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Reaching pan-European integration and success in Open Banking

Dr Michael Salmony, Executive Adviser at equensWorldline SE, and Member of the *Payments & FinTech Lawyer* Editorial Board, discusses the issue of pan-European integration in the payments market in the context of the revised Payment Services Directive ('PSD2') and explores three different models for enabling third party payment service providers to access as many banks across Europe as possible.

Background

It is a prime goal of the European project to increase the integration between Member States. This applies not only to allow the smooth passage of people, goods and services across the Union but also to allow digital services to be used as seamlessly as possible - ideally as easily across borders as within a Member State. This very laudable goal applies of course also to PSD2.

This means concretely that any TPP/FinTech operating in any Member State should be able to access any ASPSP/bank just as easily as if they were both co-located in the same country - even if one happens to be in Portugal and the other in Romania.

For those of us who think that Open Banking is a huge opportunity to increase services to consumers, to develop new business and to further demonstrate Europe's leadership in this space, we feel it is critical to solve this problem of reach soon and to avoid any fragmentation.

Whilst many of the necessary PSD2 topics are being addressed (increasing regulation clarity, industry setting up infrastructures such as directories, standards being defined for security measures such as certification, establishing a TPP insurance market, etc) this topic of pan-European reach is still proving elusive.

This paper will explore three different models for achieving this goal, notably:

1. Defining one single API for every ASPSP in Europe, to allow a TPP to access each ASPSP in a uniform way;
2. Letting the market evolve and encourage the development of commercial solutions to provide integration where there is market need; and
3. Allowing regional hubs to connect to local communities and interconnect them for pan-European reach.

The merits and challenges associated with each approach are discussed here, leading to a recommended way forward based on a mix of all models but favouring the interconnected hubs (Model 3) at least for the short term, since we believe that this is the approach that will reach the biggest market penetration quickest, leverage investments already made and has the highest motivation for all actors for success.

Model 1 - one standard API

If a single API had been defined at the outset back in 2013 when PSD2 was starting, then this would be the ideal solution; indeed this may be the ideal final end state. A TPP anywhere in Europe could immediately access any bank in Europe in a single standard way. All market parties could then focus on the many topics that really should be of primary concern (not technical access issues, but new business models for customers, great user journeys with the most secure and convenient consent/authentication etc).

However there is no single API and now much valuable time, effort and management attention is being devoted to defining several sets of APIs, defining common criteria for APIs to be acceptable to banks and useful to FinTechs, defining potential fall-back mechanisms, etc. This is proving an arduous process and thus some parties from the regulatory side, from the consumer side and from the merchant side are increasingly calling for a 'single API.' This initially does indeed sound sensible and a way out of the current diversity and complexity.

We believe however that enforcing a single one-size-fits-all standard now has some risks, notably holding back the development of PSD2 and actually hindering competition and innovation.

Experience in SEPA, in e-invoicing and many other network topics in payments has shown that it is optimistic to believe that a common standard can be defined quickly and will produce anything like an optimal outcome. The SEPA thinking, i.e. "it can't be that hard to agree on a common way of doing a simple thing like a credit transfer" (which banks already had decades of experience in) actually led to the industry taking years to define SCT. Although many very skilled market actors worked very diligently together, and we can confidently assume this would be done again, we have no reason to believe that the outcome would be better this time for PSD2. On the contrary: the consensus-finding process will be further exacerbated this time round, since the participants have little experience (e.g. on bank APIs) and since this time it is necessary to find agreement between stakeholders with competing interests (ASPSP/TPP).

Consensus processes, by their very nature, take a long time (not only in banking and payments: the GSMA also took years to define common



Figure 1: The Chinese solution

continued

roaming standards, and we have never standardised the one single European 220V power plug - for good reasons[1]). Consensus processes also tend to lead to sub-optimal results that are often the lowest common denominator, even with the best will of the participants. Meanwhile the market stands still, awaiting the outcome.

Only China has managed to define the one, single, state-defined API - after market actors (Baidu, Alibaba, Tencent) initially went their own way - which is now enforced and run centrally by the Government's People's Bank of China (also for state monitoring of its banks, merchants and citizens) (see Figure 1). This can surely not be the approach for Europe.

The optimal outcome in the West with this approach would be a political compromise. We have seen this in 'agreements' on ISO20022 (which essentially just standardises the 'envelope' but leaves extremely wide possibilities open for content, fields, flows and semantics). Similarly, here we could envisage everyone potentially agreeing on the Berlin Group standard, for example. This would already be a major achievement. However, it must be clear to all that this 'standard' - which is more a high-level reference model - leaves open a very wide range of options for concrete APIs, data flows, consent/authentication models and implementations. Thus, it does not really solve the problem. TPPs would still have to negotiate through many widely varying flavours, interpretations, models and implementations within the 'agreed' standard.

Not only is a single API long and hard to agree upon, and will likely lead to political compromises at best, it may also mean the de-investment of the efforts previously made by local communities who have tried to move ahead and make PSD2 work. Thus, Open Banking UK, France's STET, Poland and others would be punished for having moved ahead and forced to rework (read: downgrade compared to their original local requirements) their agreed solutions towards the common European one-size-fits-all solution.

There will, of course, be heavy competition in innovation for APIs outside the compliance space (PIS, AIS, PIIS) - smart banks are already defining value-added APIs for structured data, recurring payments, identity and more. We should encourage competition in this space. Even for the regulated APIs maybe it would be healthy to have some degree of competition: let those communities that have good experience with redirection (iDeal/NL, Swish/SE, PayPal etc) build their APIs using this model and let other communities that oppose redirection provide their APIs. Then let the market decide which models are adopted the most, bring the most acceptance from the customers and drive the most growth.

Thus, we believe that the call for one API in Europe, whilst easily made, and initially sounding attractive, will actually reduce competition, reduce innovation, delay PSD2's go to market - indeed actively destroy some developments and investments already made - and should thus be approached with caution at this stage.

Since we surely all agree that the end goal must be to have uniform access for all FinTechs to reach any bank in Europe, we propose to let the



Figure 2: The market doing the work: overlay services provide access to many banks across Europe. Source: Klarna 2016

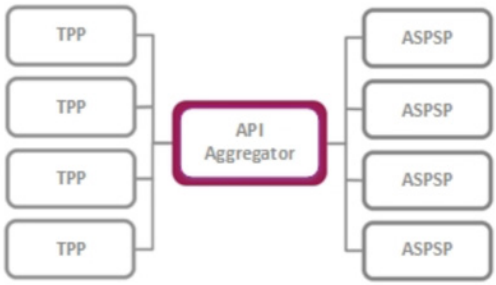

Figure 3: Simple hub model. Source: Ibanity 2017

following alternative models develop, which solve this regulatory/business goal without technical prescription of a single API standard now.

Over time the market developments described below will surely lead to convergence (the best models win) and thus Darwin should take precedence over top-down enforcement.

Model 2 - let the market do the work

Surely the preferred approach in any modern market economy is simply to let the market develop where there is user need and where a problem needs to be solved. Only in the case of a proven market failure should the regulator step in and enforce a model.

In our context of PSD2 'letting the market do the work' (to provide reach for TPPs to as many banks in Europe as possible) would likely mean the introduction of overlay services. We have already seen the emergence of such services, e.g. Klarna allows a merchant to initiate a payment from any bank connected to the service, regardless of its geographical location. These overlay services solve a problem for the merchant (in future also for a TPP) by providing uniform access to many banks, irrespective of their underlying technical connection (API, HBCI, screen-scraping, etc)(see Figure 2).

This makes life easier for merchants/ TPPs and thus opens up new commercial models where there is a business case and incentivises such overlay/ intermediaries to emerge and grow. We expect a good number of such market initiatives to unfold for PSD2, both from established players in Europe (e.g. Klarna, PayPal), from successful players with similar models outside Europe now moving in (e.g. Yodlee, Plaid) and from new FinTechs and innovators (e.g. figo, YES, Tink), from forward thinking banks (e.g. Nordea Hub) and from existing infrastructure providers (e.g. ACHs, card schemes). We believe this will be a lucrative market - somewhat akin to the acquiring market for cards - which will provide real value, hence has a model for funding and development, provides ample scope for competition (between such overlay services and between FinTechs and banks) and is thus surely a promising way forward.

Incidentally we have no doubt that there is a demand for cross-border PSD2 services. People in Europe increasingly want to shop in neighbouring countries (e.g. the Dutch buying at German merchants, Germans renting homes in France) or even further afield (from European consumers buying Swiss chocolates to European corporates using UK financial services). As people lead increasingly global lives we will need PFM overviews of our accounts regardless of location. This applies especially to corporates (maybe one of the biggest overlooked beneficiaries of PSD2) which require consolidated overviews of all their accounts across Europe and the ability to move funds optimally between them. Thus cross-border demand is clear and the market will move to satisfy it.

The main drawback of the 'market' approach is that there is no control, so there will be some uncertainty if and when TPPs will be able to access which banks. Indeed, there is some likelihood that investments will initially flow towards integrating the large economies (France, Germany, the UK) thus further disadvantaging smaller, emerging economies in Europe. This may hinder innovation and competition and thus be detrimental from a policy point of view. An innovative TPP in Warsaw should have the same opportunity as another in Berlin and not be at the mercy of purely commercially driven market initiatives. Thus this approach has many benefits but may also not satisfy all of the requirements alone.

Model 3 - hubs with interoperability

The third option for achieving the reach and connectivity necessary in PSD2 is to leverage the already emerging hubs. Currently significant efforts are being undertaken to connect all key banks in local regions via a local access hub. In the UK (Open Banking), France (STET), the Nordics, Poland, Netherlands and other regions of Europe any bank of that region can be accessed easily via the local hub (see Figure 3).

These hubs often go well beyond simple access aggregation to yield a number of further significant advantages: all banks under a hub share the cost of compliance, can operate a joint directory, have cheaper and more effective overarching fraud management than if each bank were to do it alone, etc. The TPPs have the advantage that they can reach any local bank easily, in a harmonised way (with uniform APIs, a single sandbox, testing, app store) and have a single point of resolution in case of questions/disputes or conflicts.

The hub approach thus solves a number of problems, notably reach, for the local TPPs: a French TPP can access any French bank via the French hub, a British TPP can access all key UK banks via the UK OB hub, etc. These hubs typically offer local access via a standard local API (often according to one version of the Berlin Group standard). However, it does not yet solve the problem of cross-border access.

We here propose that, instead of throwing the effort invested in these local hubs away (Model 1) or putting another intermediating layer on top (Model 2) that these hubs be interconnected (see Figure 4).

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In practice this could work as follows: a British TPP wishing to access a Polish bank simply connects to its usual UK OB hub, but the UK OB hub will recognise from the destination (target IBAN = "PL....") that the TPP wishes to reach a non-UK/foreign bank and will thus forward the request on to the appropriate hub serving that geography. Thus, TPPs continue to have a unified interface to their local hub but still achieve reach beyond their local market. This is a really simple and elegant solution that has been proven many times in other areas of payments and in the mobile industry and more. For more details on the workings of such interconnected hubs, the reader is referred to the literature[2]. Industry coordination (between a more tractable, small number of expert market participants - the hubs) could simplify the landscape, making it easier for aggregated propositions to flourish.

This model not only leverages existing investments, it also actively promotes competition since hubs will compete across Europe to provide the best reach, the maximum number of connected banks, the best services, and the most innovative value-added APIs.

We suggest therefore that this model of interconnected hubs be the preferred model for attaining pan-European reach for TPPs in PSD2 in the short term.

Summary

As mentioned at the outset, we believe that all Models will come to play, as:

- Hubs are already being built to provide access to all local banks (Model 3), satisfying the most immediate need;
- The market is already developing overlay services to connect communities (Model 2), especially where cross-border demand exists;
- We should now further encourage the interconnection of the hubs and the development of solutions that provide cross-border access;
- As this develops, it will become increasingly clear which models are working best for the consumer and these will become the standard (Model 1) - ideally a single API not through top-down enforcement but through natural market forces with regulatory support - thus allowing all TPPs to provide all their services at any bank in Europe.

This would surely be a good approach for all.

As a closing thought, we would like to suggest that the coordination between market players to reach pan-European integration may actually be only one aspect of a wider issue. Other topics that surely will need to be addressed to make Open Banking a success and bring about the PSD2 vision may include: common regulatory interpretation (GDPR, SCA), liability framework/guarantees, fraud management, dispute handling, evolution management, governance, branding, and commercial model etc.

Maybe if some new coordination is to be initiated it should be more ambitious and focussed on a holistic market outcome rather than just the necessary-but-maybe-insufficient tidying up of one issue. Maybe it is time for a scheme-like arrangement?

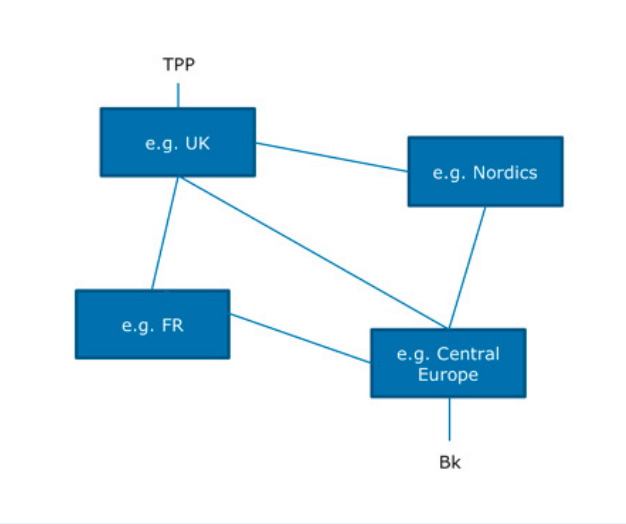

Figure 4: TPPs access local hub, which is connected to other hubs to provide pan-European reach. Source: equensWorldline2017

1. An 'adapter' industry solves the problem, not optimally, but this is better than spending years on a consensus process and then replacing all power supplies/appliance cords and ripping out all the plugs in Europe.
2. CAPS Considerations on Interoperable Hubs under PSD2, April 2018, www.caps-services.com



Image: Markus Spiske / Unsplash.com

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