‘Mobile First’ will become ‘API First’ — PSD2: Changing banking as we know it

Received (in revised form): 28th April, 2017

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Abstract Under PSD2 (the European Commission’s revised Directive on Payment Services), banks are required to open up access to account data to third parties at the request of customers. Additionally, the related GDPR (General Data Protection Regulation) requires banks to ensure the portability of their customer data. As PSD2 presents an entirely new legal structure for payments across the EU, its impact will be overwhelming. As we move towards open application programming interface (API) banking, PSD2 is expected to be a catalyst for unprecedented customer-oriented change: banks and FinTechs should leverage PSD2 opportunities and amend their operating, business and revenue models. In response to PSD2, banks face existential choices: to become mere ‘bare-bones’ utility providers or the ‘orchestrating hubs’ to facilitate customers, services, providers and payments. There will be new alliances with FinTechs to benefit from each other’s strengths and respond to changing customer demands in a unified European market. Market players that have the greatest control over their capital, customer touch-points and corporate agility will be successful.

KEYWORDS: API, banking, PSD2, FinTech, marketplace, API economy, regulatory, customer, innovation

PSD2 AT A GLANCE

- The introduction and regulation of third party payment service providers (TPPs), these being Payment Initiation Services Providers (PISPs) and Account Information Service Providers (AISPs);
- The unconditional right of refund for direct debits under the SEPA CORE scheme;
- A strong customer authentication system;
- Ban on surcharging for card payments;
- Better consumer protection against fraud, capping any potential payments if an unauthorised payment is made at €50;
- Improved consumer protection for payments made outside of the EU or in non-EU currencies.

SHIFT TOWARDS 'MARKETPLACE BANKING'

Imagine a bank that will act as an 'orchestrating hub' for all kinds of financial services across a huge marketplace, a trusted go-between for myriad services that can be added, modified or deleted at will. In a recent white paper, this process was dubbed 'marketplace banking', with the bank of the future 'orchestrating' all kinds of financial services, each of which can be coupled or decoupled easily.[1] To put it bluntly, the new bank is a bustling bazaar bringing together a world of services to serve each particular need of any type of customer. In other words, tomorrow's bank is an advanced technology platform based on seamlessly interconnected, open APIs. This paper focuses on some of the drivers of marketplace banking, including regulatory requirements, FinTech investments, customer-centricity and entrepreneurship, as well as opportunities for innovation ahead.

WHAT DOES A MARKETPLACE BANK LOOK LIKE?

Banks are opening up. They are not just connecting to the outside world but also — like FinTechs — starting to open up through APIs to provide access to their own services. This provides huge opportunities for all kinds of parties to use banking services and creates a network of partners and services, including product and service providers and distribution channels or both. This is basically the concept of marketplace banking or Banking-as-a-Platform (BaaP). Having an open API is a new way to invite other parties and engage their customers or their customers' customers. For developers, it means building applications with APIs to access new services across new marketplaces. Perhaps surprisingly, the marketplace bank has relatively simple elements:

- A digital banking platform that allows a high level of automation through workflow management.
- A service and integration layer to connect to third parties and to allow third parties to connect to one's own platform and services.
- And, even more important, its management should not be afraid to think in terms of its strengths and weaknesses. Own capabilities must be used in the best possible way, while competencies of partners must be leveraged to improve the total product portfolio for the sake of customer service delivery.

DOES THE MARKETPLACE BANK EXIST?

Two Dutch challenger banks can be categorised as marketplace banks. Knab, the first digital, branchless retail and small and medium enterprise (SME) bank in the Netherlands, aims at better serving the funding needs of its SME customers. Knab decided to connect to an external crowdfunding provider instead of creating its own loan products. It required courage from management to use its competitor's products. Yet Knab management understood that using the marketplace for additional products at least allowed the bank to keep its customers close. Another Dutch challenger bank, Bunq, a digital-only banking start-up, has expanded beyond its native market to Austria and Germany with the launch of its open API, allowing developers to integrate Bunq's real-time payment system into their own apps. The Moneybird, Exact and Informer apps are among the first users of the new Bunq-API (www.bunq.com/en/api) to prepare money orders in their accounting systems.[2]

DRIVERS OF MARKETPLACE BANKING

Regulatory requirements

Requirements such as PSD2 and the related GDPR are essential drivers for the acceleration of marketplace banking. Similarly in the UK, the British Competition and Market Authority (CMA) concluded that the competitive landscape for banking needed change. To tackle this, CMA imposed a package of measures to ensure banks work harder for customers and the benefits of new technology are fully exploited (August 2016). Interestingly enough, these regulations go far beyond PSD2. The important measures, which will benefit personal and small business customers, include:

- Requiring banks to implement Open Banking by early 2018, to accelerate technological change in the UK retail banking sector.
- Requiring banks to publish trustworthy and objective information on quality of service on their websites and in branches, so that customers can see how their own bank shapes up.
- Requiring banks to send out suitable periodic and event-based 'prompts', for instance on the closure of a local branch or an increase in charges, to remind their customers to review whether they are getting the best value and switch banks if not.[3]

Leveraging regulatory demands

Backed by the Know Your Client (KYC) provision, mandated by the Bank Secrecy Act and USA Patriot Act of 2003, and Customer Due Diligence as part of the overall Anti-Money Laundering (AML) onboarding life cycle, customer-centricity requires banks to meet and exceed their customers' expectations. KYC urges them to know and understand their customers and their financial dealings to be able to serve them better and manage their risks prudently. Typically, digital banks and FinTechs are leveraging these regulatory demands to optimise their customer service delivery. Similarly, external data-rich services are being used to meet customer demands and to keep up with competition. These include personal financial planning, robo-advice engines, predictive analysis and Big Data services.

FinTech investments

FinTech is hot, also in the investor community. FinTech investments are fuelling marketplace banking. Since 2010 more than US$50bn has flowed into the FinTech industry. The year 2015 saw multibillion dollar IPOs of PayPal, Square and Worldpay. The year 2016 showed a slight increase in FinTech investments despite the slowdown due to uncertainty regarding Brexit and the US elections. Today, new FinTech initiatives keep popping up, encouraging regulators to lower domestic entry barriers, as seen in the UK and the Netherlands. Major FinTech events such as Finovate, Money2020 and Sibos are reporting strong growth. In 2017, FinTech topics include FX payments, SME lending, identification and authorisation services.

Customer-centricity

The concept of marketplace banking provides new perspectives on how banks can serve their customers in unseen ways. A rich interconnected ecosystem will evolve that should create unprecedented value to banking customers. As orchestrating hubs, banks will connect to customers, services, providers and payments through solid open APIs. Value creation will be based less on owning, for example, in-house developed customer services, than on sharing. Data (Big Data, small data, any data) will become key assets, and ecosystem partners can utilise these to build and launch new services. This new way of digital marketplace banking might transform the customer experience and could even help restore trust in the financial sector. London-based Metro Bank, for example, started a partnership with Zopa, the UK online personal finance peer-to-peer (P2P) lending company, in order to expand its credit facilities. By accessing Zopa's broad customer base, Metro Bank is able to lend outside of the geographical reach of its stores.

Entrepreneurship

Many start-ups are led by entrepreneurs who know how to deal with shortcomings from existing financial services providers by heading either services FinTechs or product FinTechs. Services FinTechs are the ones that provide a complementary service to existing banking business, such as know your customer (KYC)/customer due diligence (CDD) services, financial planning services or identification services. Typically, services FinTechs provide enriched or sophisticated banking services in a different way from banks: better, cheaper and extremely customer-centric. Product FinTechs, on the other hand, are competing against the incumbents. They provide, for example, robo-advice propositions, P2P lending platforms or SME lending products. Typically, product FinTechs follow at a later stage and operate in the same arena as incumbent players. For these incumbents, disruption and 'Uberisation' will knock on the door one day.

API ECONOMY GROWING RAPIDLY

The API market is growing at a rapid pace. ProgrammableWeb, the leading directory for professionals in the sector, currently has over 250,000 open APIs registered. According to some studies, this figure is only the tip of the iceberg and may represent only 20 or 30 per cent of the total open APIs existing worldwide.[4] This suggests that the API economy has matured already across a wide range of sectors. Applied by the usual suspects (Google, Spotify, Facebook), APIs have already gained ground in multi-merchant e-commerce platforms (Amazon, eBay), media (BBC, Marvel) and tourism platforms (Expedia). And then there is the financial arena waiting to be conquered. PayPal, Google Wallet, Venmo and Square Cash are early movers. Who will be next and who will be tomorrow's winners?

EXAMPLES OF API BANKING

Banks and new challengers have stepped into the arena to join in.[5] CitiGroup, BBVA Compass, Bank of America and Capital One Bank are US-based examples. In March 2016, Capital One was reported to have one of the world's first truly open APIs and launched a fully-fledged developer platform.[6] In September 2015, Copenhagen-based Saxo Bank opened up its trading platform strategy and launched an additional channel called OpenAPI to enable institutional clients to customise their trading experience and create new revenue streams.[7] As mentioned, in July 2016, Knab, the Dutch challenger bank, introduced its SME crowdfunding platform, which enables its customers to invest in crowdfunding loans, which are assessed and serviced by its partner Collin Crowdfund.[8] Knab chose to implement Five Degrees' Matrix as the centrepiece of its banking platform architecture. Exposing APIs for external use can quickly cause a sharp growth in data traffic. Therefore, back-end applications, databases and infrastructure require the flexibility and robustness to keep pace with the growing need for capacity and availability.

UNCERTAINTY AHEAD

For traditional banks, there will be mental or cultural obstacles to be overcome. To many, an open API economy means inviting new competitors from all possible corners of the business universe, new (financial) services, new customer experiences and disruption to incumbent banks while creating a vast, Europe-wide competitive environment. The worst thing for banks to do would be to adopt a 'wait and see' approach in response to the uncertainty ahead. Will it be a 'death by a thousand cuts', as remarked by Carlos Torres Vila, CEO of BBVA? He described the threat to incumbent banks in an interview with Business Insider: 'A lot of the start-ups choose one very thin slice of what a bank does. But there's just so many of them that they encompass everything we do. In every little slice, you have like 10 companies that just do it better. They do it cheaper and they do it with better value for the customer.'[9]

NOT A BOX-TICKING EXERCISE

Ultimately, PSD2 will introduce Regulatory Technical Standards (RTS) for new security and customer authentication methods, although these will be defined only after the implementation deadline (2018). Banks may be using this delay to resist opening their APIs. From their point of view, they might feel that investing in PSD2 could hamper their revenue streams or, even more daunting, introduce competition to their doorstep —free of charge. They might even limit or postpone their PSD2 investments and create open APIs with 'bare-bones' functionality — to just wait and see. This would be the worst possible strategy. Compliance with PSD2 (and related regulations such as GDPR) must not be considered a fear-driven, box-ticking exercise, or, even worse, a 'compliance 2.0' project.

BENEFITS FOR RETAIL AND CUSTOMERS

From a customer perspective, banks must choose to provide a customer journey with customer-centric services through secure, highly automated and regulatory-compliant platforms. Open APIs provide unique opportunities for retail banks to put themselves back at the centre of their customers' lifestyles.

Banks could think of segmenting services — rather than bundling them as they do today — and use open APIs within their proprietary products (loans, mortgages, credit). They could then sell credit lines directly to retail customers as credit options with drawdown to payment accounts.[10] In Germany, banks are using API technology to help private and corporate customers deal with tax and treasury issues. PSD2 also means improved security, particularly in the area of global remittances. Direct integration of bank accounts with the merchant means improved checkout — another benefit for customers. In one of their recent briefings, Payments UK predicted: 'The likely impact of PSD2 and the API proposals (if implemented) will be that, within five years, we can expect to see customers who are more confident about sharing their financial data with third parties in order to get access to new products and services. In turn this will drive increased innovation and competition, including the entrance of a variety of new players'.[11]

OPPORTUNITIES FOR INNOVATION

2-Factor authentication

Another PSD2 highlight is the increased security of online payments and account access. In part, this is an implication of the open banking structure. Strong customer authentication is required for most transactions. During the development of PSD2, the payments industry actually recommended that 2-factor authentication was not required in low-risk situations. This recommendation, however, was not incorporated into the final text. Thus, the resulting complication from 2-factor authentication means increased friction at the checkout — the critical point in the customer journey when customers demand a zero-friction purchasing process. The directive, however, does leave flexibility as to the mechanisms of 2-factor authentication. This provides opportunities for innovation in certain areas, such as biometrics, to provide new security solutions.

New biometric authentication

According to Gartner, the reluctance among consumers towards services that aggregate their data is about 'multiple pain points connected to existing services',[12] ranging from inconvenient sign-in practices to concerns over security, privacy and trust. Improving user experience should make it easier for consumers to sign in and use third party services. The introduction of new biometric authentication methods and improved use of standards such as single sign-on and role-based access will ensure the integrity of their data. Rather than be relegated to a commodity service relationship, the current relationship banks have with their customers should be brought to a higher level. Future value creation revolves around sharing data with a rich ecosystem of partners, resulting in a unique and rich customer experience. The flip side, however, is that tensions may emerge between easy access and perceived security.

Cross-sell opportunities

Aggregating all one's financial information in one place provides great cross-sell opportunities. This makes PSD2's Account Servicing Payments Service Provider (ASPSP) particularly attractive to comparison websites. Customers will only need to enter their bank account login details for the ASPSP to access their account via API. In the past this was not even possible in the UK, as by giving away their login details to an aggregator, customers would be breaking their bank's terms and conditions. The benefit to customers is clear: all accounts can be consolidated in one place.

THE WAY FORWARD FOR BANKS

According to Gartner, digital leaders and CIOs in EU-based banks should use the introduction of PSD2 to upgrade their digital banking capabilities beyond cosmetic changes. Incumbent banks do have one competitive advantage: they still 'own' the customers' bank accounts, whereas FinTechs typically have the technology, the golden idea and the entrepreneurial spirit. Banks may use targeted start-up services for serving 'difficult' market segments such as SME loans. With the proper API infrastructure in place that can easily (dis)connect to external systems, banks can combine their service offerings with third party services while keeping a 360-degree customer view themselves. There is one pitfall for banks: PSD2's slow speed of adoption can fool banks that are not acutely aware of the shift towards the global API economy.

NEW PARTNERSHIPS ARISE

Most importantly, PSD2 gives banks the opportunity to be proactive and gain a competitive advantage by embracing open innovation. Many of the most eligible FinTech partners are already forging relationships with banks, triggered by the opportunities that arise from the new legislative standard. Seeking alliances is one way to ensure success in a financial world that is facing upheaval. Recently, several banks signed deals with FinTech players. A notable new partnership includes digital banking platform Moven announcing a deal with online services Payoff and Commonbond, and the German FinTech bank Number26 tying up with TransferWise, the P2P money transfer firm. Banks that arrive late to the party may have to get in line to see their proactive peers exploit their first-mover advantage.

START WITH AN OPEN MIND

The best advice for banks would be to start with an open mind towards innovation, business models, customer-centricity and forging new partnerships. Banks simply cannot afford to sit idle and become obsolete. At the same time, the rewards for proactive innovation can be huge. Superbrands such as Uber, Spotify and Google have one thing in common, besides innovation: a relentless focus on a superior customer experience. This requires that banks adopt an outside-in approach, specifically by asking themselves how they can better serve their customers and look at interconnected ecosystems rather than merely their own siloed portfolios. In order to better serve their customers, banks need to have the following:

- A modern platform to be able to work in a customer-centric way, with a flexible

integration layer to connect to new services easily.
- An infrastructure to launch public APIs, as ecosystem partners will build their services on these APIs.
- Solid security measures that take security to the next level, using standards such as single sign-on, role-based access and claim-based secure token services.
- A thorough understanding of PSD2 and its pitfalls and opportunities to be able to advance their services to the level of marketplace banking.[13]

WHAT IS NEXT?

PSD2 will lead to big changes in EU banking. Yet eventually, consumers will decide on how to respond to the new marketplace offerings. Questions that remain include: who will be the ones handling your payments and having access to your account? How are newcomers able to meet the expectations of both consumers and the European supervisory bodies? FinTech may expect to see tougher regulation, as Bank of England's governor Mark Carney said last January.[14] He also stated that 'FinTech could signal an end to the traditional universal bank model.' Will, at some point in time, traditional banks cease to exist? One thing is certain: change is inevitable. Traditional banks will need to shift gears to get up to speed. Acting on PSD2 means accelerating towards the API economy.

Takeaways:

- PSD2 will bring uncertainty to incumbent banks, FinTechs and supervisory bodies. Banks need to keep up with developments and invest in being front runners to find or create their own FinTech niche. This requires substantial investments as well as change of organisational culture.
- Compliance with PSD2 is mandatory, yet should be embraced as a catalyst for change and a unique opportunity to adjust the value proposition.
- New alliances will arise to benefit from each other's strengths and to respond to changing customer demands in a unified European market.
- Open APIs provide unique opportunities for retail banks to put themselves back into the centre of their customers' lifestyles.
- Players, both large and small, that have the greatest control over their capital, customer touch-points and corporate agility will be successful.
- From a customer's perspective, banks must choose to provide customer-centric services through secure, highly automated and regulatory-compliant platforms.
- Early PSD2 movers will be able to set the PSD2 agenda and engage with customers, providers and supervisors more easily and become trusted financial partners for their customers.

> *'By 2020 you won't call your bank accounts 'checking' accounts. By 2022, banks won't have a head of cards or a cards division. You won't differentiate between small business bank accounts and retail banking — customer behavior is what will differentiate the use of a value store. A mortgage will be part of a home buying experience, not a separate experience. If you choose to own a car, you'll order a car with or without financing, but you won't ever sign a piece of paper — the only thing you'll need to do is nominate how much you want to pay each month and where the money for those payments will come from.' Brett King*[15]

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