fake, fraud & frenemy – Blockchain to the rescue?

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Global Client Lead, WPP

WPP

fake

feɪk/
noun

one that is not what it purports to be; a **forgery** or sham; worthless **imitation** passed off as genuine.

fraud

frɔːd/
noun

wrongful or criminal **deception** intended to result in financial or personal **gain**.

frenemy

frenemy/
noun

working relationship despite obvious **conflicts of interest** in a commercial venture.

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fake news

feɪk/
noun

deliberate **disinformation** spread online and in social media with the intent to **mislead** or deceive in order to **gain** financially.

ad fraud

frɔːd/
noun

practice to represent online advertisement **impressions**, clicks, conversion or data events in a **deceitful** manner.

frenemies

frenemy/
noun

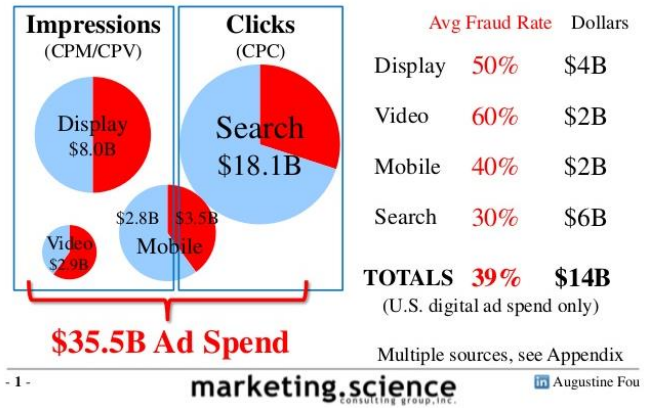
gardens where data is partially or intentionally **withheld** in their own servers in order to protect their own **commercial** pursuits.

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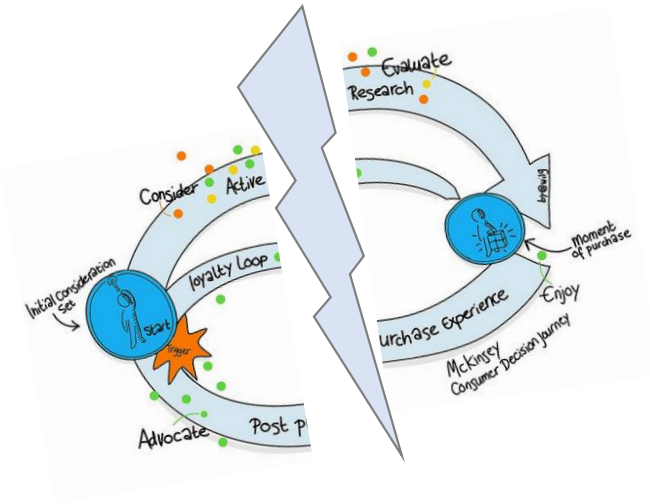
fake news

~9,000,000
Facebook interactions generated by the top 20 fake news stories during the 2016 US election
#WhatTheFuture

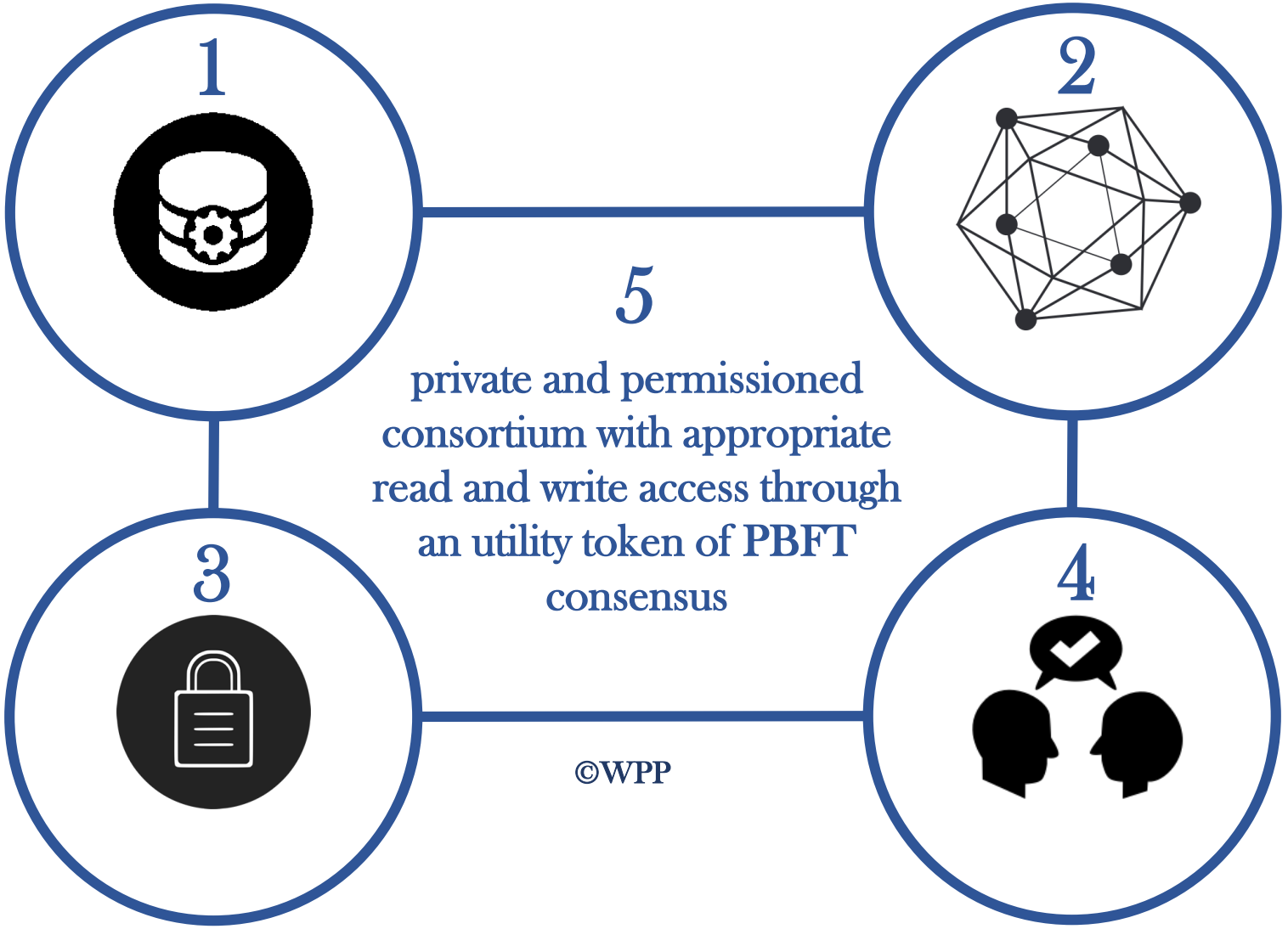
ad fraud



frenemies



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asymmetric exchange

marketer

want to **reach** and **engage** consumers fully and meaningfully; and **verify** the message they've paid a platform to **deliver** did, in fact, reach a real **human** at a cost that is **commensurate**.

platform

want a fair **exchange** of value as **rapidly** as possible for performing their task, allowing them to **generate** more and/or better site **content** to build their **user base**.

consumer

want **access** to content as **inexpensively** as possible, without being exposed to **intrusive** or **irrelevant** messaging, and without feeling they're being **spied** on.

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1. brief history of data



web 1.0

1970 – 2000/
relational databases

relational databases, structured query language; object oriented databases; visual basic & Y2K!

web 2.0

2000 – 2018/
internet intermediaries

hadoop, non-SQL to new SQL emergence of search, social and digital platforms.

web 3.0

2018 – 2025.../
translytical data platforms *

real-time applications, connected devices; transactional analytics and distributed databases.

* Forrester created this term

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65% of data is from the world outside our own



CRM; Back Office Systems; Workflow & ERP; Personal Productivity; Business Intelligence; Machine Learning; E-Mail; E – Commerce; APIs; Mobile Applications; Big Data

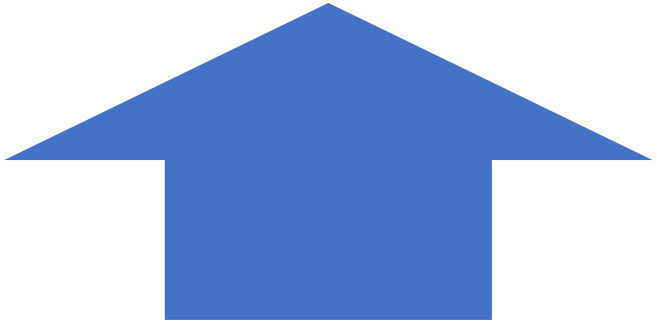
owning ‘data castles’ are a thing of the past

distributed databases



secure, transparent and reliable
autonomous, economical and relevant
improved performance
modular query management

disconnected taxonomy
multiple infrastructure
difficult to maintain integrity
concurrency control



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Distributed Ledger Technology

▲

{blockchain}

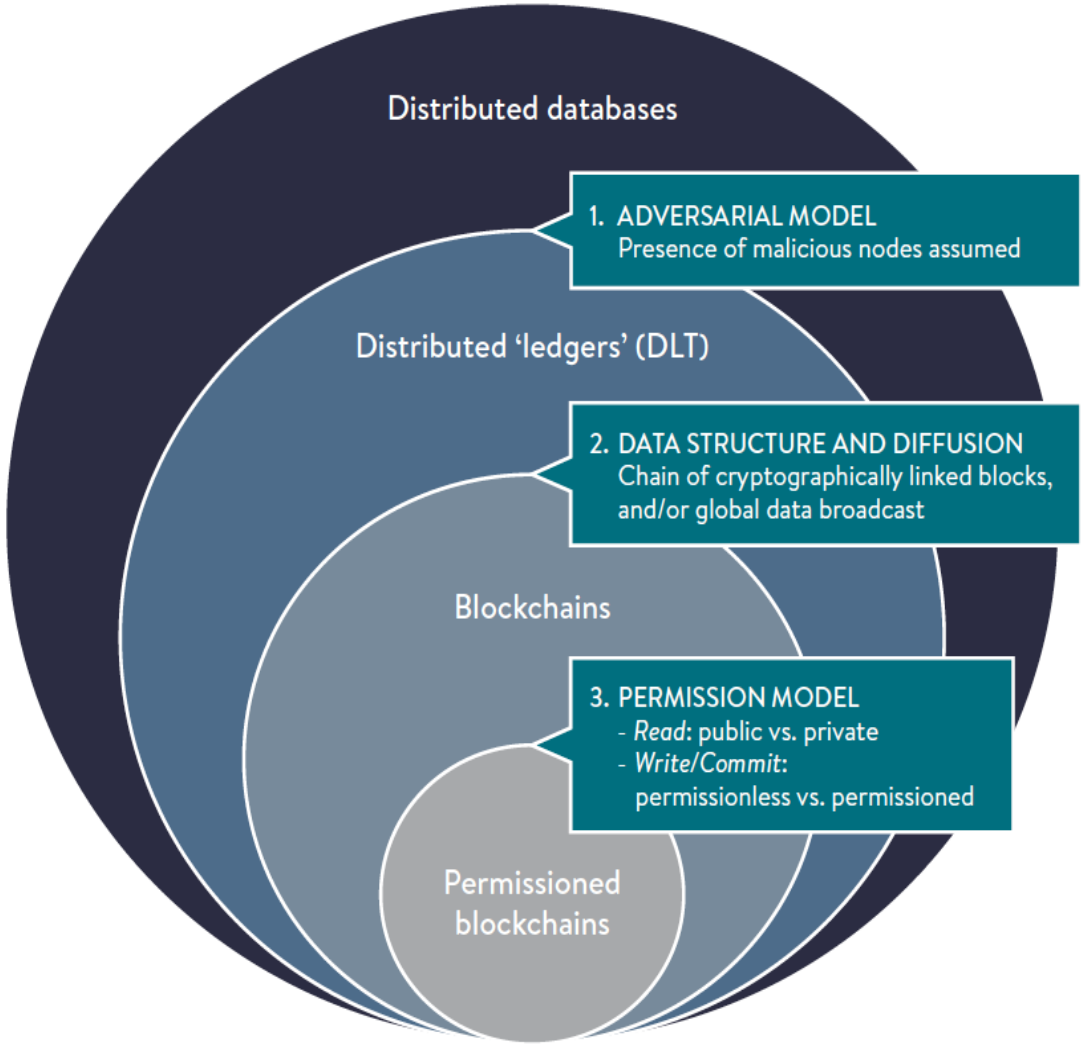
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bitcoin

≠

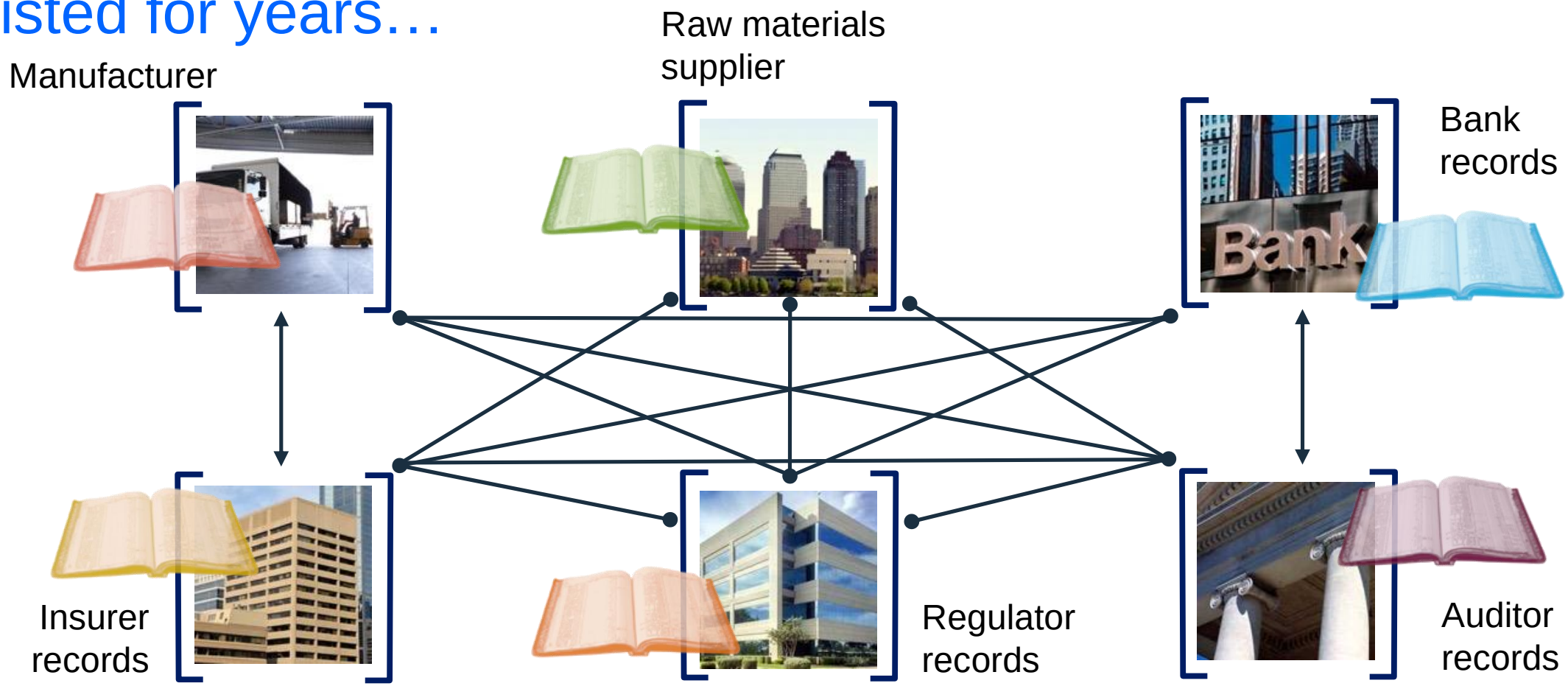
blockchain

Source: University of Cambridge Global Blockchain Benchmarking Study

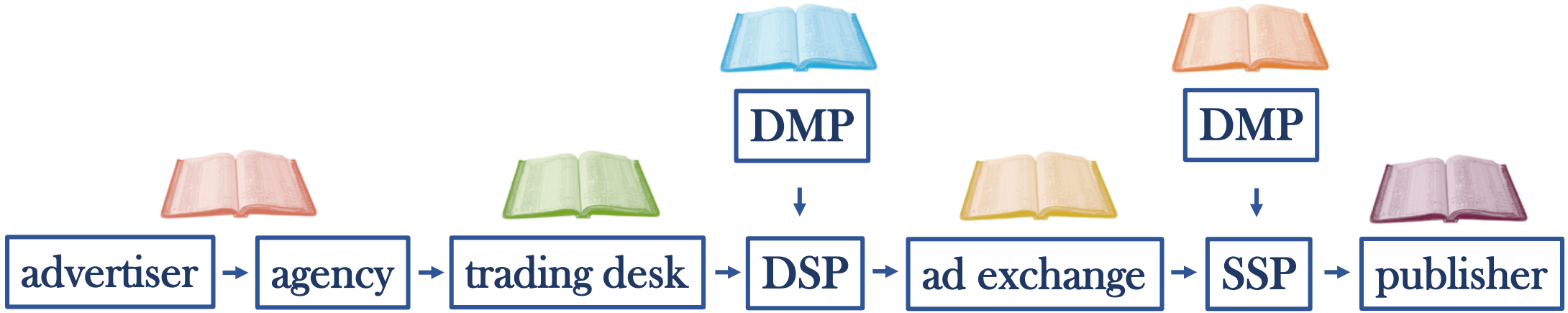


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Inefficiencies in business-to-business processes have existed for years…



… creating an expensive, vulnerable ecosystem lacking trust and transparency

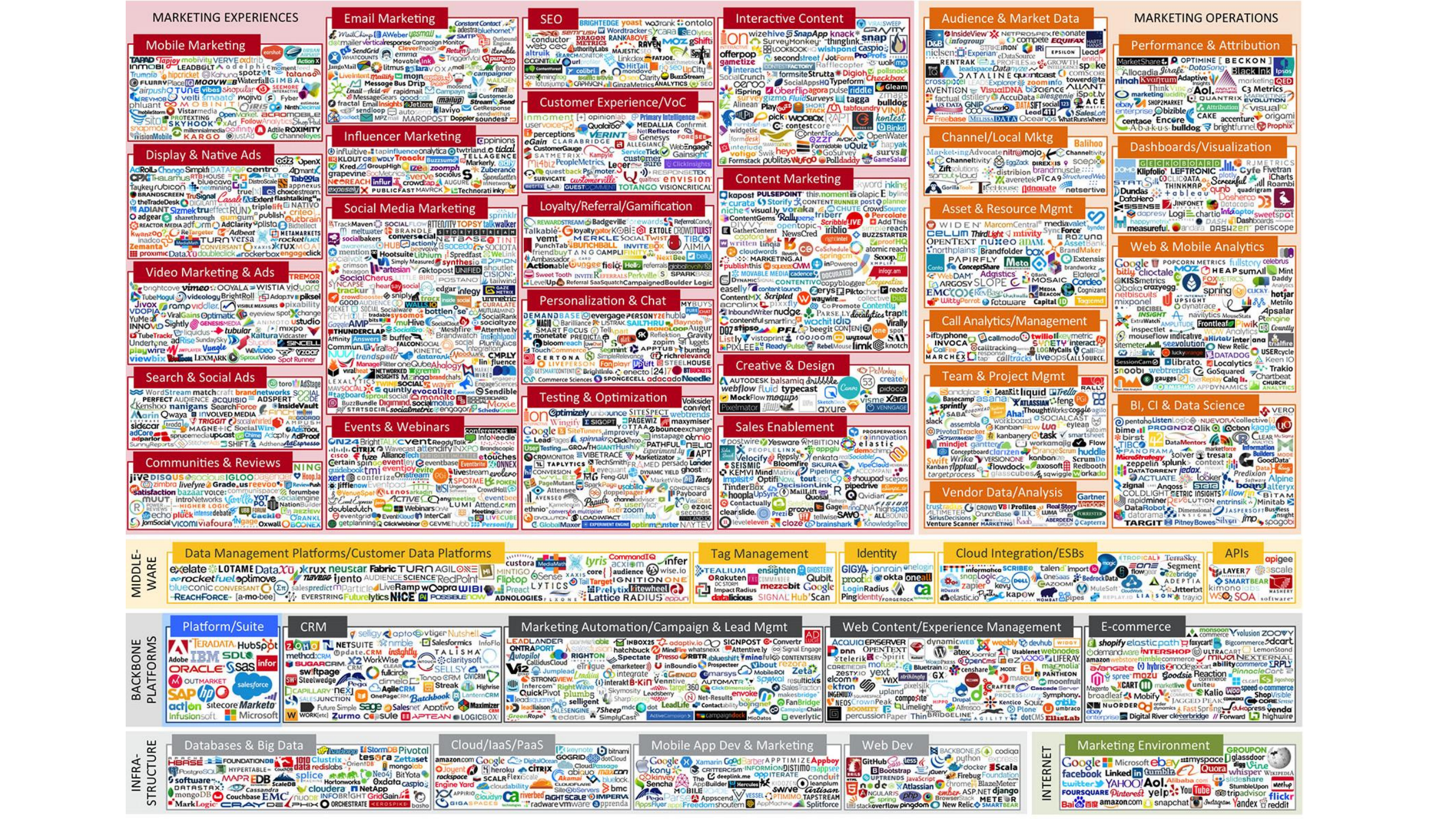


1$

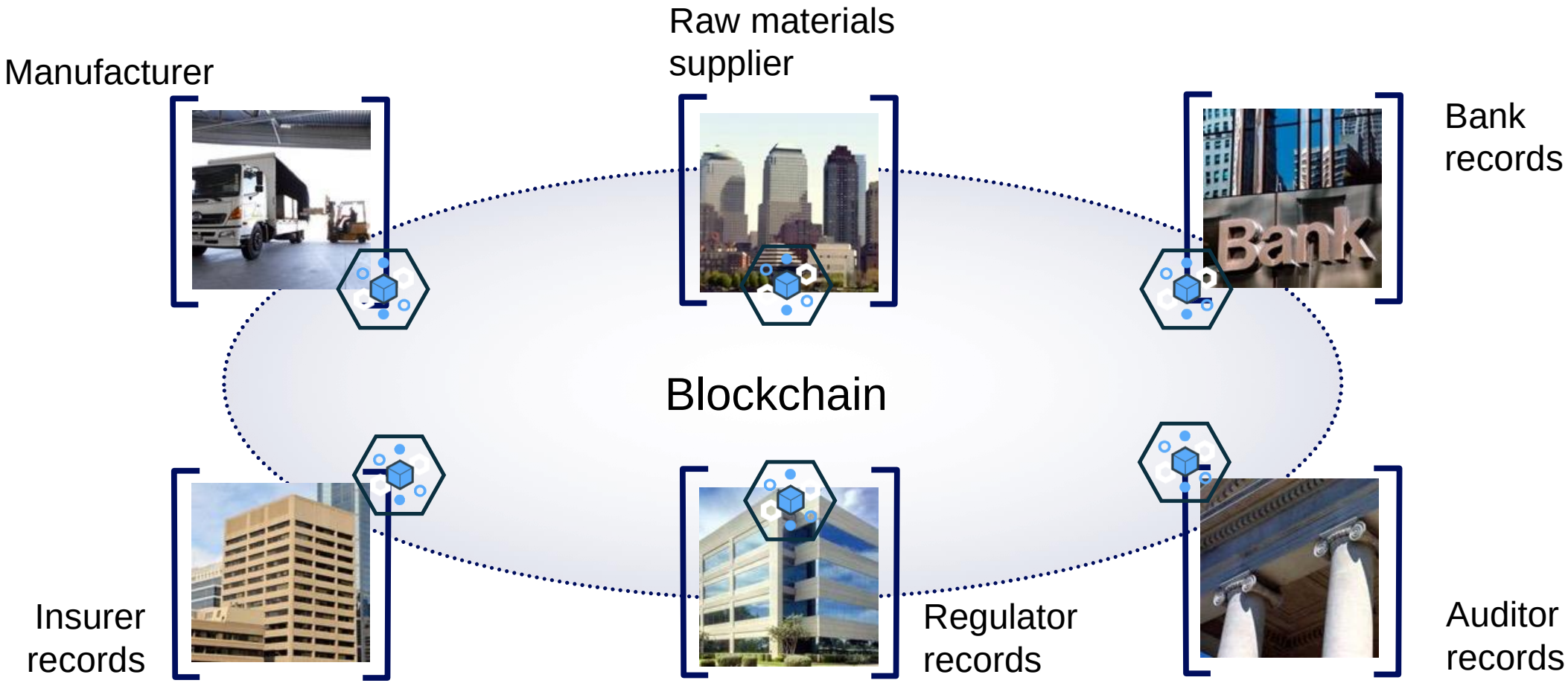
estimated at 70 Bn USD in 2018, programmatic spends is **perceived** to have nearly 35 Bn USD across the supply chain, sometimes also called as **non working media**

0.5$

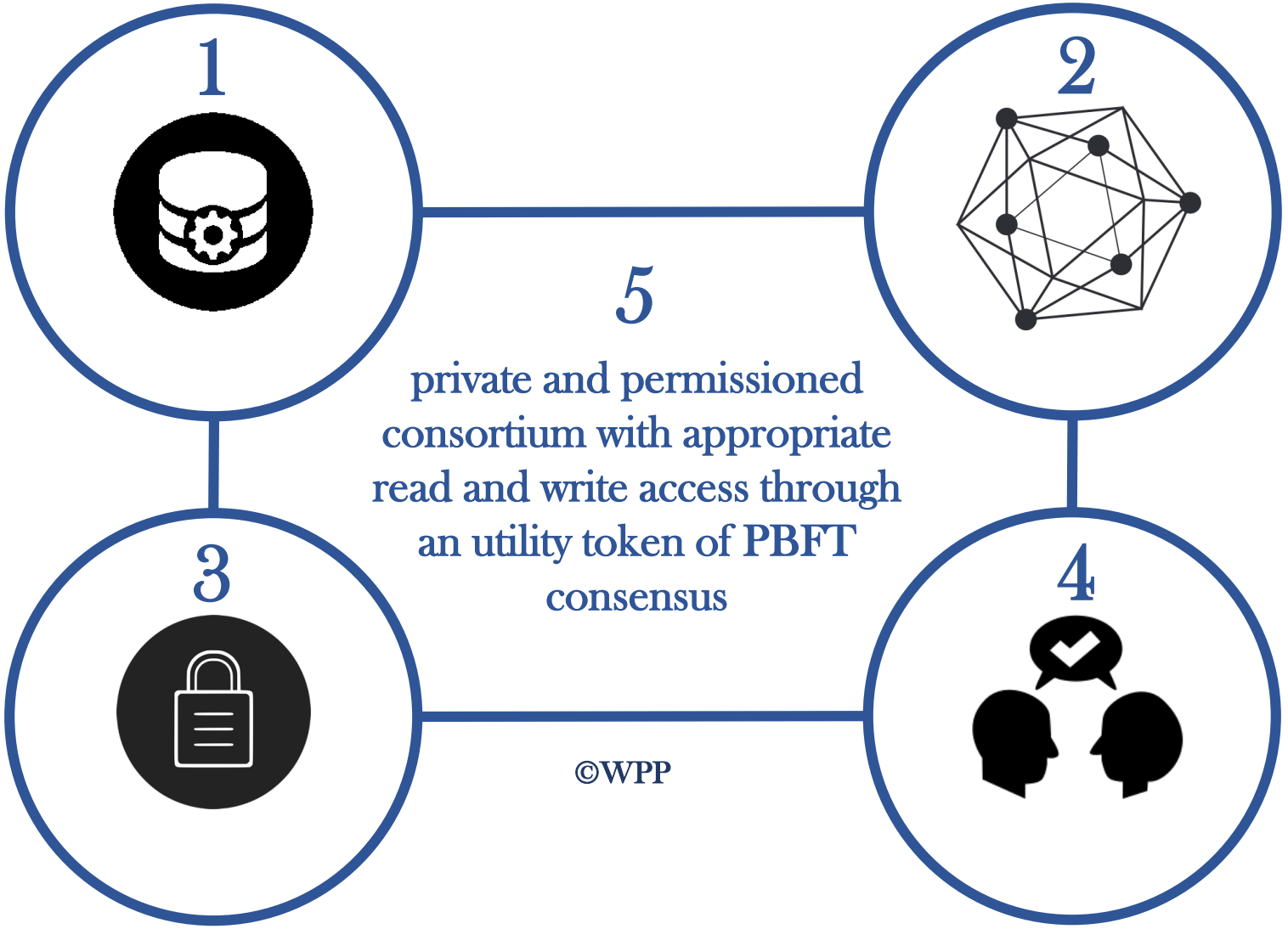
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MARKETING EXPERIENCES
Mobile Marketing
Email Marketing
SEO
Interactive Content
Audience & Market Data
MARKETING OPERATIONS
Performance & Attribution
Display & Native Ads
Influencer Marketing
Customer Experience/VoC
Channel/Local Mktg
Dashboards/Visualization
Video Marketing & Ads
Social Media Marketing
Loyalty/Referral/Gamification
Content Marketing
Asset & Resource Mgmt
Web & Mobile Analytics
Search & Social Ads
Personalization & Chat
Call Analytics/Management
BI, CI & Data Science
Communities & Reviews
Events & Webinars
Testing & Optimization
Creative & Design
Team & Project Mgmt
Sales Enablement
Vendor Data/Analysis
MIDDLE-WARE
Data Management Platforms/Customer Data Platforms
Tag Management
Identity
Cloud Integration/ESBs
APIs
BACKBONE PLATFORMS
Platform/Suite
CRM
Marketing Automation/Campaign & Lead Mgmt
Web Content/Experience Management
E-commerce
INFRA-STRUCTURE
Databases & Big Data
Cloud/IaaS/PaaS
Mobile App Dev & Marketing
Web Dev
INTERNET
Marketing Environment

Blockchain; a shared, replicated, permissioned ledger



… with consensus, provenance and immutability


1
2
5
private and permissioned consortium with appropriate read and write access through an utility token of PBFT consensus
3
4
©WPP

2. distributed ledger



who

a **consensus** of replicated, shared and **synchronized digital data**; **integrated taxonomy** with common standards, maintaining integrity

where

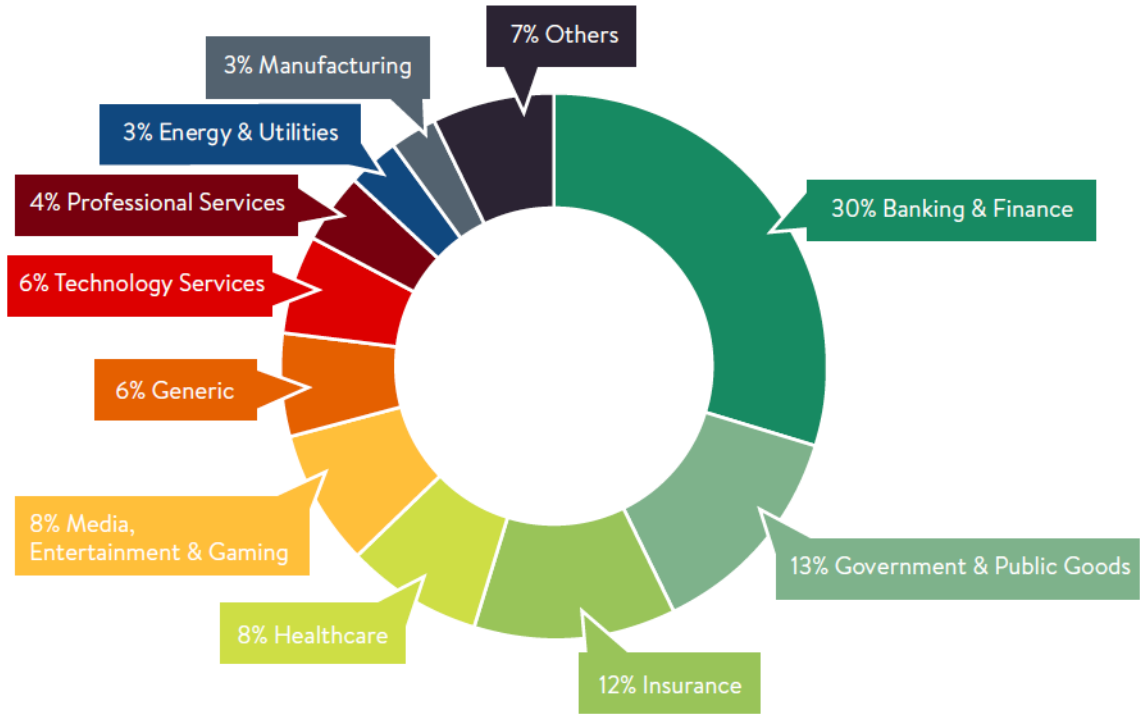
geographically spread across sites in multiple countries or institutions; **economical** to maintain; secure, **transparent** and reliable.

how

there is **no central administrator** or centralized data storage; **autonomous** with modular query management.

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is blockchain solution looking for a problem?



Note: This figure is based on a list of 132 use cases, grouped into industry segments, that have been frequently mentioned in public discussions, reports, and press releases.[33]

Source: University of Cambridge Global Blockchain Benchmarking Study

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IAB Explores The Future of Blockchain for Video Advertising in New Comprehensive Whitepaper

02.08.18

Report Presents Real World Use Cases for Publishers and Buyers & Identifies Benefits and Challenges

NEW YORK, NY (February 08, 2018) —The Interactive Advertising Bureau (IAB) today released "Blockchain for Video Advertising: A Market Snapshot of Publisher & Buyer Use Cases," an in-depth whitepaper that uncovers strong use cases for blockchain technology in digital video advertising, with a focus on over-the-top (OTT) advertising. The paper acknowledges that blockchain has captured the public's attention through the skyrocketing growth of cryptocurrency, but also illustrates that the technology is a natural fit for the digital advertising supply chain—potentially enabling increased efficiencies and a more trustworthy supply chain, as well as reducing cost and fraud for publishers and buyers.

The report outlines the foundational structure of blockchain technology, including terminology and then deep dives into blockchain use cases in digital advertising, exploring applications such as

Will Ads.cert Be The IAB's Next Big Inventory Clean-Up Play?

by James Hercher *// Wednesday, December 6th, 2017 – 12:46 pm*

Share:

Both the adoption of Ads.txt and commercialization of blockchain solutions have the IAB optimistic about the prospects for Ads.cert, a follow-up to Ads.txt that uses cryptographic security measures to authenticate inventory.



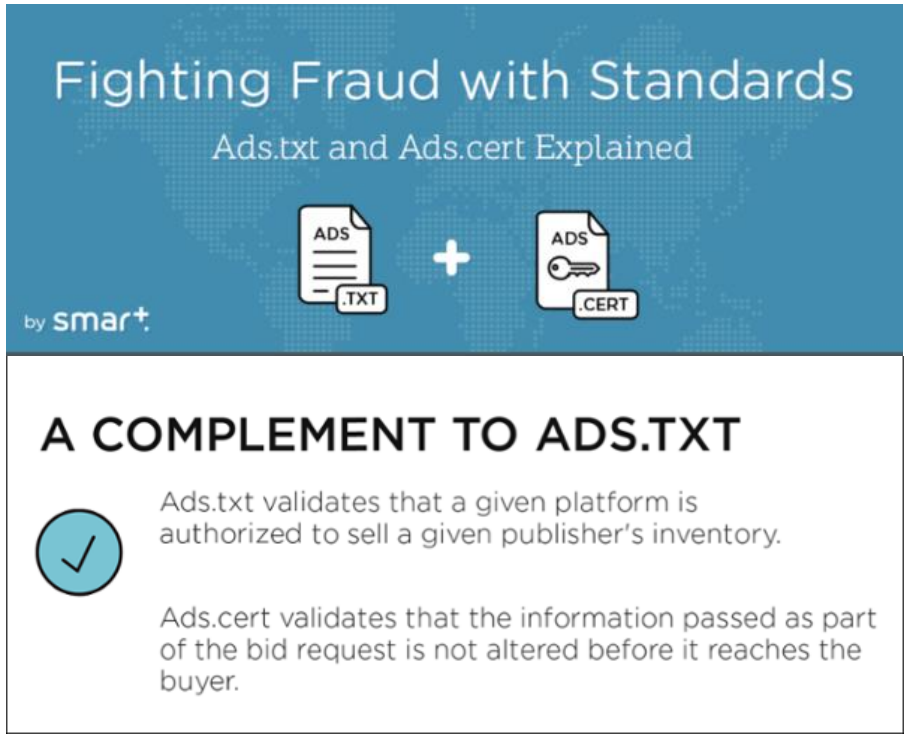
A Weak Link In The Chain

While Ads.txt helps authorize inventory sources, it doesn't solve the authentication problem, said Neal Richter, CTO of Rakuten Marketing and co-chair of the IAB's openRTB working group.

There's a subtle but important difference between authorization and authentication. Authorization grants permission to enter a designated area, but if an entity isn't properly authenticated, it might gain entrance when it shouldn't.

Ads.txt is a good tool to authorize inventory and avoid domain spoofing, but its loopholes have already been exploited by ad tech and media companies.

Some tech vendors have pressed publishers to add them to Ads.txt files to continue reselling inventory. And ad fraud researcher Augustine Fou said he's seen networks of scam publishers add their own Ads.txt files or duplicate the Ads.txt page of reputable players to continue selling garbage inventory on lax DSPs.



So, everyone will jump on this, right?

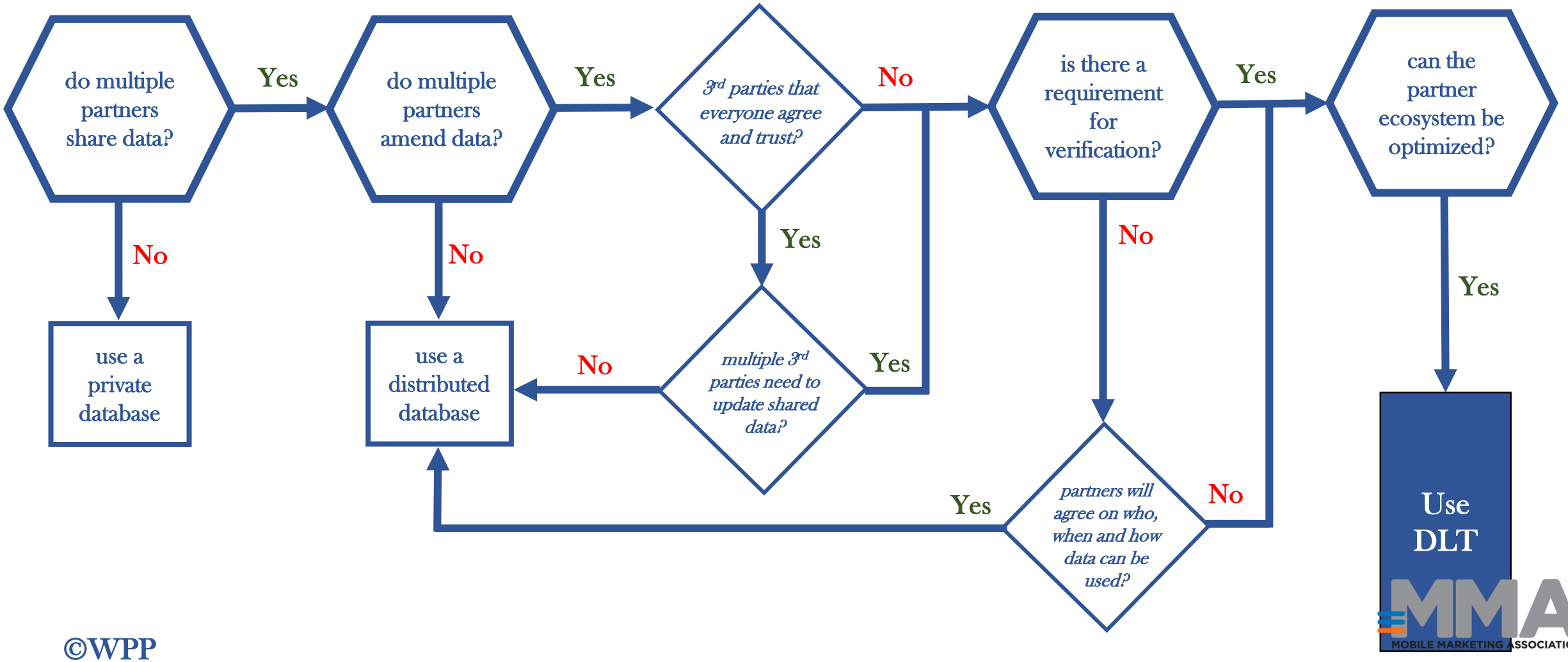
Not so fast. Ads.cert can only be implemented if a company has upgraded its tech infrastructure from OpenRTB 2.5 to version 3.0, which was released by the IAB and designed to handle new kinds of programmatic buying and selling such as header bidding, content sales, product recommendations and connected TVs.

What will it take to upgrade?

OpenRTB 3.0 is not backward compatible, meaning that you can't use it with existing legacy technology systems. Demand-side platforms, SSPs and exchanges will have to pay hefty engineering costs in order to become compatible.

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blockchain in programmatic



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3. cryptography



code

written as a **program**; between consenting individuals; option to remain **anonymous**; in a distributed ledger **cryptographically**.

trigger

an event like an **expiry date** and strike price is hit and the contract **executes itself** according to the coded terms.

privacy

use the ledger to understand the activity in the market while maintaining the privacy of **individual positions**.

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4. consensus protocol



authentic

contains a **signature from the owner**; shows the authentic path; untampered message; can run **forensics** within and outside the path for **verification**.

authorised

necessary **permissions** to perform an activity; linked to authenticity but provides **assurance** the information is going to the correct entity.

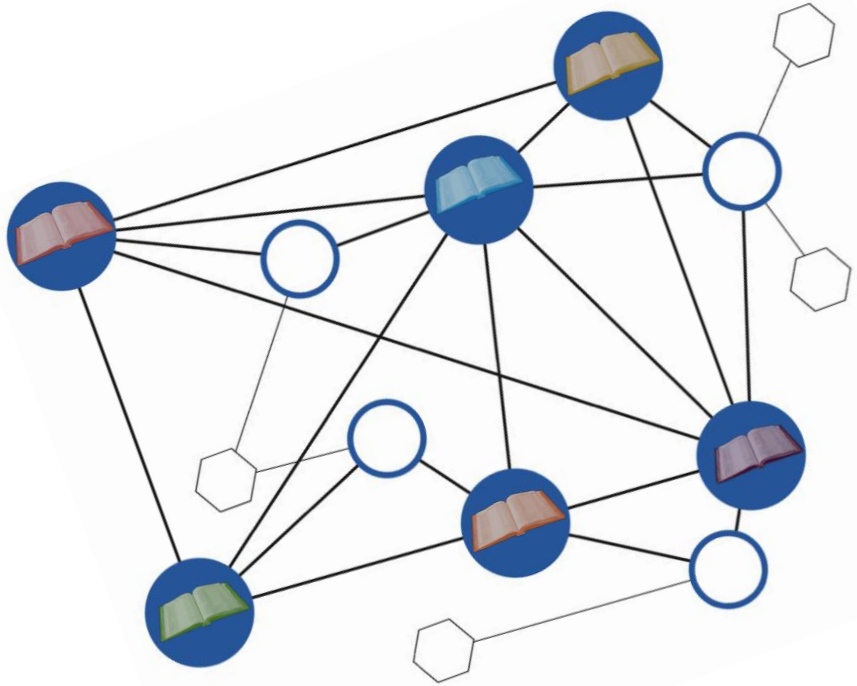
approach

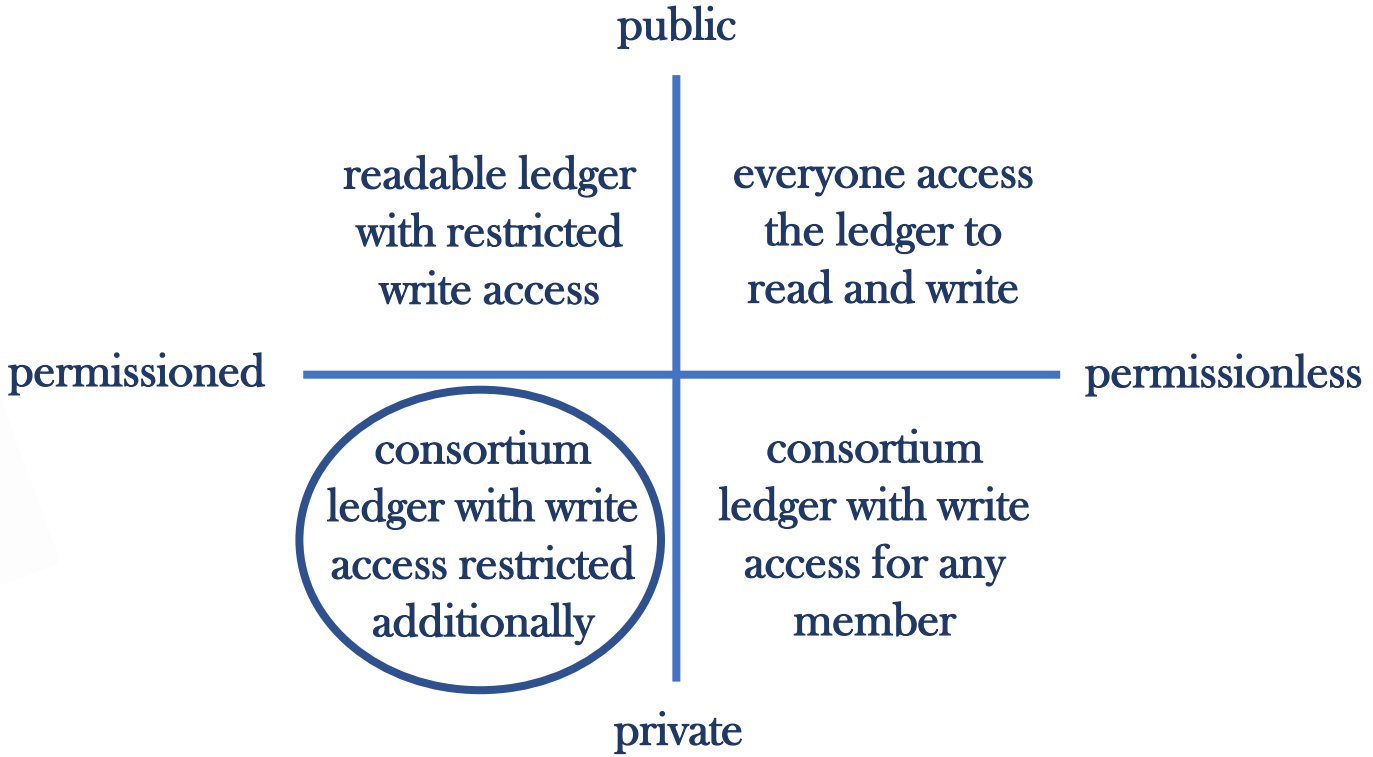
cryptographic reconciliation by providing **proof points**; through **algorithms** – Proof of Work, Proof of Stake and PBFT.

{trustworthy, inter-operatable, transparent, scalable and replicable}

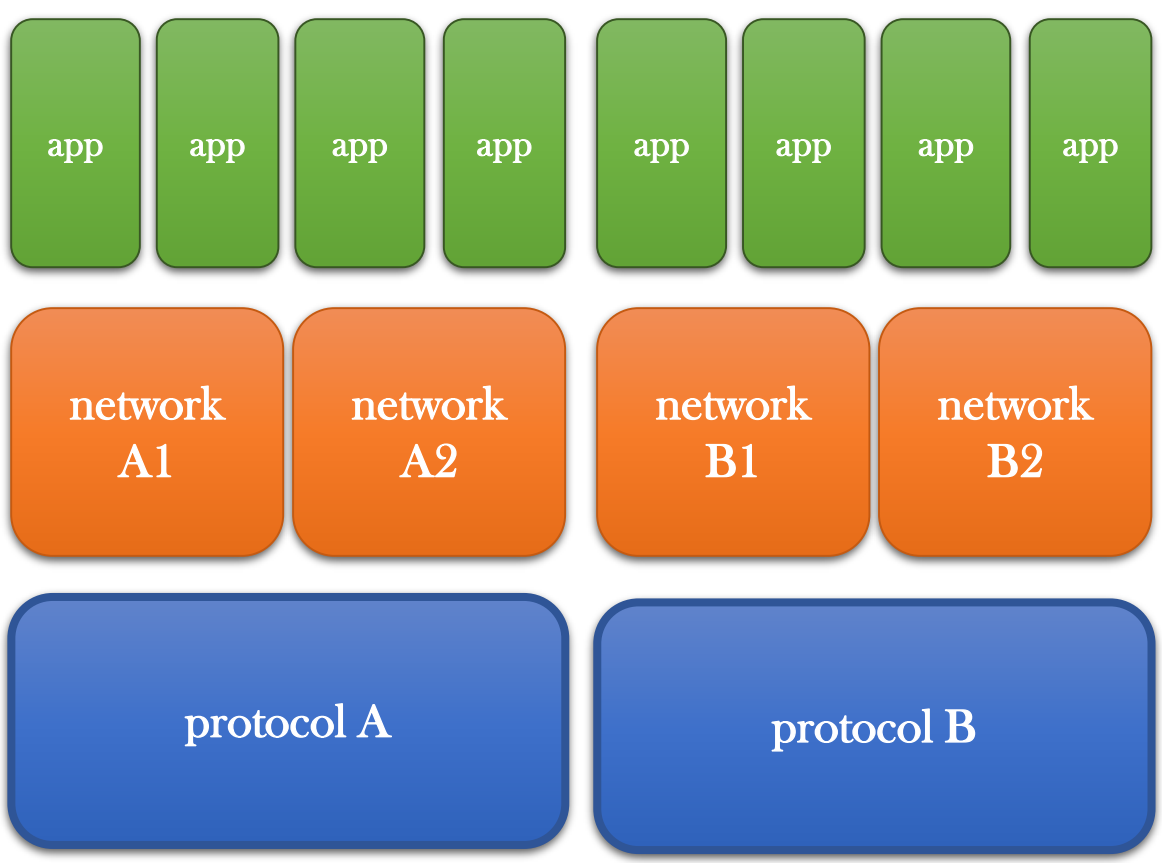
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5. platform architecture





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primary user interface with products and services

P-2-P network that brings ledger to life

core infrastructure software

Framework adapted from Colin Platt

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LEARN MORE AT: http://bit.ly/BlockchainMarTech

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potential use cases

efficient



media supply chain management



reconciliation & billing

effective



data management



identity

impactful



asset provenance & tracking



content authenticity

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Comcast blockchain insights platform

matching audience datasets — without sharing identities

secure exchange of non-personal, audience insights for addressable advertising

improved ad planning, addressable targeting, execution and measurement



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key challenges

ownership

marketers cannot afford to replace existing **band-aids with new ones** from another a luma-scape of blockchain solutions as it defeats the purpose

authority

marketers need to be part of the overall alliance with full **visibility** and **audit rights** with tokens linked to a stable currency

algorithms

inter-operatability is very key to the adoption of this technology. Opportunity to integrate all in-house silos onto one ledger.

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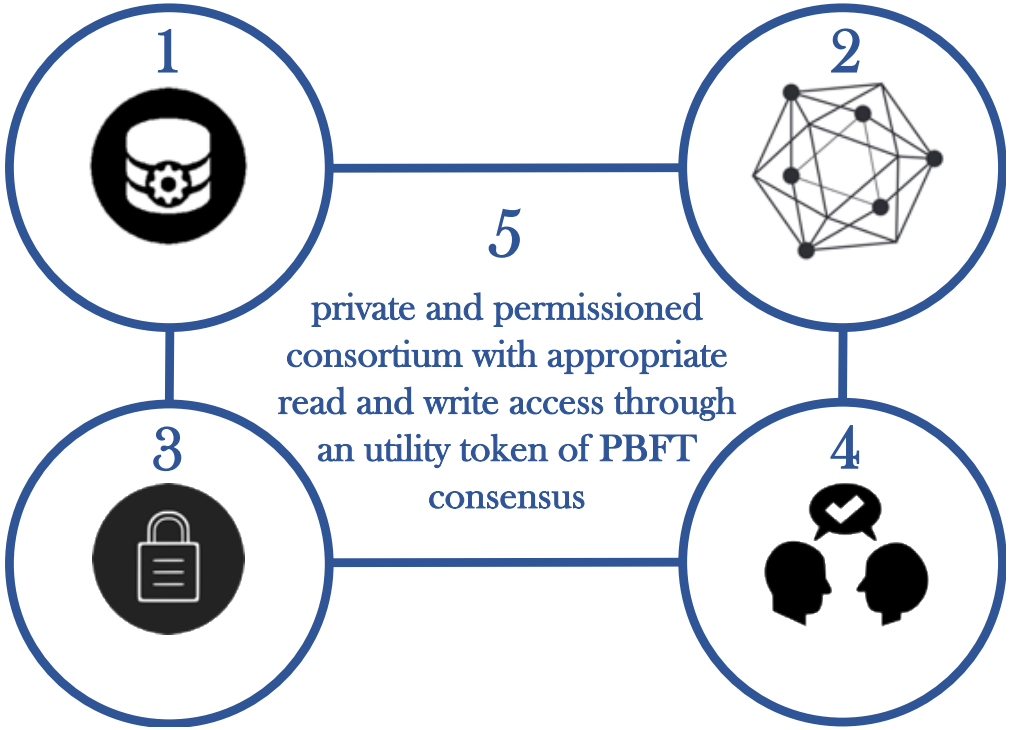
partnership

2018-2019 will be the defining year for the application of blockchain in media and advertising with claims and counter-claims

a full value chain solution instead of fragmented products (no band-aids)

pilot to check all three critical interventions

- ❑ universal ledger
- ❑ throughput and latency verification
- ❑ native alliance token



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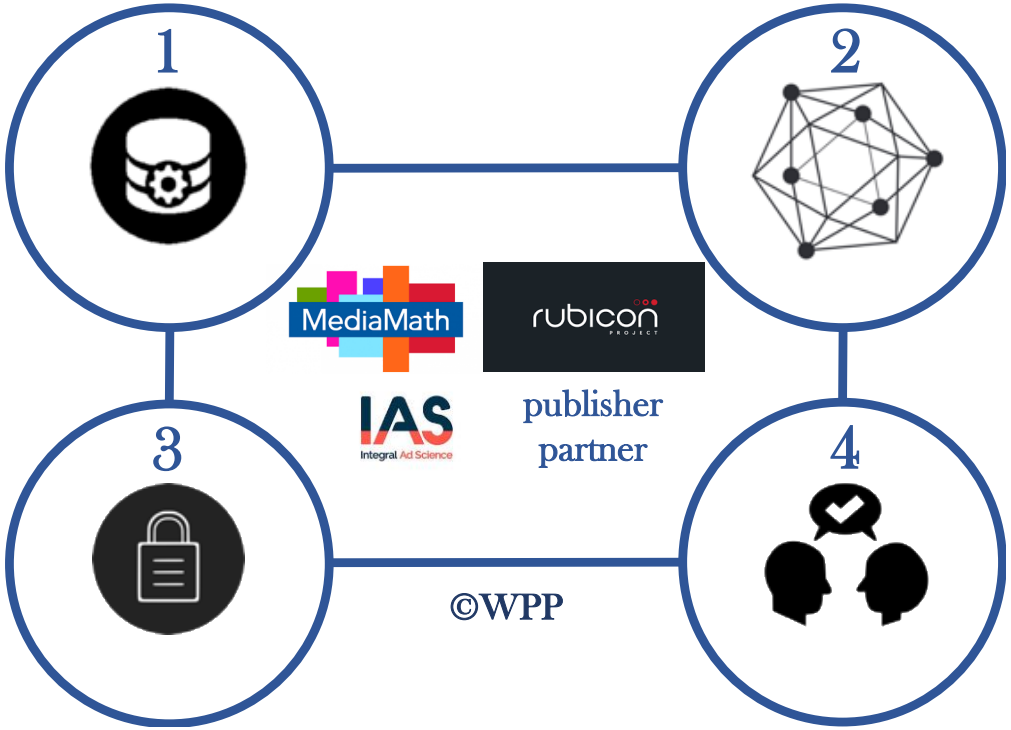
project proton

An impression that isn't viewable has no value

buy-side still is liable to pay for the impression, upon winning an auction, irrespective of the ad being served or viewed

current process is manual, cumbersome and time consuming with weekly reconciliations

to create a MVP using Blockchain technology



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THANK YOU

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