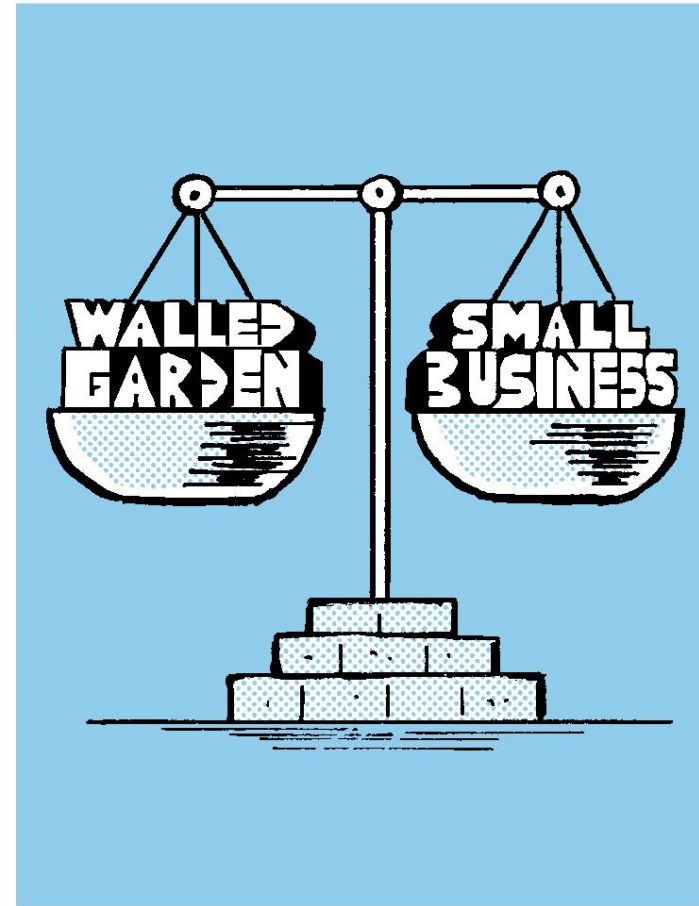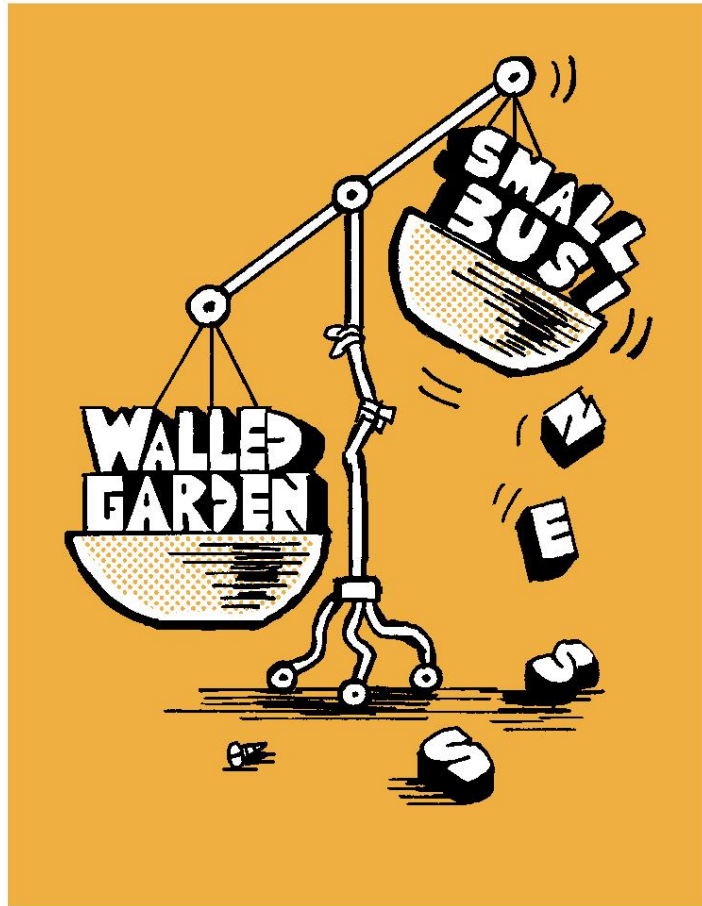# Agenda

- Concepts (15 mins)

- Demo (10 mins)

- Next steps (10 mins)

- Q&A

# Just some of SWAN's contributors

**Christian Cockcroft**
Lawyer - Privacy, Antitrust
& Regulatory

**Hardeep Bindra**
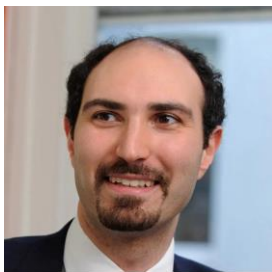Product Management

**James Rosewell**
Engineer &
Entrepreneur

**Joe Dix**
Engineer

**?**

You

**Joshua Koran**
Programmatic
CTO

**Sherif Malak**
Lawyer -
Privacy

**Tim Cowen**
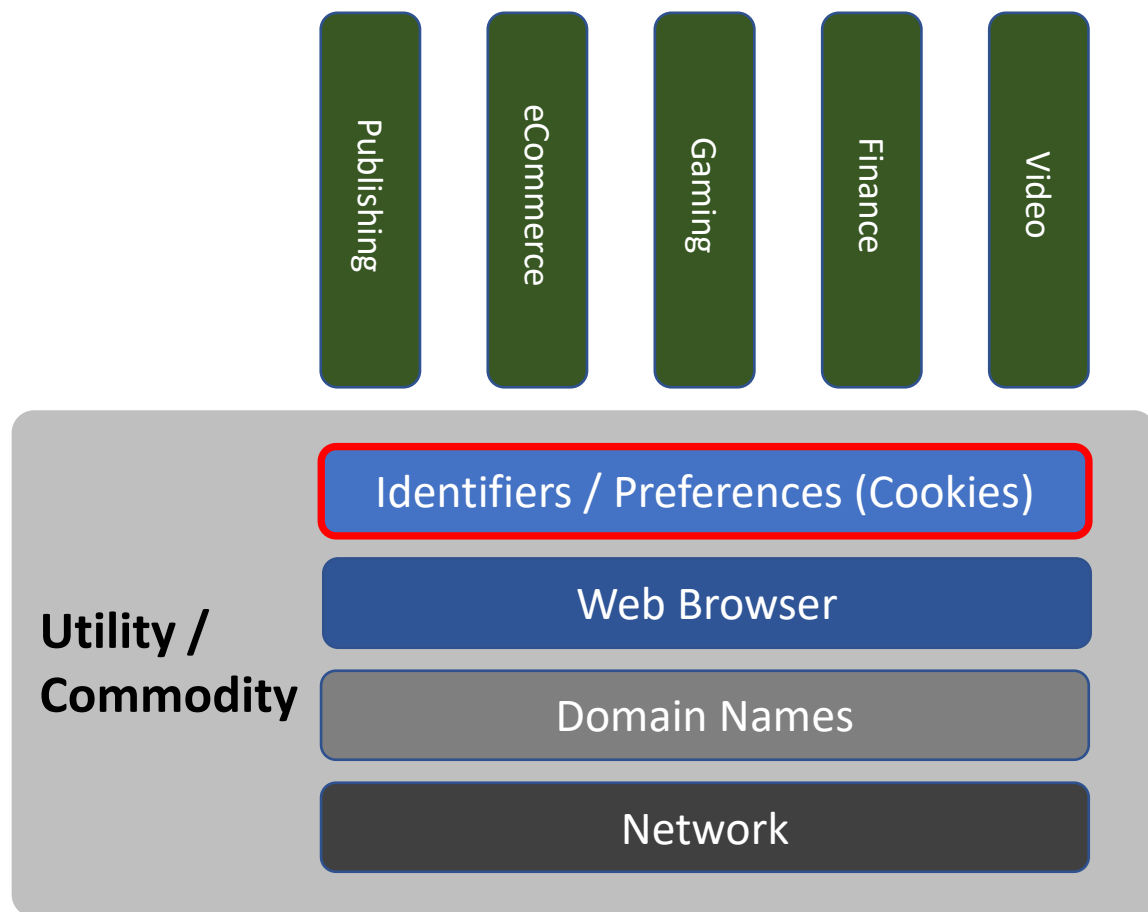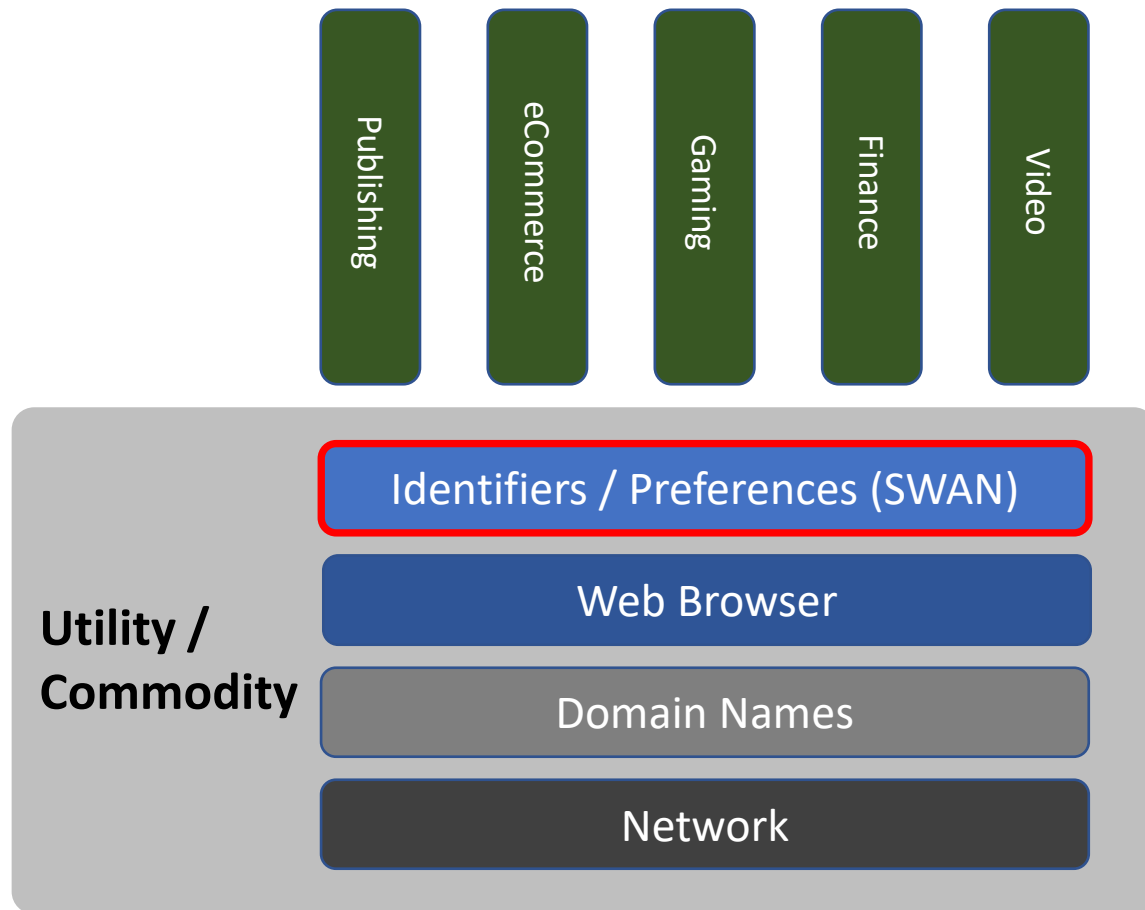Lawyer – Antitrust
& Regulatory

**Tracy Barlow**
Marketing

**?**

You

# Identifiers / Preferences - Utility

Publishing

eCommerce

Gaming

Finance

Video

**Utility / Commodity**

Identifiers / Preferences (Cookies)

Web Browser

Domain Names

Network

# Identifiers / Preferences - Utility

Publishing

eCommerce

Gaming

Finance

Video

**Utility / Commodity**

Identifiers / Preferences (SWAN)

Web Browser

Domain Names

Network

- SWAN is a utility – like domain names

- SWAN addresses access and transparency issues with cookies

- Recognises problem is not just about engineering, but law, economics, politics **and** engineering

# Current situation

**We all agree**

- Improve respect for people's privacy when using digital services

- Build trust

- Comply with laws

- Detect & sanction bad actors

**Proposed Solutions**

- Web browser knows best

- Focus on centralized control, not utility

- Serious competition issues
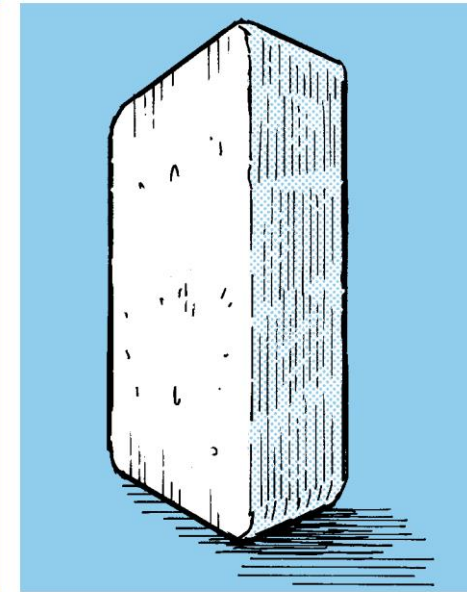
**Confusion, frustration and stress**

# Bounded Rationality

is the idea that, individuals' decision making is limited by access to information, cognitive limitations of the mind and the time available to make the decision.

Accordingly, people often seek a *satisfactory rather than an optimal solution*.



## Stop playing "Jenga"

# Centralized

**Signs of centralization:**

- words like "web browser will…"

- single administrator

- single-domain.com

- register of participants

**Leads to:**

- How does my organization become the 'one'?

- What can we do if the 'one' abuses its power?

- How will this impact publishers, if the 'one' begins charging a 'tax' for continued access?

# Centralized Solutions

Operate and Govern
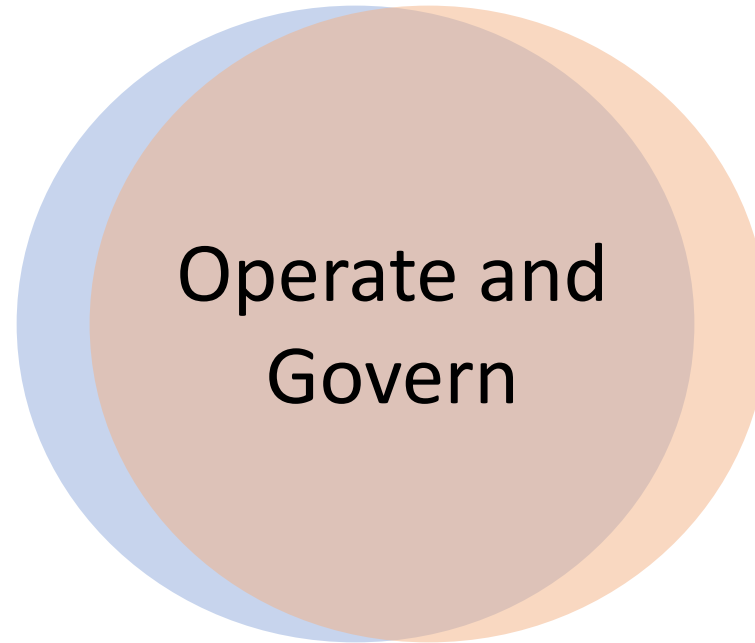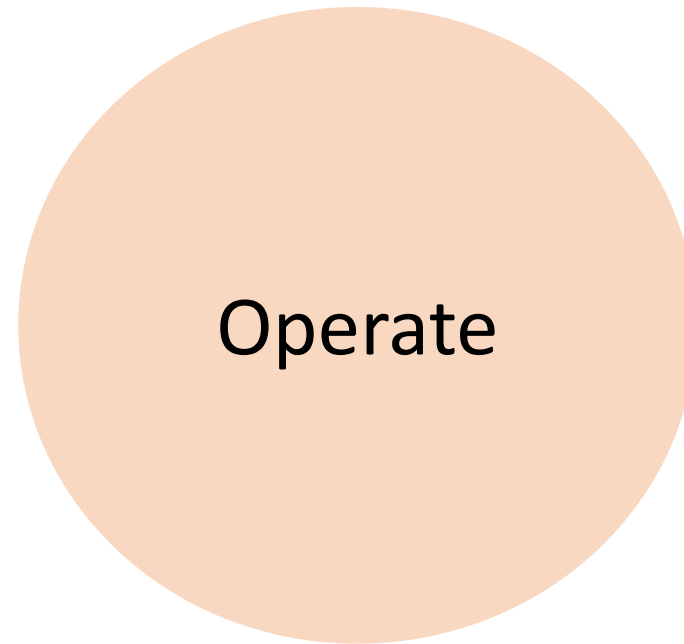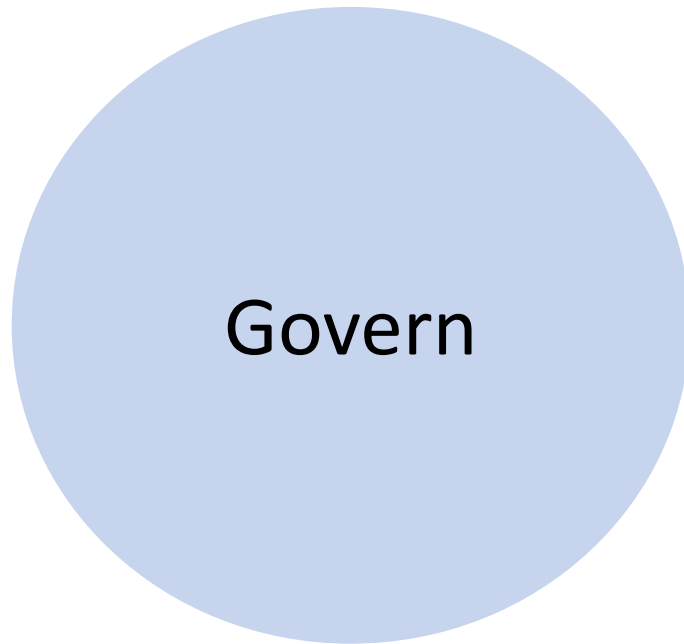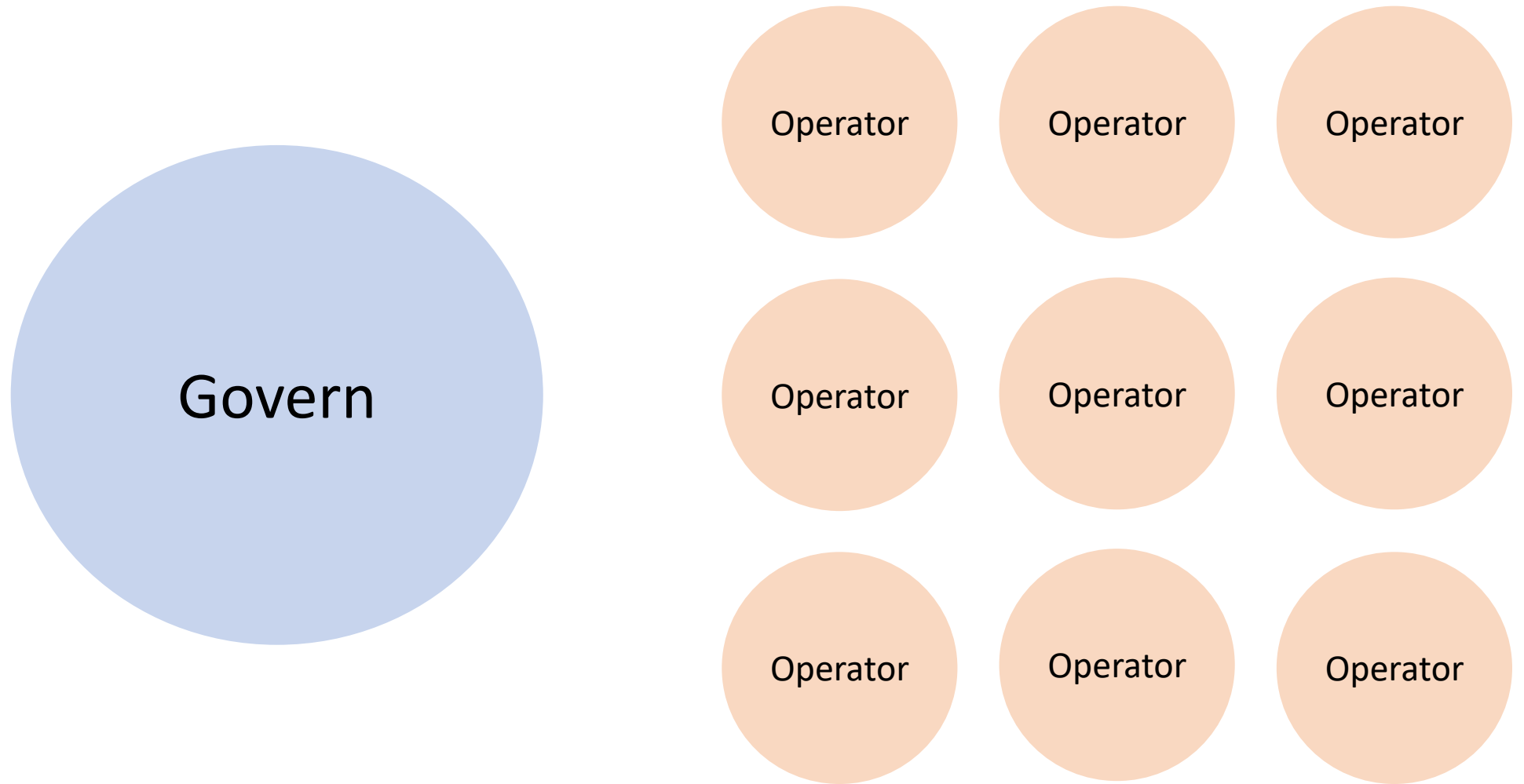
# Neutral Solutions

Govern

Operate

# Decentralized Solutions

Govern

Operator Operator Operator

Operator Operator Operator

Operator Operator Operator

# Regional differences

**Europe Laws**

**US Laws**

# This is not a new problem

Show whole month

Additional bag fees may apply

🔔 **Get Price Alerts**

699 results

Sort by **Best** ▼

## Stops ⌃

☐ Direct
None

☑ 1 stop
£488

☑ 2+ stops
£490

ℹ Want to know the latest travel restrictions for United States?

See travel info

| Best | Cheapest | Fastest |
|---|---|---|
| **£518** | **£488** | **£2,219** |
| 14h 16 (average) | 16h 02 (average) | 13h 04 (average) |

🔄 **Flexible tickets** ⌃

☐ Only show airlines with flexible tickets

🛡 **COVID-19 safety rating** ⌃

☑ 5/5

☑ 4/5

☑ 3/5 or below

### Departure times ⌃

**Outbound**
00:00 – 23:59

BRITISH AIRWAYS
12:05 LHR — 18h 34 — 22:39 SFO
1 stop DFW
Operated by American Airlines

BRITISH AIRWAYS
10:00 SFO — 16h — 10:00+1 LHR
1 stop DFW
Operated by American Airlines

🔄 Flexible ticket       🛡 4/5 rating for COVID-19 safety measures

Sponsored
**£719**
Select →

Lufthansa
09:30 LHR — 15h 41 — 17:11 SFO
1 stop ORD
Operated by United

UNITED
10:45 SFO — 12h 50 — 07:35+1 LHR
1 stop ORD

1 deal
**£518**
Select →

# 2021 Predictions

2021
Digital Advertising
spend

2021
Commercial Aviation
spend

**$400B\*** **>** **$287B\*\***

\* https://www.statista.com/outlook/dmo/digital-advertising/worldwide
\*\* https://www.statista.com/statistics/263042/worldwide-revenue-with-passengers-in-air-traffic

# Design principles for Common Pool Resource (CPR) institution

1. Clearly defined (clear definition of the contents of the common pool resource and effective exclusion of external un-entitled parties);

2. The appropriation and provision of common resources that are adapted to local conditions;

3. Collective-choice arrangements that allow most resource appropriators to participate in the decision-making process;

4. Effective monitoring by monitors who are part of or accountable to the appropriators;

5. A scale of graduated sanctions for resource appropriators who violate community rules;

6. Mechanisms of conflict resolution that are cheap and of easy access;

7. Self-determination of the community recognized by higher-level authorities; and

8. In the case of larger common-pool resources, organization in the form of multiple layers of nested enterprises, with small local CPRs at the base level.

Elinor Ostrom - Wikipedia

# SWAN – Key features

- Separates operation from administration
- Requires common rules for Operators to follow
  - Data model
  - Quality of service
  - Transparency to people and all stakeholders
- Incentivise price competition among Operators
- Limited administration to extensibility and improvements

# Demo time

Follow along at https://new-pork-limes.uk

See https://swan-demo.uk/example.html for JavaScript code

*"A device that automatically accepts/rejects all internet cookies without asking every time."*

Matthew Parris – UK journalist and 'national treasure'
#28 - The 31 inventions that Britain really needs

# Binding Legal Terms

# APIs



SWAN Operator

Cookies

New cross domain browser state

Storage Options

Access Controller

Update

Retrieve*

CMP (User Interface)

Retrieve#

Advertising Environment

Pub. / SSP

Offer ID
Transport: OpenRTB
Encoding: OWID

\* Directly identifiable personal information retrieved for editing purposes
\# All directly identifiable personal information irreversibly hashed

https://github.com/swan-community/owid
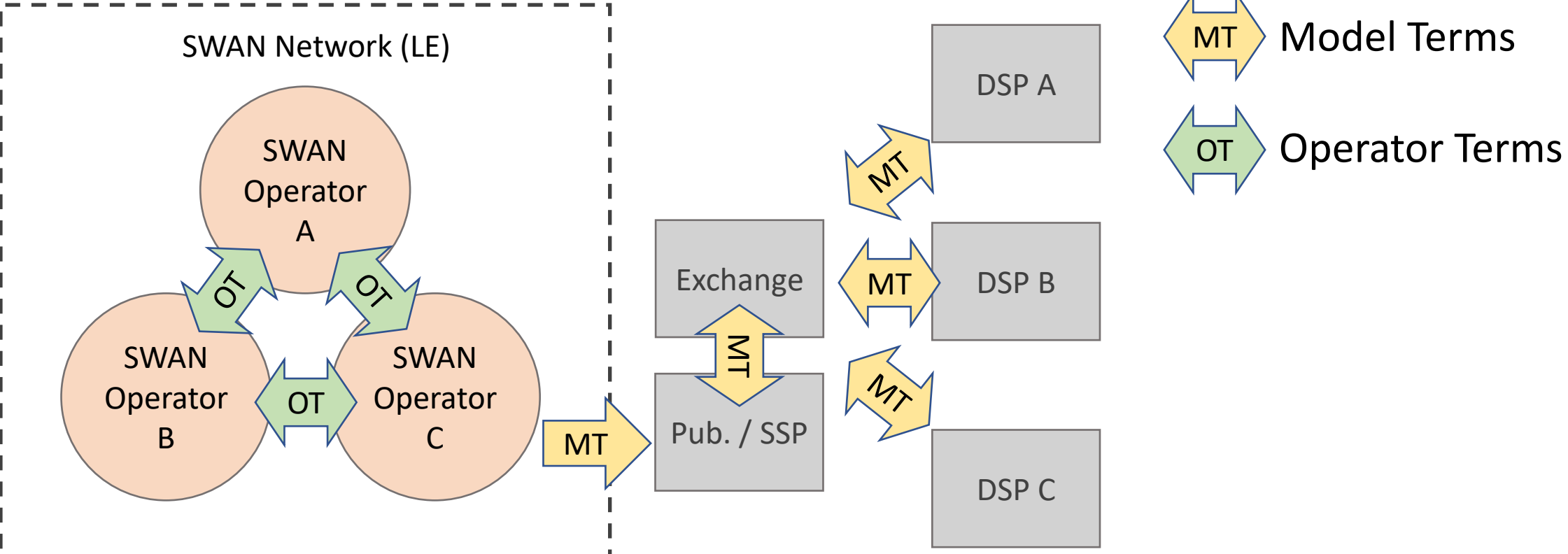
# SWAN – Key Considerations

- Developed in constant dialogue with major regulators

- Complies with GDPR and ePrivacy principles and law

- Enhances the W3C security and privacy model to recognise data controllers and processors as defined by major law makers

- Route to browser adoption and new standard

- Designed with standards in mind
  Cookies [RFC6265], HTTP temporary redirect [RFC7231] & HTTP URL [RFC3986]

# SWAN complements other options

| Requirements | Data Scale & Reach | Accuracy & Precision | Real Time Feedback | Global Frequency Capping | View-through Attribution | Auditability by Individuals & Regulators | Open Source |
|---|---|---|---|---|---|---|---|
| **SWAN SWID** | ● | ● | ● | ● | ● | ● | ● |
| SWAN's scale and cross-publisher optimization makes UID2, Contextual and Publisher 1P data solutions more valuable and actionable. | | | | | | | |
| **UID2.0** | ◐ | ◐ | ● | × | × | ● | ● |
| While providing great cross-device recognition capabilities, hashed email solutions lack scale and the ability to offer view-through attribution and lift measurement to marketers. | | | | | | | |
| **Privacy Sandbox** | ● | ◐ | × | ◐ | × | × | × |
| Privacy Sandbox offers scale, but fails to provide accurate engagement, cross-publisher frequency capping or lift measurment. | | | | | | | |
| **Contextual** | ● | ● | × | × | × | × | × |
| Contextual provides great engagement capabilities, but does not meet other aspects of campaign optimization from frequency capping to lift measurement. | | | | | | | |
| **Pub 1P Data** | ◐ | ◐ | × | × | × | × | × |
| Publisher 1P data provides great engagement, but its value is directly proportional to scale. The lack of cross-site portability not only fragments marketers' media buying, but also does not meet cross-publisher frequency capping or lift measurement. | | | | | | | |
| **Clean Rooms** | ◐ | ◐ | × | × | ◐ | × | × |
| Clean Rooms provide great analytics, but do not provide cross-publisher frequency capping or cross-site optimization. | | | | | | | |
| **Differential Privacy** | ● | × | × | × | ◐ | × | × |
| Differential Privacy can provide scaled analytic solutions, but does not support smaller publishers given the lack of accurate engagement, cross-publisher frequency capping and real-time optimization. | | | | | | | |

See https://swan.community/how-we-compare

# Stakeholders

- People
  - removes consent fatigue
  - builds trust via improved transparency and accountability
- Publishers
  - restore full addressability from day one
  - improved control over experience
- Advertisers
  - get what they pay for & enables detection of publisher fraud
- Web browsers
  - simple solution to address primary problem of privacy and trust

# Roadmap to maturity



SWAN

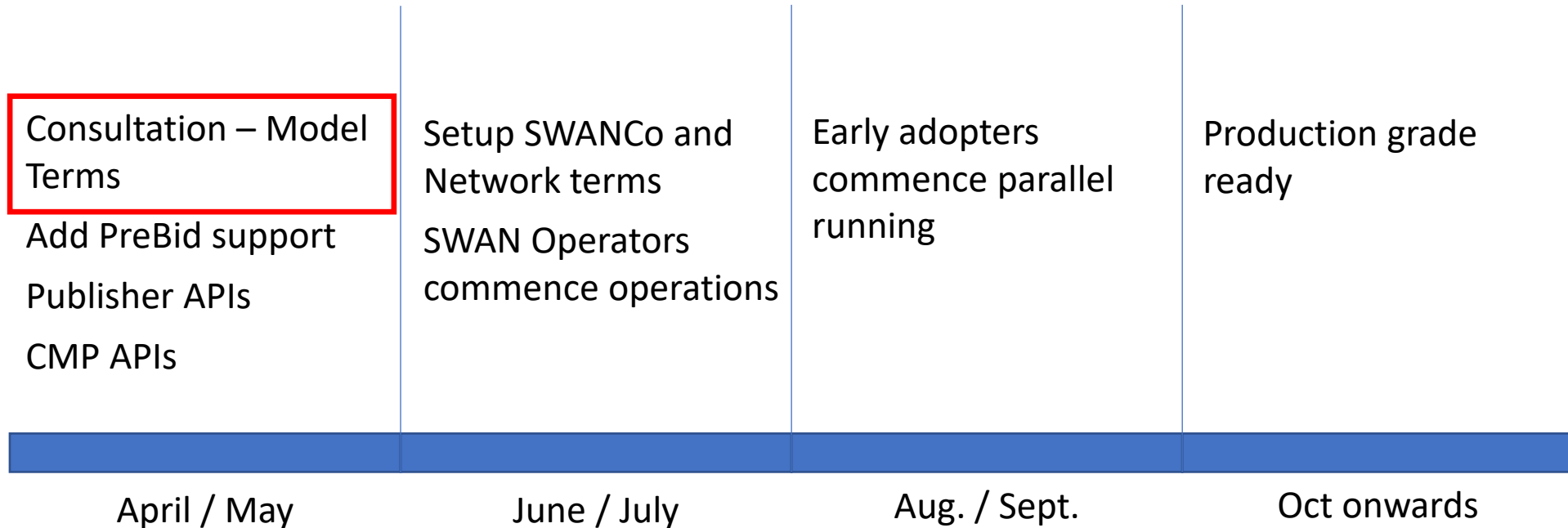Web browsers with SWAN embedded

Current web browsers
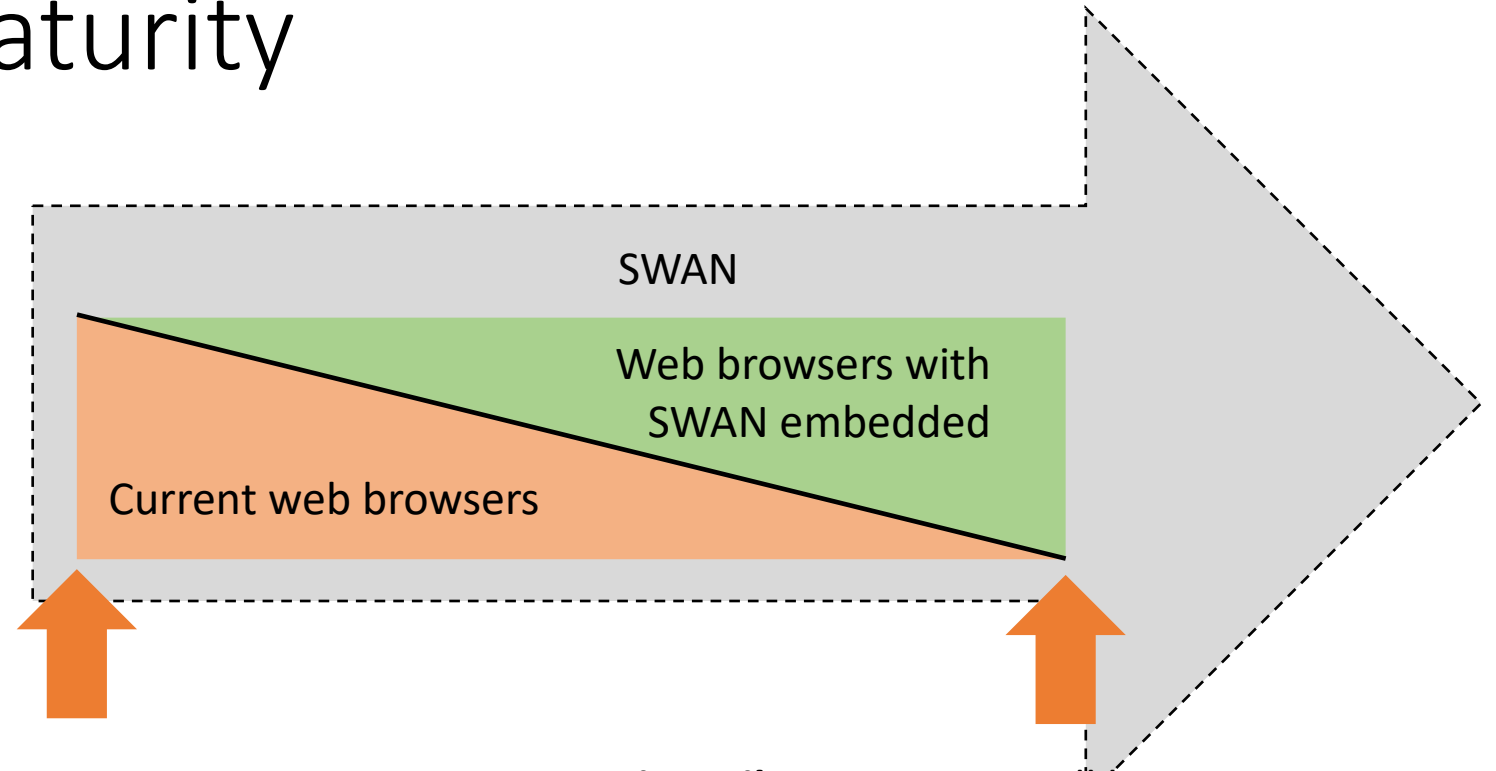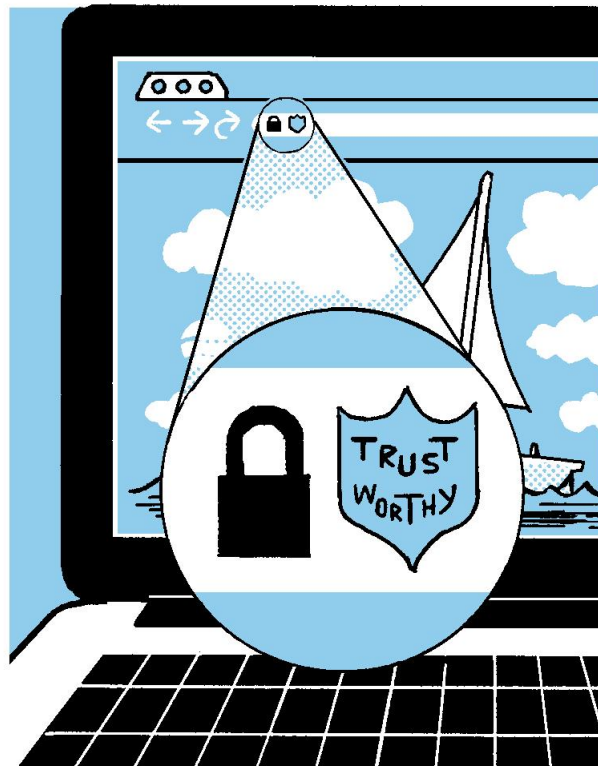
**Today** – SWAN enabled by first party cookies

**Major milestone** – once all browsers embed SWAN there will be no need for SWAN Operators.

SWAN Co. continues to govern Model Terms and the browser standard.

# Roadmap to launch

| Consultation – Model Terms | Setup SWANCo and Network terms | Early adopters commence parallel running | Production grade ready |
|---|---|---|---|
| Add PreBid support | SWAN Operators commence operations | | |
| Publisher APIs | | | |
| CMP APIs | | | |
| **April / May** | **June / July** | **Aug. / Sept.** | **Oct onwards** |

**No new technology or legal issues – low risk timeframe**

# Next step

# Q&A

1. Support it – SWAN's presence will alter the debate – add your logo to the demo pages / feedback on Model Terms

2. Work on it – SWAN is 100% open source

3. Do nothing – stay neutral - the easy option

4. Rubbish it (but verify correct understanding first)