

3.2 USE CASES: WICKED INDUSTRY PROBLEMS

3.2.1 OPEN BANKING

On 16 November 2015, the EU passed the Revised Directive on Payment Services (PSD2), and gave member states two years to incorporate the directive into laws and regulations.

In the post PSD2 payment ecosystem, there will be three new actors, third-party providers (TPP), added to existing payment schemes between payers and beneficiaries:

1. Account Servicing Payment Service Providers (ASPSPs)
2. Payment Initiation Service Providers
3. Account Information Service Providers.

Under PSD2, third parties authorised as any one of these types of providers will have access to customer account, payment and transaction data generated by account providers.

The new rules aim to promote pan-European competition in traditional banking and digital innovations that maximise consumer benefits.

Alignment with Open Banking Initiatives in the UK

In the UK, the Competitions Markets Authority (CMA) imposed remedies on the nine largest financial institutions which it required to also be in compliance with PSD2 following its review of competition in retail banking.

The CME ordered the nine largest retail banks in the UK, to create the Open Banking Implementation Entity and collaborate with it to deliver: (1) Open Data APIs to enable access to bank products and reference data, making available information on ATMs, Branches, Personal Current Accounts, Business Current Accounts for SMEs & SME Unsecured Lending and Commercial Credit Cards, by 31 March 2017 in a standardised way; and (2) Read/Write API's that were compliant with PSD2, making available to authorised third parties the ability to initiate payments and/or obtain transactional data from consumer & SME accounts by January 2018.

As part of this mandate, the Implementation Entity is creating a developer toolkit to assist FinTechs and ASPSPs in accessing the API's it has worked with the community in defining.

Also following a CMA remedy, NESTA launched a £5m Open Up Challenge to encourage development of new banking services for small and medium enterprises.

As part of the challenge, a screened and selected pool of 20 participants will have early-stage access to "Open Up Sandbox", containing anonymised UK banking transaction dataset and APIs aligned with the open banking standard. The use of the sandbox will help startups securely build and test innovation products to hit the ground running in 2018 alongside the implementation of PSD2 and Open Banking APIs.

Open Banking and Industry Sandboxes

PSD2 and the CMA Remedies open the door for a new cohort of FinTech solutions which deliver customer services based on transactional data previously only accessible by the account provider. Whether these emerge as stand-alone FinTech products or collaborations between third parties and retail banks, testing, viability assessments and adjustments will be an integral part of the evolving payments landscape. With a number of government and proprietary initiatives already underway, an industry utility function could be beneficial to ensure visibility and interoperability of the various testing environments.

Industry could also consider making an anonymised set of transactional data available for testing purposes on an on-going basis, pooling resources in ensuring that access to this data is appropriately managed and secured, and usage analysed.

An Example of Open Banking Sandbox in Spain

The Germany-based Open Bank Project (TESOBE) together with Atmira, a Spanish Solution Integrator, organised the first PSD2 hackathon event in Madrid on June 11th - 12th 2016 as a way to bring banks together, collaborate and engage with the Spanish FinTech community and seek innovative ideas for a post-PSD2 world.

About 80 developers attended the event and developed seven applications over the weekend. A panel of judges composed of representative of the six largest banks including BBVA, Santander, Banco Sabadell, Bankia, Banco Popular and Bankinter, chose three winning teams - an account balancing service, an NFC payment aggregator and a QR-code-based payment solution.

TESOBE provided its Open Bank Project sandbox. Importantly, all data uploaded to the sandbox was test data, which was further anonymised. TESOBE worked together with the banks and Atmira to gather, anonymise and upload "localised" data. Data elements developers had access to included: bank details; Customer Profiles & Messages; Account information, balance and transaction history of multiple bank accounts; Counterparties information.

Alongside data, the Sandbox technology includes tools to help developers work faster.

The Open Bank Project sandbox, fed with Spanish test data, provided the stepping stone on which the ideas transformed into concrete prototypes. Its usage has sped-up development and provided a level-playing field for participants to build their applications on.

The hackathon was a great opportunity to connect disparate parts of the Spanish tech community in a new way.



Amazing weekend seeing so much talent ready to invest their free time in working hand in hand with random developers to create new value to our customers in a Post-PSD2 ecosystem. Open Bank Project Sandbox was just the perfect toolbox to make it possible to develop end-to-end applications in less than 36 hours of work.

- Raul Lucas Alcaraz, BBVA Open APIs, Spain Country Manager



Our Two Cents on an Industry Sandbox: A view from Eric Mouilleron, Founder and CEO, Bankable



Bankable promotes “Banking as a Service” experimentations and pilots with large financial institutions and global industry players. We have been actively involved in promoting Industry Sandboxes in the preparation of the PSD2. By providing banking and settlement access into the Industry Sandbox, incumbent and challenger banks can emulate relevant business cases in an industrial experimentation with various FinTechs. An Industry Sandbox provides an opportunity to test break-through innovation in a controlled, nurturing environment where financial institutions and startups can come together to discuss, develop, deliver, and share experience – to provide the best financial products and services to the end consumers.

We believe that an Industry Sandbox is complementary to a financial institution's in-house FinTech Lab. The Industry Sandbox encourages financial institutions to be involved with relevant FinTech(s) outside of their own innovation programmes enabling them to vet startups that may have not been on their radar.

An Industry Sandbox could provide information on the global industry happenings and brings together relevant players and thought leaders in the ecosystem in one big space. This could also enable financial institutions to maximise their capacity to anticipate the impact of PSD2 on every industry player.

Thus, Bankable looks forward to welcoming incumbent and challenger banks and other financial institutions in this initiative which is much needed to drive innovation in financial services today.



Part of the impetus for Open Banking regulation was the fact that current banking products have complex fees and pricing models, and as a result users are not able to easily compare services and understand where they can get a better offer. The Starling Marketplace strips away that complexity and enables users to easily compare products from across the market so that they can make better financial decisions about which products are right for them. As a result, this gives customers the greatest amount of choice in providers – so they are not just limited to traditional rates and products, but can explore and compare options from innovative new FinTech startups too.

This is a true marketplace model, and drives a network effects platform - ie. the more consumers are on the platform, the more the producers benefit, and the more producers are on the platform, the more consumers benefit.

In conjunction with building out this Starling Marketplace, we have launched our Developer Platform. The developer platform enables third party developers and FinTech companies to easily access and build on top of the Starling Bank APIs. As a result, users can easily access these products and securely share their data with them should they choose to do so. Integrating with the Starling APIs is also the first step to making a product available in the Starling Marketplace, if the FinTech company wants to do so.

We have been advocating PSD2 and the UK's Open Banking initiative as we believe this approach will transform the competitive landscape and foster innovation in financial services. In mid-April Starling Bank held its first Hackathon, making Starling the first UK licensed bank to launch a public API in keeping with the ambitions of PSD2 and the Open Banking initiative. At this event, 25 developer teams created social and commercial solutions to various different financial problems. We were able to provide an environment where developers, supported by the Starling engineers, could work with and test our public APIs, using a small amount of their own data along with some synthesized data sets. In the future, of course, apps will be able to use Starling customer data (as long as the customer gives their permission).

We see the benefit of an Industry Sandbox as a place where both banks and FinTech solution providers can come together. An Industry Sandbox provides an environment and opportunity for third parties to prototype before accessing a Regulatory Sandbox or seeking authorisation.

The provision of an Industry Sandbox provides the opportunity for collaboration in order to create, test and drive innovation in financial services. This in turn supports increasing competition with improved services and products for both commercial and social good.



A view from Starling Bank



Starling bank is a licensed bank that has developed a feature rich mobile current account. Concurrently, we have been building out the Starling Marketplace, which enables users to easily search and access the best financial products from across the ecosystem, all from within their Starling account.

An Industry Sandbox essentially provides an off-market development environment that mirrors the logic of the Starling Marketplace by allowing innovators to build integrated solutions which will eventually populate such marketplaces. This is an essential part of finding and solving problems for customers using FinTech. Such collaboration is essential for addressing the shared challenges that face our ecosystem, with the vision of providing users with access to the best products from across the market for their specific needs, as well as the transparency necessary around these options to make better financial decisions.