

Potential convergence: a discussion note

John Harrison (john.harrison@pib-d.net)

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Summary

The Open Banking reforms are now in place, but take-up is modest for lack of any reason for the retail banks to promote the OB functionality. This note describes a proposal to extend the 'open' philosophy from transaction data and payments to include trusted personal data, starting with both proof of identity, as held by banks, AND proof of qualifications as held by learning providers and the Department for Education.

If implemented correctly, the proposal has the potential to make success in a reformed and extended OB infrastructure a competitive necessity for the retail banks, who might otherwise lose their share of the youth and student market.

The proposal offers a coherent business model, replacing payment transaction fees with relationship fees; and a fair funding model, rewarding the innovative banks and penalizing the laggards. It has been discussed with many relevant stakeholders, and is considered credible.

Further progress requires explicit support from the Department from Education. It is hoped that this note will lead to discussions with the FCA and the Treasury, and thence to another discussion with the Department of Education, who may come to accept – at last – the case for action.

Introduction

1. Open Banking is now mostly implemented. The CMA-9 banks have complied with their obligations, but without much enthusiasm. Thus technical capabilities are now in place, but the banks see no compelling reason why they should market the new functionality to their customers and drive uptake.
2. This situation is the result of incomplete evolution. The OB Implementation Entity has done precisely what was asked of it. But the new 'open' philosophy still lacks a business model, or a basis on which the banks will begin to compete. Both are necessary before the full benefits of the scheme are seen by consumers, and society in general.
3. In a fully mature scheme, we might expect to see individuals using an OB-enabled interface:
 - as their principal means to interact with the account provided by their main retail bank
 - to interact with accounts provided by other banks and credit card issuers, and transfer money between any two accounts
 - as a means of making payments from any account accessible via their OB interface to any service provider or other individual
 - as a means of sharing proof-of-identity data from their main bank (perhaps 'topped up' by a specialist 'identity provider') in order to prove identity to any other counterparty, whether another financial service provider (to open a new account) or government (Verify-style)
 - as a means of communicating securely with any counterparty, whether an organization or another individual.

4. The vision outlined above is technically feasible, but hard to realise within the banking sector alone. The remedy may be to look outward from retail banking to another sector - education - which, similarly, is closely regulated and in need of reformed digital infrastructure.

User-control of data, starting in Education (UCD-E)

5. Banking and education both require the sharing of trusted personal data. Banks need individuals to prove their identity, before opening a new account, in order to comply with the anti-money laundering regulations; while schools, colleges and universities provide learners with the qualifications they need to transition to their next learning provider, and then to find a job. A qualification and proof of identity are similar: both are facts (or attributes) about an individual originated, or checked, by a counterparty. So a university is the originator of a degree attribute, while a bank checks legal identity, but the end result is similar: trustworthy data about an individual held by a counterparty.
6. Now consider a proposal put forward by a PIB-d Ltd, an entity half owned by the UK's HE sector and half privately:
 - PIB-d suggests that individuals should be empowered to choose a Personal Data Service (PDS) from a managed market, and then use their new account to: (i) link to multiple distinct counterparties, both organizations and other individuals; and then (ii) control the flow of trusted personal data to between such counterparties.
 - The flagship application is a portable personal achievement record, to be used by learners as point in the cloud from which to interact with learning providers, and transition between them, and then into employment, citing trustworthy qualifications at each step.
 - Other applications, required for the minimum viable launch product, are communications (to ensure frequent use) and payment (for reasons of business model).
 - Organizations will pay a per-capita relationship fee to the new infrastructure for which they will receive: (i) a secure online relationship with each individual; (ii) updates on whatever personal data the individual has agreed to release; and (iii) payments up to an agreed limit. Thus the new infrastructure can be seen as a generalization of current payment systems, replacing a single form of trusted personal data – money – with many different types, and transaction fees with relationship fees.
 - Subsequent applications for the new infrastructure are legion, and include the sharing of proof of age, proof of student status, DBS attribute, legal identity, preferences, medical prescriptions, professional qualifications, NINO, retail loyalty, etc. Also individual-individual functionality will be important, enabling social networking abstracted from any end-use and thus useable across many applications, not least for delegation.
 - One early sign of demand has arisen in the health sector, where Blackpool NHS Trust – working in collaboration with NHSx - is experimenting to permit trainee medics to register with their next NHS employer online, showing digital proofs of identity and proof of qualification, rather than relying on paper. While the technology works, the NHS has – as yet – made little progress with organizational, governance or business models, nor have they made the (inevitable) links to the education and finance sectors.
 - The personal data infrastructure will be governed by a public-interest non-profit, probably a charity. The non-profit will enter into a concession contract with a development company part owned by the initial PDS providers. In return for carrying out the heavy lifting, the dev. company will receive two privileges:
 - The right, limited only by competition concerns as the infrastructure reaches ubiquity, to be the Service Provider Acquirer (SPA, i.e. the necessary single point of contact to the

infrastructure) for all commercial service providers; it is assumed that, in time, public-interest-sectors – such as education and health – will each wish to stand-up an in-house SPA; and

- The right to charge national brands, who wish to enter the infrastructure as PDS providers after the initial pilots, for late entry.
7. In summary, then, PDS functionality is a generalization and completion of that currently mandated under the Open Banking requirements. Any bank not offering PDS (and therefore OB) functionality as part of its mobile banking app would risk missing out on the youth/ student market. Few could tolerate this for long, particularly if it becomes clear that PDSs will scale quickly, driven not only by education apps, but also by other sectors, e.g. retail loyalty etc.

Views of stakeholders re UCD-E

8. This proposal – now called ‘User Control of Data, starting in Education (UCD-E)’¹ – has been developed on paper for some years, and has been discussed with most relevant stakeholders:
- Information Commissioner’s Office: in favour
 - Government Digital Service
 - GDS has been aware of UCD-E for some years, but has always declined discussion, while still attempting to make a success of gov.uk Verify. However some GDS staff, both current and former, have said informally that UCD-E is a likely way forward.
 - Learning providers, i.e. universities, colleges and schools
 - There is general recognition that the current situation, in which qualifications are handed out on paper certificates, is archaic.
 - Jisc, which leads on IT for HE and FE, is one of PIB-d’s shareholders, having been persuaded some years ago. The organisation’s position is now difficult: its chief executive recognises the need for the new infrastructure, but – at the same time – is aware that the universities are in no great hurry to change, somewhat like the banks when faced with the need for Faster Payments a few years ago.
 - Department for Education
 - UCD-E will use the Learning Records Service (LRS) a centralized database of qualifications from Secondary and Further Education, as a conduit through which learners in those sectors can pull down qualifications from awarding bodies (e.g. OCR, City & Guilds) to their PDS. Universities act as their own awarding bodies and so would prefer to give data back directly to learner, rather than deposit it in LRS.
 - Support from DfE, and thus access to the LRS data, is necessary to give pilots – which should take place in a university, a secondary school, and an FE college – a national dimension, sufficient to persuade learning providers that participation would be a sensible decision. There was a high-level meeting at DfE in Jan 2019 to discuss UCD-E, but the timing was still too early.
 - Department for Digital, Culture, Media and Sport
 - DCMS now leads on digital identity strategy, having taken over from GDS. They are aware of UCD-E, and their support is probably necessary in order for DfE to move forward. However, their position will not be clear until they publish the results of the 2019 call-for-evidence / consultation, now somewhat overdue.

¹ Previously called ‘Personal Data Ecosystem, starting in Education (PDE-E)’

- Certain banks.
 - UCD-E has been discussed in detail with two of the largest retail banks. The first admits the logic of the proposal, but is no great hurry to make it happen. The second also admits the logic, but a dominant group there sees ‘identity’ in education as an opportunity for it to pioneer a new market, rather than as one use-case for new national infrastructure which – if it is to succeed – must be developed collaboratively.
- The Open identity Exchange (OIX)
 - OIX provides a forum in which interested organisations can discuss digital identity and related subjects, commission work to explore topics of interest, and publicise ‘schemes’, i.e. proposals for the creation of new identity-related infrastructure. UCD-E has been discussed with the OIX leadership. There is agreement that the scheme is credible, and – at the appropriate moment – can be publicised under the OIX banner, inviting further stakeholders to express interest and sign-up.

Proposed next steps

9. Work on UCD-E is now focused on four distinct, but linked, areas:

- Setting up the governance body as a public-interest non-profit, probably a charity.
 - The new body will be much better placed than PIB-d Ltd to publicise the UCD-E concept and attract support. It will have a strong board of independent trustees, and will – we hope – enjoy the support of relevant national bodies in this space, such as the Centre for Data Ethics & Innovation.
- Winning support from government
 - Because of the after-effects of gov.uk Verify, politicians – and the Civil Service - remain wary of any new identity related schemes, to the point where there is almost paralysis: DfE will not move forward until DCMS has given a lead; and DCMS cannot publish its new strategy until politicians have given their consent.
 - One route to breaking this impasse might be for the current discussions with OBIE to be expanded to include the FCA and the Treasury. If convinced, the Treasury might then convince DfE to move forward more quickly.
- Building support in the education sector
 - Work is now underway to build support in the education sector. Endorsement by Prof Rose Luckin, an expert in ed-tech at UCL, has helped a lot; and we hope soon to announce a new university willing to lead pilots.
 - We also intend to approach potential pilots hosts in Secondary and Further Education.
 - Clearly, support from DfE would help in this matter of pilot host recruitment.
- Recruiting PDS providers
 - As demonstrated by Open Banking, the retail banks - with one or two exceptions – are not overly keen on change. We will continue to speak to them as the opportunities arise, but believe they will only take the proposal seriously when there is overt support from government.

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