد داریم PSD2 را معرفی و نتایج جانبی و حداقل قوانین آنرا عنوان کنیم. و استراتژیهای مختلف بانکها و فایده و ضرر آنها را بررسی کنیم.

[۱] Due Diligence

چکیده (انگلیسی)

Terminology: Payment Service Directive2 (PSD2), Open-Banking, Regulatory Technical standards (RTS), Access to Account (XS2A)

Following the huge changes in payment industry in US and Britain, European Union also has legislated PSD2 to force banks to start opening their services to the third party payment providers specifically as Payment Initiation Service Providers or PISPs and third party account access or Account Information Service Providers or AISPs. To enable a new era of business development in Fintech industry to grow as it should. Promoting Card-not-Present transactions and giving more opportunities to businesses like retail payments, due diligence and credit checkers. This rule which will come to force in January 2018 for banks to start compliance with it, has both threat and opportunities for banks based on their strategic response of how to comply. This can vary from achieving compliance with PSD2 and implementing only the necessary services then losing a volume and quality of customer interactions to leveraging the opportunities and providing value-added services that will increase customer loyalty and open new revenue opportunities for both banks and TPPs.

In this article we will discuss about PSD2 and its spin offs along with the minimum requirement for its RTS (Regulatory technical standards) which soon will be revealed. We describe different strategies that banks can choose, their pros and cons.

With the fast forward changes happening in the E-commerce world and mobile applications, consumers expect faster, convenient and safer payment methods ("Click and Pay"), for their online shopping, managing their finances or interaction on social medias.
Also, merchants need newer payment methods to support these Omni-channel commerce and lead more customer visits to sales. Therefore, Fintech companies have found new payment methods known as Card-not-Present methods. And consequently, regulators around the world are recognizing this trend and they are responding to the market needs by mandating new rules which not only stimulates the innovation but at the same time will protect their customers against new means of fraud.

This rapid change of the payments market led the EC (European Commission) to revise the PSD and modernize the legal framework. PSD2 was published on January 12, 2016, to become effective on January 13, 2018, after transposition into local law of the EU/EEA member states.

The stated objectives of the PSD2 are the following:

- Make it easier and safer to use internet payment services.
- Better protect consumers against fraud, abuse, and payment problems.
- Promote innovative mobile and internet payment services.
- Strengthen consumers' rights.
- Strengthen the role of the European Banking Authority (EBA) to coordinate supervisory authorities and to draft technical standards.

Clearly PSD2 is much more than an update of the former PSD. It is probably the most disruptive payment law that was ever published, with the potential to change the industry as we know it.
The most impactful new rulings are the following:

- **SCA:** PSPs which include banks, e-money providers, and payment institutions, must apply strong customer authentication (SCA) for all electronic payments initiated by the payer (such as card payments and credit transfers), unless the payment qualifies as low risk and enjoys certain exemptions which are provided in the RTS**.**
  To help secure customer interactions, PSD2 guides banks to deliver SCA using multifactor authentication. For every activity that is at risk for fraud, PSD2 highlights the need to authenticate the user with two or more independent elements:
    - Something the user knows, for example a password or personal information
    - Something the user has, such as a token or a smartphone that the user can prove they hold at the time of login
    - Something the user is: unique physical characteristics, such as a user's fingerprints, voice or face. (This will trigger a huge need for biometric authentication solutions)

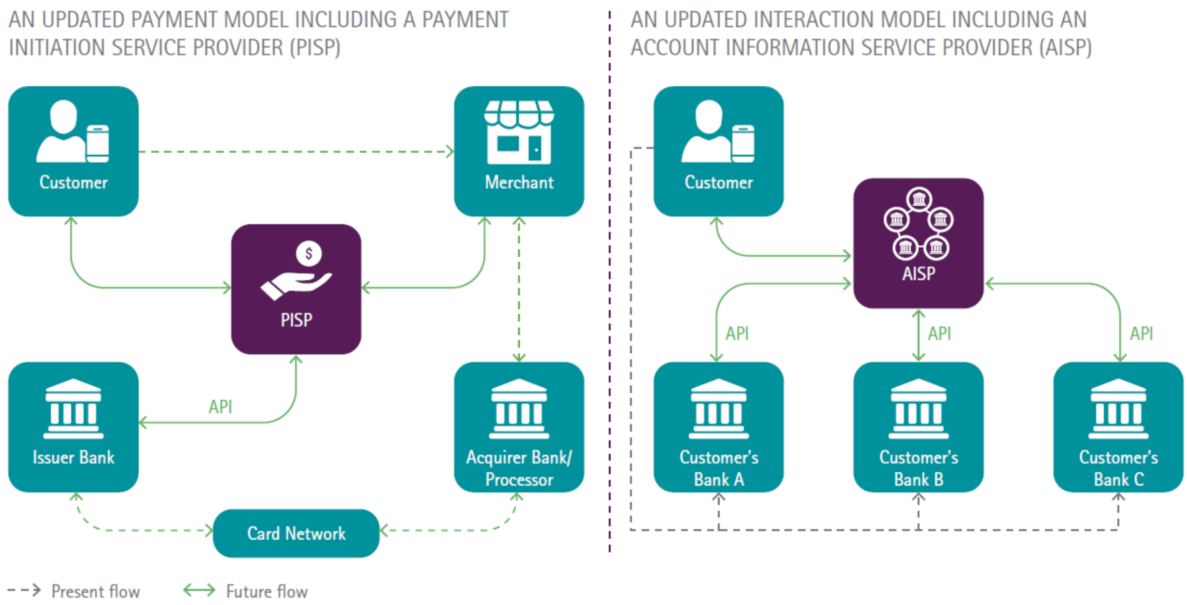


Figure 1

These elements must be independent, so the potential breach of one does not compromise the reliability of others. They must also be designed to protect the confidentiality of the authentication data.

- **Access to (payment) accounts (XS2A):** Banks must provide open access to payment accounts of their customers to TPPs. Such TPPs are allowed to do three things:

    1. Access payment account information (account information services [AIS])
    2. Initiate payments (payment initiation services [PIS])
    3. Confirm the availability of funds on the payment account for a card payment (such service is relevant if the card issuer is not in control of the bank account)

As shown in Figure 1, PISPs and AISPs will change existing interaction models between customers and banks. It enables new payment models to be developed as an alternative to the established four-party (including merchant and its acquirer, and buyer and its issuer) cards model. There should be some impacts on different business types in the payment industry, from POS payment to account aggregators and digital commerce will experience different adoptions by PSD2.

Although, SCA could have a negative impact on conversion in the short term for certain merchant segments trading higher-value goods, but this may be temporary as customers get used to the new procedures. Longer term, new payment models will arise based on the possibilities of PISP in combination with instant payments (Although instant payment has been available in Iranian payment system for a long time, but in Europe because of all the concerns and regulatory check-ups they have to apply for money transfers it is considered only recently and still will have some restrictions to avoid hazardous fund transfers). Such models have the potential to at least partly replace the existing cards-based model for online commerce payments.

Disruptive impacts of XS2A on service charges:

In regulating PISPs, PSD2 contemplates a simplified payments value chain in which the card network can be fully disintermediated. In such a transaction, payment is initiated by the PISP directly from the customer’s bank account via an API call to the originating bank. In this scenario, all interchange fees and acquirer fees currently received by the issuing and acquiring bank could be fully displaced, as could all fees received by the processor and card network.

While these impacts present a notable threat for the banks and card networks, their severity will correlate directly with the level of adoption of PISP services. It remains to be seen how much the customer experience for PISP transactions will differ from that for existing card-based payments but, in estimating the potential uptake of PISP services, it’s clear that the merchant will be the key.

Currently, the average Merchant Service Charge (MSC) in the UK is approximately 0.68 percent of the transaction value for debit cards. In the PISP value chain, as shown in Figure 2, the PISP itself is the only intermediary to which this MSC is to be distributed. This makes it highly possible that PISP services will be offered at a significant discount to the existing rates of MSC, and that industry competition will drive these rates downwards. In current situation of Iranian payment system that the model of charges are still not well-defined and banks and PSPs in both acquirer and issuer side are struggling to come to a better agreement for MSCs, inspiration of the new offering models of PSD2, can help a better negotiation. Also, as it may be noted, around the world the customers in payment system are merchants and they should be the target for the MSC, but it seems based on the current policy in Iran, the end user (the buyer) is facing the service charges in their receipt.

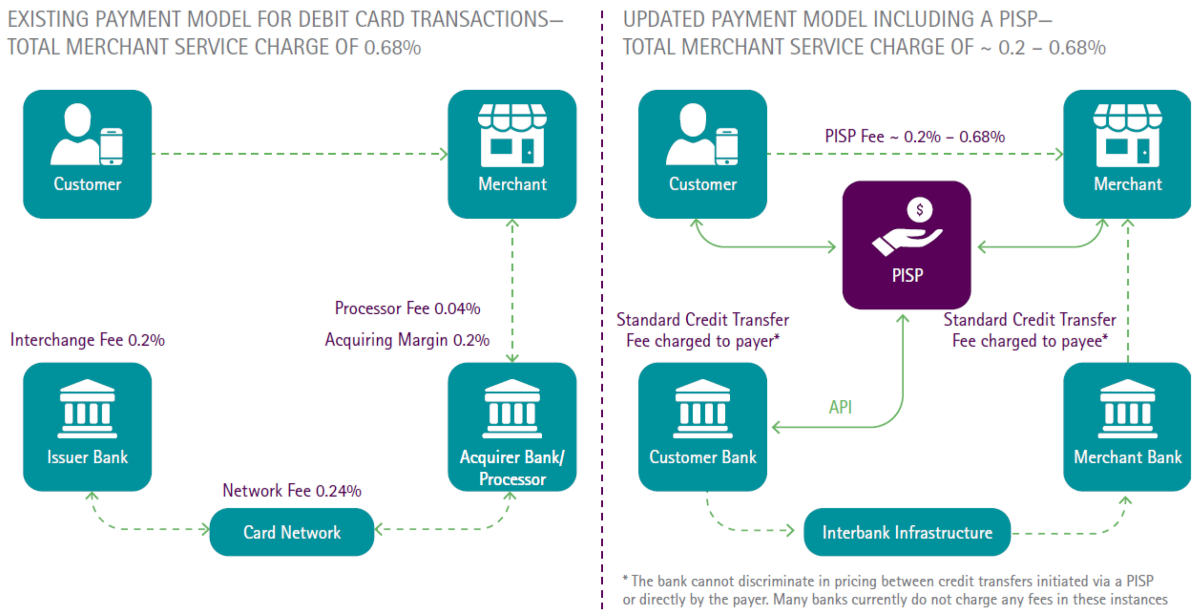


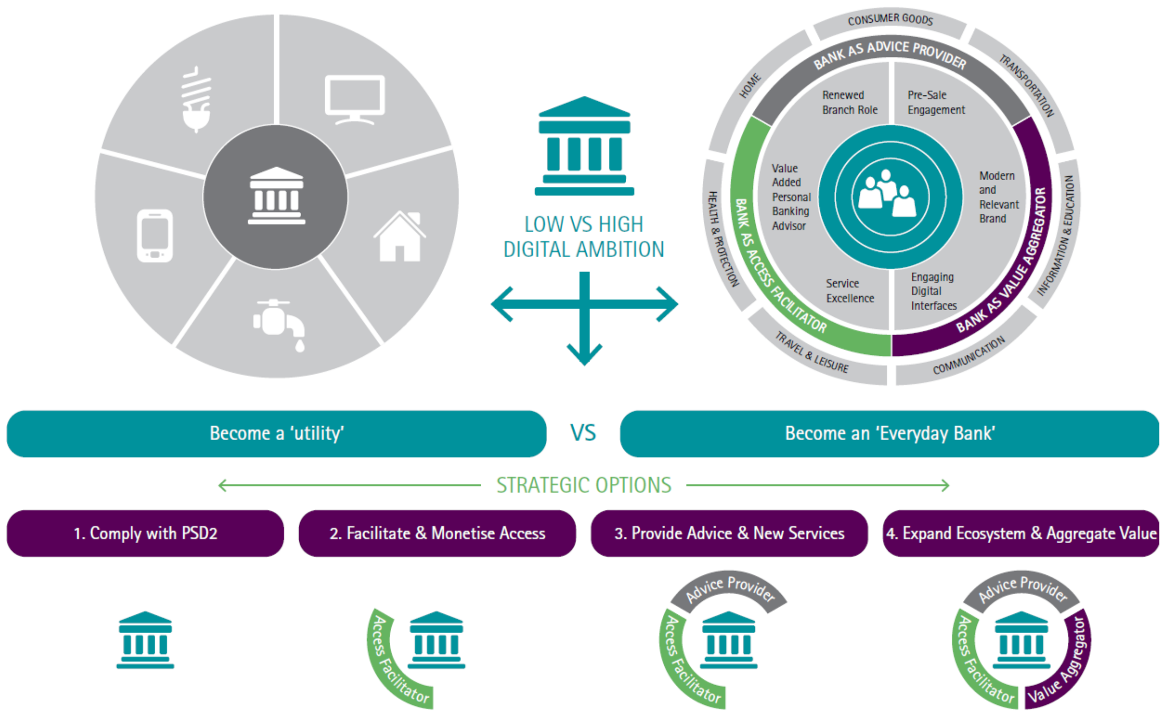
Figure 2 The Changes in MSC

Possible approaches for European Banks regarding adoption to PSD2:

One of the biggest challenges that banks will face as a result of PSD2 is customer disintermediation. As consumers gain the ability to consolidate existing payment accounts, they’ll likely choose the most convenient web- or application-based interface to manage their money, initiate transactions and payments, and apply for new financial services. For banks that rethink business and IT design to place their institution at the center of the user’s experience, PSD2 can inspire greater opportunities — introducing new value-added offerings, better customer experiences and new business opportunities — along with increased customer loyalty. But those that don’t realize this opportunities, can potentially face reduced customer interaction and loyalty, and a lower return on investment as consumers turn to third-party providers to aggregate account and financial transactions data or process direct payments from their bank accounts.

It’s a dynamic that has already played out in some ways in the telecom industry. Take mobile network providers for example (Considering European market that customers can easily change the mobile network provider while reserving their current phone number). While consumers are often devoted to a specific device, they can be quick to change mobile providers for less expensive deals. As a result, mobile providers may compete primarily on price, and often may collect little customer loyalty since they do not own the user interaction. Typically, users are loyal to the devices that they interact with and are accustomed to the device’s user experience.

The imperative for banks is to leverage API integration and their existing customer relationships in order to develop a customer value ecosystem centered on their own banking portals. We believe four primary strategic options are available to banks in order to respond effectively to the threats and opportunities of PSD2, while deciding whether to become a banking “utility” or to continue to play a central role at the heart of their customer’s daily lives. These strategic options are laid out in Figure 3 below.



- Comply with PSD2 requirements
- Give 3rd parties access to data required by law
- Provide a basic-level open API free for anyone

- Comply with PSD2 requirements
- Develop more advanced API platform; allow granular data access beyond what is required by law
- Monetize access to raw data and banking services to create unconventional revenues

- Comply with PSD2 requirements
- Extend from providing API access into providing insight and services to monetize data
- Establish as an AISP and / or PISP

- Comply with PSD2 requirements
- Open APIs to create an ecosystem between the bank, merchant and consumers
- Offer products & services to address financial & non-financial needs
- Become an ﺍEveryday Bankپ central to a customerی daily transactions

Strategic Option 1:
Comply with PSD2

It is likely that banks which seek to achieve compliance with PSD2 without implementing other options discussed in this document risk disintermediation and a loss in volume and quality of customer interactions. However, as competition intensifies in the financial services industry, banks must prioritize their investment and have a clear strategy for developing and maintaining their core business. For some banks, a valid decision may be to narrow the focus of their business model towards the provision of liquidity and infrastructure services. In such cases, the bank becomes a ﺍutilityپ managing underlying customer accounts, processing payment transactions, and providing liquidity and credit services which are offered to the customer through a TPP who owns the customer experience. Even currently most of the banks and financial institutions are only focused on liquidity and loan management services and the highest portion of their annual revenue comes from these sectors, these entities may still prefer to stay focused on their current business due to costly technological changes they may need.

Strategic Option 2:
Facilitate & Monetize Access

Although PSD2 mandates the opening of certain bank APIs, these are restricted to payment account transaction and balance data, credit transfer initiation and account identity verification. Access via APIs to additional customer data in relation to non-payment accounts, customer demographics, identity documentation and direct debit mandates is entirely optional.

This means banks have a choice over whether to extend their API development beyond the minimum requirements and enable a customer to retrieve additional data sets as described above. Banks could also extend development to enable the creation of Standing Orders and Direct Debit Mandates (The client signs a debit mandate form giving the requesting company permission to debit their account with a fixed or variable monthly value. This value can be recurring or once-off.) or the completion of product applications via API. By taking this step, banks gain opportunities to monetize these additional APIs as well as to collaborate with third parties to create new products and services based on these data sets and niche customer needs. An example of such a service would be the sharing of a customer’s mortgage data and identity documents with a home insurance provider (with the customer’s consent).

Strategic Option 3:
Provide Advice & New Services—Monetize Insight

Leveraging customer insight empowers the bank to provide a highly customer-centric, digital banking portal, and create a customer value ecosystem consisting of symbiotic or mutually beneficial relationships between the bank and TPP that create value for the customer. Such services can enhance customer loyalty as well as open new revenue opportunities for both bank and TPP.

A bank could significantly improve its ability to sell customer insight by offering PISP and AISP services as well, due to the increased availability of customer data and touch points. However API integration is not strictly necessary with referral based partners.

Strategic Option 4:
Expand the Ecosystem & Aggregate Value

Beyond the monetization of APIs and customer insight, investment in open APIs could present opportunities for more integrated partnerships between banks and third party companies within and outside of the financial services industry. Such partnerships could manifest themselves in two ways:

- Consolidation of services: new products/services owned by third parties but offered via the bank’s online portal
- Consolidation of data: customer data stored on third party systems but presented on the bank’s online portal, subject to obtaining necessary consents and authorizations

An open API infrastructure and the consolidation of customer data from multiple third party sources transforms the online banking portal into a platform reflecting the customer’s everyday needs and transactions. By establishing itself at the center of this ecosystem of both financial and non-financial services, the bank can become a pivotal part of a customer’s daily life, acting as:

1. Advice Provider: Providing specific buying suggestions, based on deep customer knowledge and purchasing algorithms
2. Value Aggregator: Assembling components (financial and non-financial, own and third parties) to create an integrated solution for ‘real world’ customer needs
3. Access Facilitator: Supporting the customer in ‘everyday/everywhere’ buying processes (shopping, access to daily services)

Operating structure that banks need to reorganize for PSD2

The impacts of PSD2 will be felt across the operating models of European banks. These impacts will vary in scale depending on each individual bank’s strategic response to the new opportunities enabled by PSD2.

In some cases entirely new platforms, roles and capabilities will emerge within the bank, while in others existing capabilities will gain rising importance and complexity.

Head of Ecosystem & Partnerships

In an expanded ecosystem, banks will have to negotiate new relationships and interactions with third party providers to drive mutual benefit for the bank, partner and customer alike. In order to support this new level of complexity, forward-looking banks will need to create an Ecosystem and Partnerships platform.

This will provide ongoing and proactive oversight of the relationship between the bank and its network of external partners, covering aspects including partner assessment, contract and commercial management, governance, lifecycle management, performance management, and decommissioning.

Effective management of partners drives alignment to a common agreed ecosystem operating model, which enables consistent service delivery and rapid decision-making throughout the ecosystem. It also ensures that the management and governance of partners is fully integrated with the bank’s internal operational & compliance structures, processes and technologies, encouraging ongoing collaboration and service improvement.

Head of API Management/ Open APIs

As banks open up their APIs and allow TPPs to use their data, products and services, they will need to put in place infrastructure and roles to manage all their APIs in a reliable and secure fashion while negotiating the complexities of existing IT platforms.

Head of Data Security & Identity

A bank centered on a Digital Ecosystem will rely heavily upon customer data and insight. This will include the existing data already held within the bank as well as new customer data owned by third parties working in partnership with the bank or connected to it via APIs. As significant quantities of customer data begin to concentrate around the bank ecosystem, the monitoring and protection of this data becomes an increasingly core aspect of a bank’s operations and value proposition.

Safeguarding this data will require the bank to ensure adequate controls are in place to verify the identity of the customer or TPP seeking access to bank’s APIs or customer data.

Head of Loyalty

The stated ambition of PSD2 is to increase competition and innovation in the European payments market. The regulation of new payments institutions such as AISPs and PISPs, as well as the introduction of rules on access to customer accounts, threatens to further disrupt a banking industry already under attack from within and beyond the financial services industry. In this dynamic competitive environment, where banks risk losing customer touch points if not becoming disintermediated entirely, a customer loyalty strategy is key to retaining competitiveness. And it is very advisable to offer loyalty services which are based on the customer data analysis and smart and data-centric advertising rather than simple old-fashion loyalty plans.

Conclusion

Regulations, emerging technologies, changing consumer behavior and competitive dynamics are fundamentally altering the payments landscape. These changes are already posing major threats to the traditional competitive advantages, customer relationships and revenues enjoyed by banks. Now PSD2 is set to heighten and accelerate these disruptions. Industry participants need to strike a fine balance between their desire to move forward quickly and the uncertainties that are still present with PSD2 and Open Banking. But, despite the uncertainties and challenges, there are significant opportunities for banks and other financial institutions to redefine their business and operating models to unlock new value and provide innovative customer propositions. These opportunities will be realized primarily by forward-looking companies who gain a first mover advantage; but achieving this will require clear decision-making now over the different strategic options. Answering the question: Is basic compliance with PSD2 enough?

Likewise, in Iranian payment systems legislating similar regulations can have a huge impact on the new methods of card-not-present payments and classify and coordinate new business models based on TPPs and beyond Banks and PSPs, such as payment aggregators, payment facilitators, payment initiators, etc., which already have started their presence in the market but lack of appropriate regulations can cause a chaos in early future, both in customer side and in banks' perspective.

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