

Kalypton Response to the Payment Strategy Forum's draft strategy - 'Being Responsive to User Needs'

September 2016

Consultation Title:	Kalypton response to Payments Strategy Forum draft strategy
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I confirm that our response supplied with this cover sheet is a formal consultation response that the Forum can publish.

Overall Comments

We commend the strategy forum for the work that has gone in to building a consensus via a fully inclusive process. For brevity, we will focus our remarks on areas of disagreement.

This is an unambitious strategy. It is less than comprehensive.

Currently, UK Faster Payments represents global best practice. Addressing the detriments will go some way to addressing known limitations. This strategy will not ensure that the UK is at the forefront globally when implementation is completed in 2024 or thereafter. There are moves in other jurisdictions to leapfrog Faster Payments to create genuine real-time payments systems, and the UK will fall behind rapidly.

The Simplified Payments Platform puts an ISO 20022 overlay on existing systems. That is analogous to the data centre where the reception is bright and sparkling. Out back, there are cables running everywhere and gathering dust.

As the BRC has written¹, merchant payments are more expensive than handling cash. The Strategy Forum has ruled the card schemes out of bounds. Given the barriers to entry; given the continued failure of Zapp to launch; how is competition to emerge? The strategy document may talk about the need to foster competition. The strategy, as it currently sits, will not enable competition in this important area.

The Economics Are Everything

Banks large and small, old and new have contributed massively to this work. One bank representative mentioned at the launch of the strategy that he was making recommendations that could hurt his employers bottom line.

Payment services represent 40%² of bank revenues globally. It is simply unreasonable for other stakeholders to present banks with a laundry list of requirements and not appreciate that major shareholder interest.

New technology can slash costs of hardware, communications, compliance, reconciliation and of innovation. It would improve radically the banks' cost bases. That needs to be demonstrated as part of the upcoming cost/benefit analysis if the banks are to move as far and as fast as possible.

A UK plc Vision

Post the Brexit vote, the UK has to forge an independent future. We need a payment infrastructure that supports and enables a dynamic, less-cash economy. We need our banks on the front foot rather than retreating and retrenching. We need export revenues.

¹ British Retail Consortium Retail Payments Survey 2013

² Global Payments 2015: A Healthy Industry Confronts Disruption, McKinsey & Co

This strategy can contribute to those challenges by setting a course to a true real-time payment scheme, with real-time settlements (via the BoE), supporting a full range of services “out of the box”, providing security and ease of use to all citizens, slashing costs and supporting ongoing innovation by bank and non-bank service providers.

We write these notes in the week that the FT published³ an article presenting a view that large banks were in danger of becoming nothing more than regulated utilities. They need to be, and we need them to be, profitable trusted customer service organisations. Some are willing to step up to the mark. Others may be swept aside to make way for organizations that are willing to take up the challenge

Q1: Do you agree we have captured and articulated the needs of end users. If not, what needs are missing?

On the whole, Kalypton is impressed with the completeness and the honesty surrounding the list of detriments. They form a valuable check list going forward. End users clearly want greater control, greater assurance and enhanced data. However, we see no discussion of:

- Merchant payments.
- Real-time payments
- Lower costs
- Anonymity to the degree that AML requirements allow

The proposed technical architectures do not support a genuine real-time system, where a consumer can make a payment to a merchant or to another user in real-time, and where that payment is settled in real-time. That system would eliminate credit and liquidity risks from the payments system, and would go a long way to providing regulators and operators with an accurate, up-to-the-minute view of each operator’s liquidity position. A system that supports genuine real-time payments that occur as part of a bilateral negotiation between a payer’s and payee’s system with a genuine real-time gross settlement system will achieve the desired goals.

If users want to continue to use cash or cheques they should be allowed to. They need to be persuaded and not coerced to change behavior. There is no reason why real-time and straight through processing of cheque images cannot be implemented eliminating an ongoing sore point of high fixed costs being amortized over ever decreasing numbers of cheques – once the modest upfront investment in technology has been made.

Q2: Do stakeholders agree with the financial capability principles?

As far as they go, yes. Technology can help by supporting a wide range of devices, authentication technologies and user interfaces accessible to various vulnerable groups at modest marginal cost.

³ Banks: Too Dull to Fail; Financial Times, September 6th 2016

However, a true view of one's financial position requires real-time payments and settlements

Q3: What benefits would you expect from these facilities and what are the risks

We have a number of points here. Firstly, we think that the focus needs to be on bringing the vulnerable, the underbanked and the unbanked into the formal financial services sector. It should be based on providing a technology architecture that allows banks and non-bank payment service providers to be responsive, flexible and innovative in addressing specific needs.

In the specific case of those many people who are struggling to make ends meet to budget and to plan, "request to pay" may give greater pre-warning and a greater sense of control than e.g. Direct Debit. We suspect that to thoroughly address the challenge a wider range of features like "jam jars" and planning and budgeting tools will be needed to make serious inroads. The technology architecture should support all of these features and use cases.

Turning to assurance data, the payer should not need to enter recipient detail. Finger trouble should not be a source of problems. True real-time payments should be like cash. You press "enter" and it is done. It is certainly undesirable from ease of use and security perspectives to have to enter account details as suggested.

Enhanced data is similar to "contextual data" as defined by the Faster Payments Task Force of the Federal Reserve Bank. We can share details of our proposal to them on the request to show how this requirement is properly addressed.

Q4: Is there a business case for investing in transitional solutions. Are there viable technology solutions to deliver some of the benefits without compromising the long-term strategy?

The question sets the bar way too low. It is entirely possible to go further faster. This includes account number portability for example.

Q5: Improving trust in payments. Do you agree with our proposals regarding customer awareness and education?

Customer awareness and education are obviously "good things" but we need to ask why they are required. Why is usage not intuitive and secure? As an example outside the scope of the Forum, why does card clash happen? Why do some end users feel the need to carry their contactless cards in shielded wallets? We shouldn't need to "sell" trust, it should be there based on sound design and engineering.

Q6: Establishment of guidelines for identity, authentication and risk assessment

Yes, there should be guidelines for identify verification. These do not need to be tied to National Digital Identity initiatives however.

Q7: Do you agree with our solution to develop a central repository for shared data?

Our default position is that central repositories of data are a bad idea. That is why our interoperability solution, the Tereon directory server only directs a party to complete a peer to peer transaction and so contains only the 16-digit card number, hashtag, email address or other unique reference number used by the counterparty and the IP address of the Tereon server of their payment service provider. We believe that a mesh is far more secure and robust than a hub and spoke. We also believe that the trust based relationship is between the consumer and the bank or non-bank payment service provider and that is where the data should be, and not an anonymous third party.

In the particular case of fraud prevention, there is value to be extracted from aggregating and analysing data but that data should be anonymised in compliance with current legislation. Any findings should be shared with the service provider for their action.

Q8: Do you agree with our solution for financial crime intelligence sharing?

Many of our arguments to Q7 apply here also.

If law enforcement sees an opportunity to improve the efficiency and effectiveness of their work, they should make that case. We do not see this as an industry-led initiative

We are particularly sceptical that this proposal will benefit financial inclusion. That seems to us much more of an economic issue, and it may be that specialist service providers with a lean cost structure will be required.

Q9: Do you agree with our proposal to develop a central KYC facility?

No.

impediments to the sharing of data on account switching or opening of a second account at a new provider should be addressed. Unnecessary duplication of effort or cost should be eliminated to maximise industry efficiency. However, that does not justify offloading the cost and the responsibility for capturing the data in the first place.

We understand from the strategy document that inaccuracies are wrongly created on data capture. Shouldn't that problem be addressed at source rather than asking a central facility to do the job properly? Or is the inference that banks cannot be trusted to perform sensitive processes with due care and attention?

Q10: Do you agree with our solution for enhancing the quality of sanctions data?

Yes, this is essential

Q11 & 12: Sort codes

Yes, this is essential

Q13: Access to settlement accounts

Yes. All payment service providers must be given access to the RTGS. However, the current RTGS provided by the Bank of England cannot support a genuine real-time payments system, and certainly cannot support a payment system that seeks to achieve the objectives set out in the paper. It would not be too complex to create an RTGS system operated by the Bank of England or by a commercial bank to act as the real-time gross settlement system to support a genuine real-time payments system. It need not affect the operation of the existing settlement systems, and can easily run alongside them.

Again, we recommend that the forum look at our submission to the Federal Reserve's Faster Payments Task Force to see how such an RTGS can be constructed.

The aggregator model is a useful model, but it should not be taken as a way of avoiding building out a new payments infrastructure.

Q14: Common PSO participation models

Yes

Q15: The Single Entity proposal

Yes, we agree with the proposal for a single entity, but we do not believe that it should consolidate the three interbank PSO into that entity. Those PSOs are unsuited to supporting a genuine real-time payments infrastructure that can achieve the aims set out in the paper. We would recommend a move to establish a new entity that will govern the new payments infrastructure. Once that has been established, the entity could then look to bring in one or more of the interbank PSOs to interconnect to that new infrastructure. This approach would not require the banks to alter their legacy systems until such time as most consumer payments had migrated to the new infrastructure.

Banks must not use the fragility of their legacy systems as an excuse not to migrate to a new infrastructure. By establishing a new infrastructure with a new entity to govern it, the Forum will sidestep any need to update, amend, or otherwise interfere with the fragile, legacy payment systems. It will be for banks to upgrade or shut down those legacy systems once the new infrastructure is in place.

Q16 Moving to ISO20022

ISO 20022 is a valuable starting point, though that standard is evolving. A message standard based on ISO 20022 in its current state will not enable the Forum to deliver on its aims for an enhanced data capability. We recommend that the forum look at our submission to the Federal Reserve's Faster Payments Task Force to see how the limitations with ISO 20022 can be overcome with an ISO 20022+ solution that processes additional data and supports legacy formats through transitional periods.

Q17: Indirect access liability guidance

Yes.

Q18: A new Architecture for Payments

Yes – but with challenge and scrutiny. A coordinated approach can result in a similar development to EMV, an idea which looked extremely good on paper but which developed to support only the minimum common denominator. The coordinated approach is responsible for many of the design and security flaws in the EMV stack, and the need for coordination means that the flaws are almost impossible to remedy in a timely manner.

We would recommend that the APIs be developed by a small group, perhaps working within the technology provider, but that the APIs are then reviewed by the wider Forum to ensure that they are understood and fully functional. Any changes can be implemented quickly, and upgrades and new versions delivered in a timely manner.

Q19: Simplified Delivery Mechanism

Yes. The simplified delivery mechanism appears to be the equivalent in principle to a set of base line services that every payment service provider should offer. A new scheme should be developed to address both the base line services that every provider must offer, and to deal with any optional services that providers might develop to add on top of the base line services. Existing schemes incorporate rules to deal with credit risks, liquidity risks, failed payments and other mishaps that occur on designated-time net settlement systems. These mishaps could not occur in a genuine real-time payments system, and so a new scheme would be far simpler to create and implement. The new governing body should be responsible for the new scheme rules.

We would recommend that the service be built on a distributed model as this will create a robust system with redundancy built in to deal with system outages, denial of service attacks, and other mishaps. A central system would present a central point of failure. So long as the systems separated the message processing from the actual account information with banks and other account providers, the eventual system could be a hybrid, whereby large and medium payment service providers operate their own systems in a distributed system, whilst aggregators operate combined systems for smaller providers.

A new payments system need not be expensive to begin work on. By definition, a real-time payments system eliminates most of the mishaps of designated-time net settlement systems. It would operate on modern, efficient hardware, it would use modern programming tools and paradigms. It will cost far less than maintaining the existing system. There is no reason why the industry could not have a prototype within eight months, with a roll-out of the base line services within two years. Again, we recommend that the forum review our submission to the Federal Reserve's Faster Payments Task Force to see an example project plan that is based on our experience with implementing and upgrading bank IT infrastructure.

Q20 Change to Deliver Anticipated Benefits

Yes, change is required. The current system stifles competition and innovation. However,

the current package of proposals will not deliver the benefits outlined unless the economic issues are addressed. It will not deliver anywhere near what it could deliver as quickly as possible without an upgrade in ambition levels.

Q21 Strategy in Sequence

We believe that the destination should be revisited in an iterative loop as consideration moves to the topics of cost/benefit analysis and technology selection.

This will reopen the important topic of fitting this program in with pre-existing projects

Q22 Implementation Considerations

As we have already indicated, we believe that the “to be” model of infrastructure and governance should be defined, piloted and built in one work stream delivering benefits as adoption grows. Each industry participant can then choose whether and when to shut down legacy activities.

Q23 Economic models

We can talk a little to the costs of technology. A current benchmark is that legacy payment schemes process the order of 1,000 to 10,000 transactions per second on substantial hardware stacks. New technologies can process the order of 1 million transactions per second on a single server.

We learn that one bank employs 6000 people in reconciliation exercises. This is because legacy processes use BASE or eventual consistency. New technology uses ACID consistency (<https://en.wikipedia.org/wiki/ACID>), real-time processes to eliminate timing errors and correct mathematical libraries to remove at source the requirement to perform these exercises.

Similar analysis can be applied to audit, compliance, communications costs, innovation costs etc. throughout the business system and over the ownership cycle.

We suggest that radical change will prove cheaper to implement than incremental change and to the economic benefit of all if the business model and the funding model are optimised.