OIX Kick Off Workshop

Held at 12-3pm on 27/01/2020 in AgFe Offices

**Agenda**

* Introductions
* Recap: why are we here?
  + Problem statements
  + Incoming hypotheses
  + Common language / mental models
* Perspectives: what matters to you?
  + Questions
  + Expressions of interest
* Planning: what do we need to do next?
  + Resourcing for Workshops #1 and 2

**Attendees**

* Chris Allgrove – HMRC
  + Focus: Looking to replace Verify.
* Ross McDonald - HMRC/Future Borders
  + Focus: Want a mechanism for exchange of value, creating a marketplace which replaces point to point data sharing.
* Richard Thompson - Idemia
* Wayne Robinson - HMRC, Innovation Function
  + Focus: Future relationship between citizen and government. Want HMRC to be invisible and frictionless, but working back the crucial component of that is identity and he is looking to clarify that piece of the puzzle.
* David Rennie – Idemia
  + Focus: Validating the concept in order to communicate commercial value internally.
* Stephen Cowx - Future Borders
  + Focus: Most interested in the underlying mechanisms that come out of the Alpha in order to judge how they might be able to be used in other projects they have going on.

**Meeting notes**

1. ***Recap***

Publishing and consuming events to support reasoning for participating entities.

* Need to be generic.
* Government is a position where it is looking at information flow through x number of “event pipelines”.
* Want to be able to share tokens of value across these “event pipelines” regardless of the specific use case or infrastructure on which they have been built

Wayne

* Other countries do things slightly differently.
* Need to make sure the terminology and interpretations correspond with one another.
* Also concerned about being able to pan out and consider multiple pipelines.

David

* Identity use case for IATA passenger information on airplane flights might provide a useful example of how that can work (orchestrated by Idemia). May be possible to show how the logic of the this work and the IATA example can come together
  + Stephen: knowing the accuracy of that sort of information is also key.

Ross: 3 important things for the Alpha

1. Mapping
   * Making sure we have common standards and a shared metadata model.
2. Outward look
   * Piece together the parts so that they can be proved to multiple entities outside the project.
3. Journey
   * The emerging concept of a chain / process as a journey which binds attributes and events together, or a cascade of events. The ability to share events allows the sharing of expertise.

David:

* Keen to have a visualised demo.
* Digital identity ecosystem needs a piece in the middle, a blackbox, which allows the ecosystem to function and flourish. This is what Idemia can provide.

Ben: presenting

* OIX provides a useful legal umbrella for public and private actors to interact. All IP that is generated through the project is open.
* Starting point is having each organisation - business, government agency etc - write down how they assure the information that they have. What processes do they undertake. This is the event data we want to capture.
* We then want to use information about these events to streamline subsequent work and reasoning that other actors and organisations want to do.

Ross

* Event is the currency, rather than the actual data.
  + Advantages of this is that it is anonymised and allows us to tap into expertise at different sites without moving the actual data. Moving the description of the data rather than the actual data.
  + This is a hypothesis to be tested.
  + Federated reasoning: recognising that in different places there are large stores of data and large amounts of expertise. We want a system which lets them bring to bear their expertise over data without having to centralise it.
* At some point you might want to 'dip in' to discover the provenance of the data.

Chris:

* GPG 45 originally useful for verifying and supporting identity. Broadening it out as a general trust framework.

David

* Analogy of money. Money is a token of value, and still useful to have different currencies, because those tokens are not shared perfectly. How much you trust the value of a currency is a question of judgement.
* Things are very variable and the construct makes it simpler and more manageable.
* Otherwise everyone is trying to build trust from first principles which doesn't really work and isn't efficient.

Stephen

* What is definition of identity for the Alpha?
* May need to limit scope.
  + David: it is easier to think about trust, as it easier to think in terms of what we trust and what we don't.
  + Ben: we are interested in binding manifest information about a thing to that actual thing, or about a person to that actual person.

Information

Information

Events (including Attestations) that bind Information to a Person or Thing

Information

Things

People

Information

Ben

* Different trust frameworks can be fed by same events.
* Bank may choose to abide by GPG 45. But they might also have their own trust framework, detailing what sort of events and at what sort of granularity they are interested in.

David

* A unit of currency between the bank and the government. Enabling interoperability. We need to create environment to allow that exchange for value.

Ben

* What do we mean by Data Assurance?
* Wayne: is the Issuer the original issuer or an intermediary issuer.
* ***Conclusion***: We need to refine our common language to distinguish between Event Producer (e.g. HMPO as issuer of a passport) and Event Provider (e.g. claimant as the bearer of the passport issued by the HMPO).
* You make be looking at a sequence of events which is just a subset of the whole event chain, the journey. This subset might not be the start of the journey, so doesn’t involve the event producer.

David

* Allegory of currency of large stones. One stone dropped in the ocean. Just exchange information about ownership of that stone rather than the stone itself.

Stephen

* Do you trace the events all the way back? Or is all of it has to be captured on the metadata of the event?

Ross

* We are provisioning for sequences of events, and when the trust chain is broken.
* We also want to be able to distinguish signal vs noise. Identify priority signals that entities need to be able to access.

Wayne

* I trust A.
* I have a breakdown with C. But A trusts C. Does that breakdown my trust with A - as in is the whole ecosystem affected?
  + David: Not necessarily.

Ross

* Part of open alliance is that you cannot update and lose your place.

Ben

* Each entity makes its own trust judgement.
* Each entity has all the events in front of them. They may choose to trust it from X but not Y.
  + David: entities may be very selective about what events they focus on, even if they have access to all the events.

Chris

* Moving away from Verify. But still going to have a trust framework.
* How does doubt about one entity affect the trust across the whole ecosystem if you have a fully audited trail.

Ben (layered graphic)

* A thin architecture piece that allows us to extract enough information to read trust across multiple “event pipelines”.

Ross

* We are doing below of the bottom line in Alpha 8 weeks.
* When we talk about open alliance, we are talking about general standards and specific use case.
* All we have to do is change the rules of engagement piece, with maybe one or two or other changes, to support any use case.

Stephen

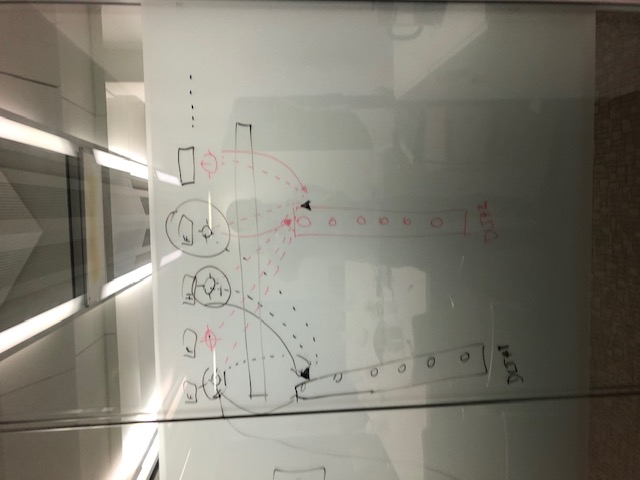
* Unsure how we can address bottom layers without touching on the top layers.

Ben

* Don’t need to consume all events, just need certain events. Analogy of an entity wanting £5s rather than £50s.
  + David: entity says these are the events that I want. Job of the orchestration layer to go and get it from the entity which has produced those events. One orchestration layer that works for multiple entities.
  + Maybe different orchestration layers for personal data vs trade data.
    - ***Query***: will we need multiple orchestration layers?

Ross (graphic on board)

David (graphic on board)



Stephen

* Likes the linked version that W3C does provide.

Wayne

* Orchestration layer serves function of abstracting the blockchain to provide data to relevant parties who want to draw on information from that blockchain.
  + David: orchestration layer itself is just operational. You need a governance piece on top of it. Eg. for the wine industry, this is what we mean by a bladder of wine being checked.
  + Wayne: is this not what chain vine is already offering?

Ross

* You cannot fill the world with the logic of DLTs. You need an additional layer. We don't want everyone to get on Chain Vine.
  + Stephen: are we at the top of the tree or somewhere in the middle?
  + Ben: we want to be lowest bar of trust, lowest threshold. X says Y is true. Can we get everyone to agree to talk about things in this structure?
  + Chain vine need be able to publish their information in this way.

Stephen

* Are events actually limiting the scope? We might want to be able to articulate more. Events are not the only thing that is possible with this sort of architecture.
  + Ross: changing attributes are events. Events do actually have a very broad scope.
* We might not want to use these events to generate trust. It could be used just to record events.
  + Wayne: degrees of trust are baked into every event. I want to be able to trust the record of that event.
  + Ross: 3 event examples doesn’t capture maximum utility of what we could get out of this.
  + ***Conclusion****:* not to become too focused on trust as only form of utility, allowing for broadening of future scope.

1. ***Perspectives / open questions***

Stephen

* Role-based access management?
* Audit log of access?
* Managing authentication and authorised access?
* Revocation of access rights?

David

* At what point do you need the orchestration layer?
* Business case for the end game may be clear but how to justify next 6 months of work?

Richard

* If an event is consumed many times will trust in it increase? Or will its value increase?
  + David: different events may have different value depending on the root assurance that went into them - just looking at the driver of the lorry vs checking their fingerprint with biometric instruments.

Chris

* Looking to develop Trust Framework based on GPG 44/45 by the end of March
* The Trust Framework would operate under a standalone entity
* DCMS is doing the policy, GDS everything else
* How best to leverage this work as part of that?

Ross

* Want executable artefacts to come out of it. From which something can be built and tested.

1. ***Planning for Workshop #1***

Stephen

* Are we testing the hypothesis that the Semantic Web standards and tools will work? Or evaluating alternatives?
  + ***Conclusion:*** focusing on semantic web, looking to test and potentially disprove its utility.

Ross

* There are examples of gigantic bodies of info that have been mapped and disseminated using semantic web tools.
* Eg. Wikipedia. Genome sequencing.

Ross

* Some key questions for the Semantic Web to be tested:
  + Security (hence involvement of NCSC)
  + Throughput – can it cope with the kind of volume we may be talking about

1. ***Planning for Workshop #1***

Ross

* Looking to discover the decisions / expertise / processing that is done across the different agencies
* Draw out business expertise from FSA / Port Health / HMRC

Stephen

* Future Borders has struggled to map the process for importing beef…although may be different for wine because of the proof of value with ChainVine already in place

Ross

* Potential to use the events that are already mapped within the ChainVine PoV

Wayne

* Is there an overlap with the HMRC / HSBC / SecureKey project?

1. ***Actions***

**Actions** for next time:

* Circulate reading on semantic web.
* Invite experts (e.g. Paul Worrall) to support the discussion re: Semantic Web