Digital Sandbox Pilot

The UK Financial Conduct Authority Digital Sandbox
(and somewhere in the mix the importance of Data in a Sandbox)

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The Original FCA Sandbox

- The FCA provides a Regulatory Sandbox which allows the testing of new services in real life situations
  - Banks could interact more easily with Fintechs
  - Fintechs could operate without gaining full regulatory cover – whilst still abiding by the rules
  - Regulatory oversight was able to assess new services
- This encouraged the implementation of new services but did not improve overall interoperability of these services
- Tech Sprints were introduced, but they were primarily UK Centric and not scalable
- GDPR increased the challenge for the proposed Virtual Sandboxes
- The regulatory sandbox started the trend – we expect the new digital sandbox approach to do the same

Regulatory sandbox https://www.fca.org.uk/publication/research/regulatory-sandbox.pdf

FCA sandbox ⟷ Mojaloop - Why?

- In the FRM delivery – we hit a big challenge.
  - We need a lot of unique data to actually test the platform
  - We dubbed it the search for Atlantis - as we needed to create realistic:
    - Geography
      - Streets
      - Towns
      - Countries
    - People
      - Individuals / Families
    - Entities
    - Social networks
    - Device Profiles
    - Transactions

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- Fortunately that task was also being addressed by

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City of London

- And a bit more

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The FCA Digital Sandbox

- Providing a structure for collaboration
  - to build a community – mentors, participants, regulators
  - to address a common problem

- Giving a testbed for new services with access to other services APIs

- A very large shared data set for everyone to work with

Digital Sandbox Pilot : https://www.digitalsandboxpilot.co.uk/

Innovation through collaboration at scale

- Big industry problems are difficult to solve
- Community enables the collaboration required from all stakeholders to uncover these solutions
- Not just an API – a place to connect stakeholders and facilitate collaboration

Pillars of success:

1. Marketplace of services – enables discovery, access, and commercialisation of solutions (or free)
2. Community – supports the development of fit-for-purpose solutions
3. Data – enables solutions to target the right problem (synthetic or real)

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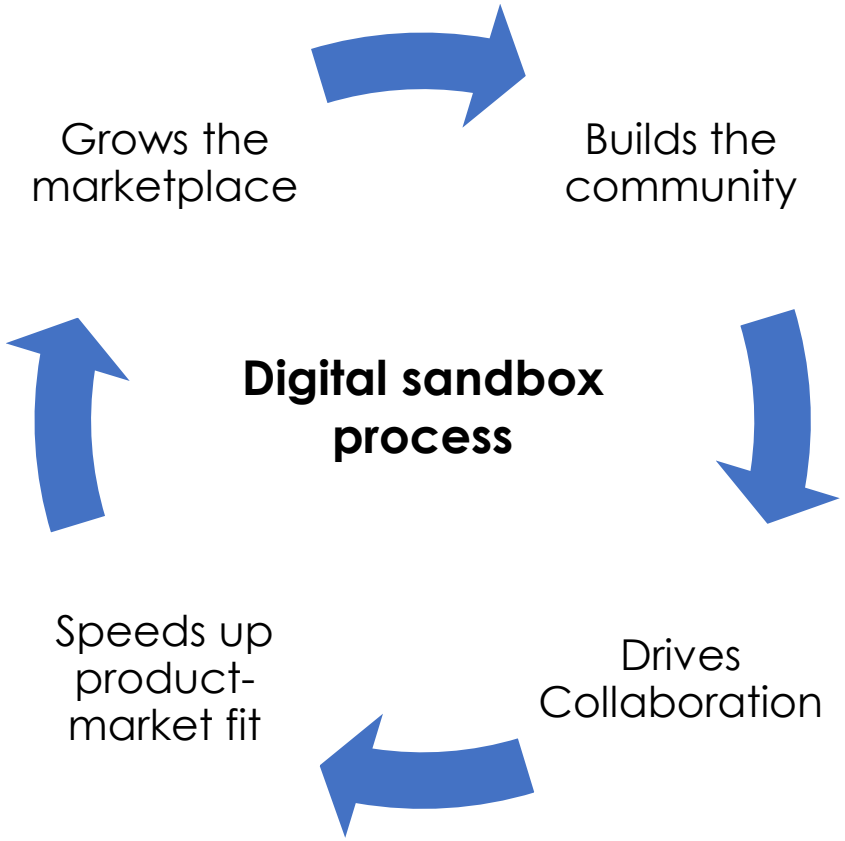

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- Exponential value exchange delivered as network grows
- Tech-Agnostic to changing business needs and services
- Global knowledge – mentors and experts facilitate solution development

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Marketplace benefits

- Build off the knowledge of others platform – don't start from scratch (DRY)
- Connect once – international compatibility
- Discover and access best in breed solutions

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Results – it works

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Between Nov ’20 and Feb ’21 (ongoing), the UK financial regulator and City of London Corporation ran a Digital Sandbox Pilot to encourage the rapid development of solutions in response to Covid-19

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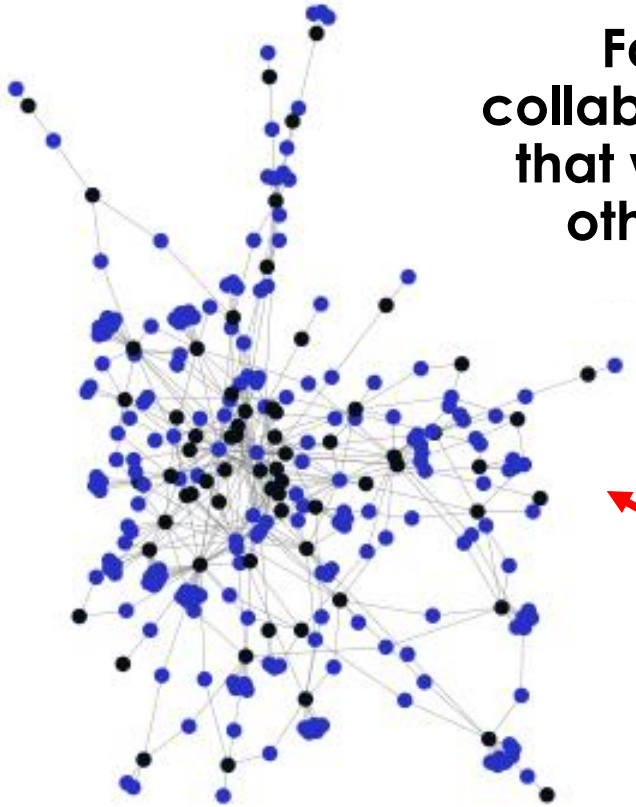

Facilitation of collaboration of teams that would not have otherwise come together!

The network effect!

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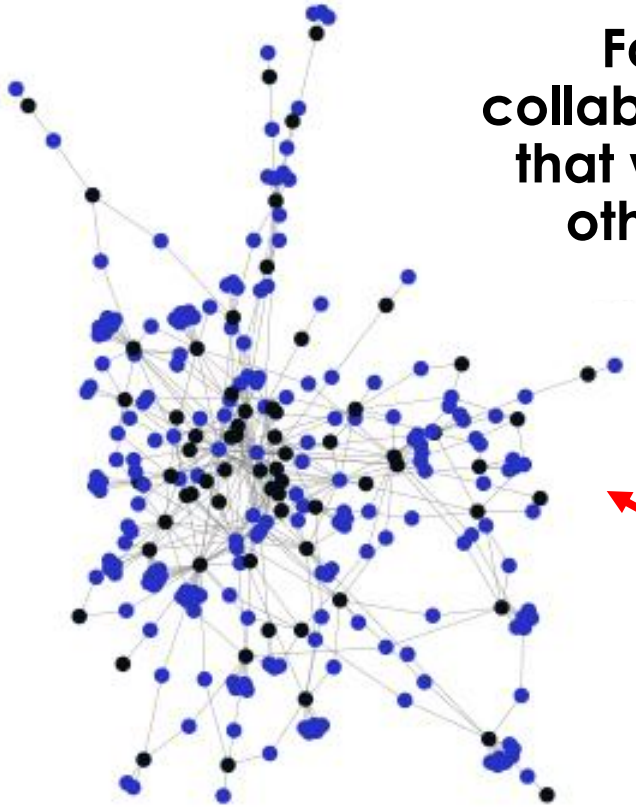

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The network effect!

800+
global participants

860k
unique data API calls

12
synthetic datasets

28
different countries

600+
data analysis sessions

400m+
synthetic banking transact

Our challenge – a lot of data

We need to hide our Needle in a LOT of hay

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Our challenge – a lot of data

We need to hide our Needle in a LOT of hay

- Fraud and Typology Management see duplicate transactions as either:
  - A common pattern to be ignored
  - A suspicious pattern to be highlighted

- You run out of unique data very quickly at 10K TPS
  - 600K Transactions per minute
  - 36M Transactions per hour
  - 864M Transactions per day

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Our challenge – data types

DATA REQUIREMENTS:

Data classification ○ Not required ◔ Nice to have ◕ Essential – Risk Load ● Essential - Reject

PRIVATE INDIVIDUAL DATA	Pr	Pe
ACTIO UUID	○	○
DFSP reference number	○	○
Name	○	○
Identification data[1]	○	○
Residential address	○	○
Postal address	○	○
Contact number[2]	○	○
Email address	○	○
Source of Income	○	○
Source of Wealth	○	○
Date of birth	○	○
Gender	○	○
Country of birth	○	○
Country of citizenship	○	○
Country of residence	○	○
Title	○	○
Adverse media flag	○	○
Risk classification	○	○
Occupation	○	○
Associated devices	○	○

BUSINESS ENTITY DATA	Pr	Pe
ACTIO UUID	○	○
Name	○	○
Identification data	○	○
Head office address	○	○
Operating address	○	○
Postal address	○	○
Contact number	○	○
Email address	○	○
Country of Incorporation	○	○
Entity type	○	○
Adverse media flag	○	○
Associated individuals	○	○

ACCOUNT DATA	Pr	Pe
Account ID	○	○
Account open date	○	○
Account type	○	○
Account number	○	○
Account holder ID	○	○
Account balance	○	○
Account currency	○	○
Transaction Limit	○	○
Daily Limit	○	○
PIN date	○	○

DEVICE DATA	Pr	Pe
MSISDN	○	○
ICCID	○	○
IMEI	○	○
MAC address	○	○
IMSI/TMSI	○	○
Location information	○	○

REQUEST DATA[3]	Pr	Pe
Request type	○	○
Request date-time	○	○
Request status	○	○

TRANSACTION DATA	Pr	Pe
Transaction ID	○	○
Source account ID	○	○
Destination account ID	○	○
Transaction type	○	○
Transaction amount	○	○
Transaction date-time	○	○
Transaction currency	○	○
Exchange rate	○	○
Transaction description	○	○
Debit/Credit	○	○
Fee/Commission	○	○
Digital Channel	○	○
Auth method	○	○
Status	○	○
Initiator Type	○	
BOP Codes	○	○
Source of Funds	○	○

DFSP DATA	Pr	Pe
DFSP ID	○	○
DFSP name	○	○
DFSP operating address	○	○

AGENT DATA	Pr	Pe
Agent ID	○	○
Agent name	○	○
Agent operating address	○	○

The benefit from the FCA sandbox

- We went in wanting data
  - 400M unique user transactions
  - 7M unique users
  - 600K unique businesses

- Adding data for our needs
  - Mobile / Web based transaction information
  - Password resets
  - Driving Licences / Passports
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A lot more than just a technical integration

Thank you

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