accesr

The Platform for Trustable Digital Relationships

What if we could control our data after it's been shared?

Smart Data can…
and this Changes Everything

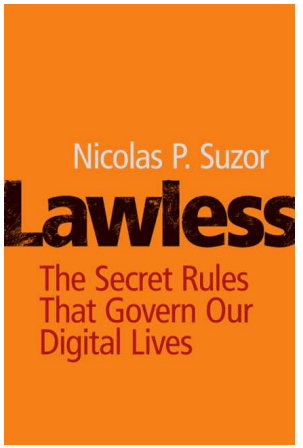
Accesr's patented Smart Data Protocol enables data owners to control the uses of their data by binding digital contracts like regulations, licenses, policies, and user preferences to data as it moves.

The BIG Problem

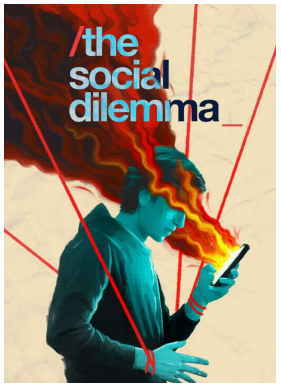
The documentaries Coded Bias & The Social Dilemma highlight several severe problems with our data landscape:

1. Lack of trust, transparency, and accountability of data flows and uses.
2. Lack of security after data is shared or transferred to other parties.
3. Lack of trust in cross-border data regulatory compliance.
4. Lack of reliable enforcement of data contracts and policies between people, organizations, and governments.

Shalini Kantayya



Nicolas Suzor



Jeff Orlowski

The Opportunity

The absence of standards creates an opportunity to create an open-source ‘de facto’ global Smart Data standard

Internet standards bodies like the W3C and the IETF worked to bind contracts to data to create effective data control architectures but Big-Tech blocked funding for this research in 2011. We’ve continued working on this concept for the last decade and now possess a patented standard for contractual control of data.

data freedom foundation

accesr

The Smart Data Protocol is a standard the Data Freedom Foundation prototyped, patented, and licensed Accesr to productize and monetize.

Founder

Alan Rodriguez

Inventor, Product Leader, Data & Privacy Renegade

1. Repeatedly envisioned and created “impossible” platforms.
2. Invented and coded first-generation payment platforms at Chase/Paymentech.
3. Created first-generation global B2B trading & supply chain platforms at Quadrem/Ariba/SAP.
4. Invented and created first-generation B2C marketing, preference centers, adtech, customer loyalty, community & engagement platforms at Tribal Worldwide/Omnicom.
5. Invented and created media and data containers as programmable, transferable, encryptable, cacheable, and remotely controllable media and data building blocks.

Edge Computing & Metaverse

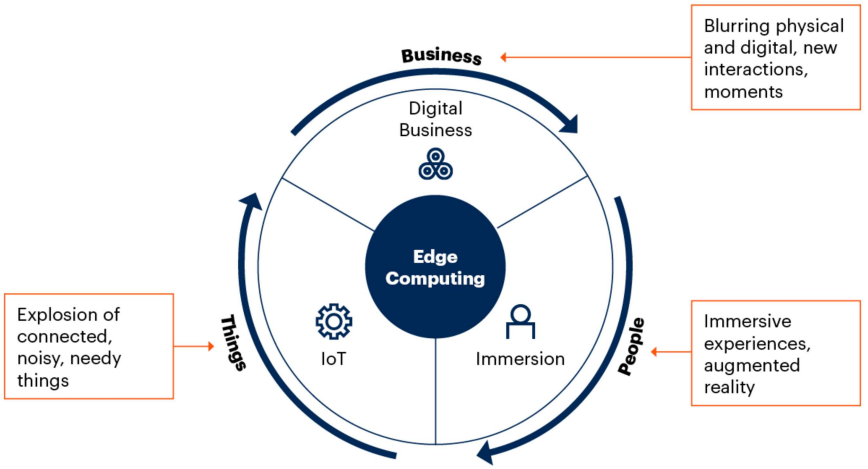
Our foothold to capture early and growing revenue

In advance of broad consumer awareness and demand, we are initially focusing on Edge Computing, Web 3.0, and Metaverse Applications that require edge data security and lifecycle orchestration based on global standards.

EDGE COMPUTING: Places data and processing closer to the things and users that create and consume data while interacting with each other.

While Cloud Computing operates on Big Data, Edge Computing operates on Instant Data generated by sensors and users in real-time to create responsive, immediate, and personalized experiences merging the physical and digital.

Edge Computing Exists Near the Sources of Data Generation



Gartner

“Edge Diversity Demands Hardware Abstractions and Vendor-Independent Architectures.

Open-Source Frameworks Provide Stability and Standardization for Edge Development.”

Gartner - 2021 Strategic Roadmap for Edge Computing

The Edge Compute Problem

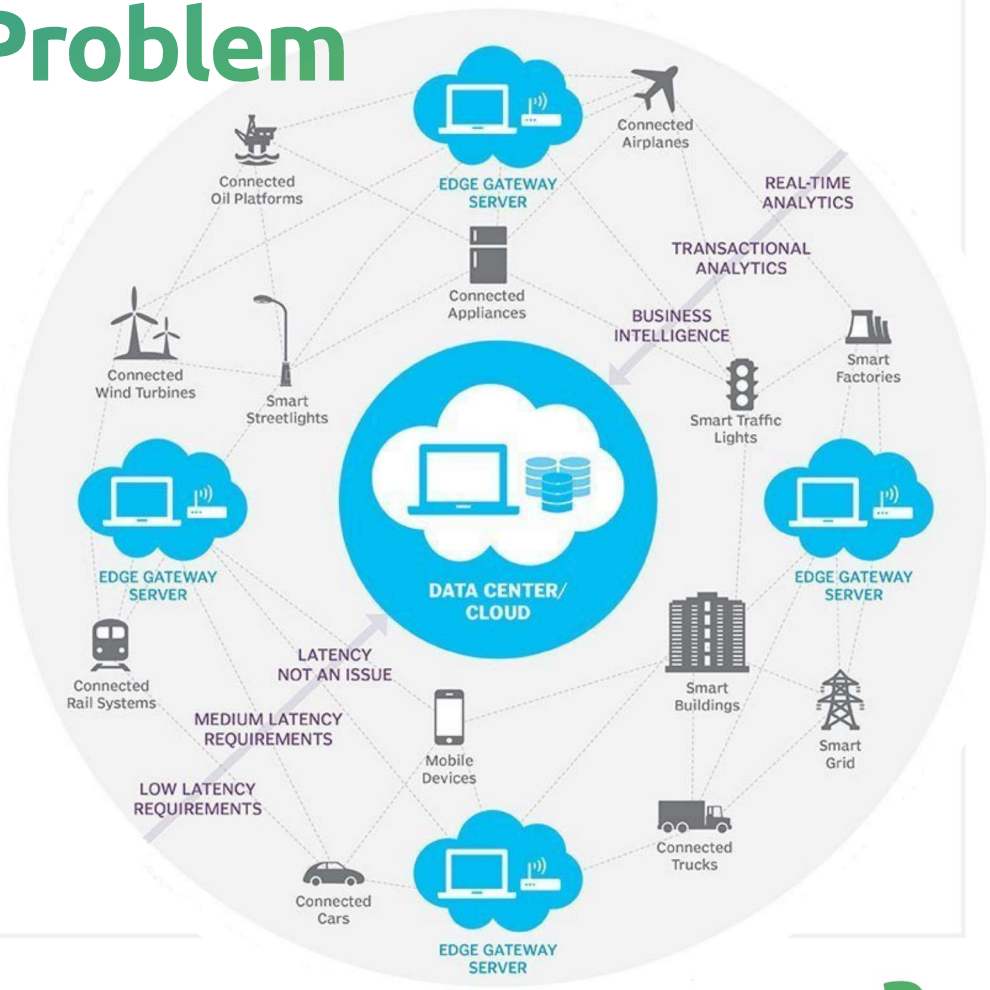
We need Standards-Based Solutions for Edge Data Security & Orchestration

The Data Security Problem: No Trust

Edge devices exist outside traditional IT boundaries without physical protection and workload integrity. No standards exist for data protection, threat detection, and remediation across potentially compromised networks and platforms.

The Data Orchestration Problem: No Standard

Edge devices and data must interoperate across a growing number of organizations. The Internet of Things (IoT) includes a bewildering array of edge devices and use cases. This growing complexity amplifies security and trust problems.



Gartner - 2021 Strategic Roadmap for Edge Computing

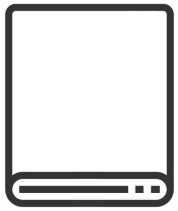
ITSE Technical Report: IoT Standards Landscape details 80 standards bodies working across smart cities, smart homes, smart farms, smart wearables, smart transportation, smart energy, and smart manufacturing concluding:

"What is missing is the choice across verticals for one solution that allows for interoperability.

The recommendation is to, as much as possible, adopt interoperable solutions across all verticals."

Smart Data is the Solution

Review, revise, or revoke your Smart Data Contracts Regardless of your Data Container Location



Data Containers are data files containing a single person's data:

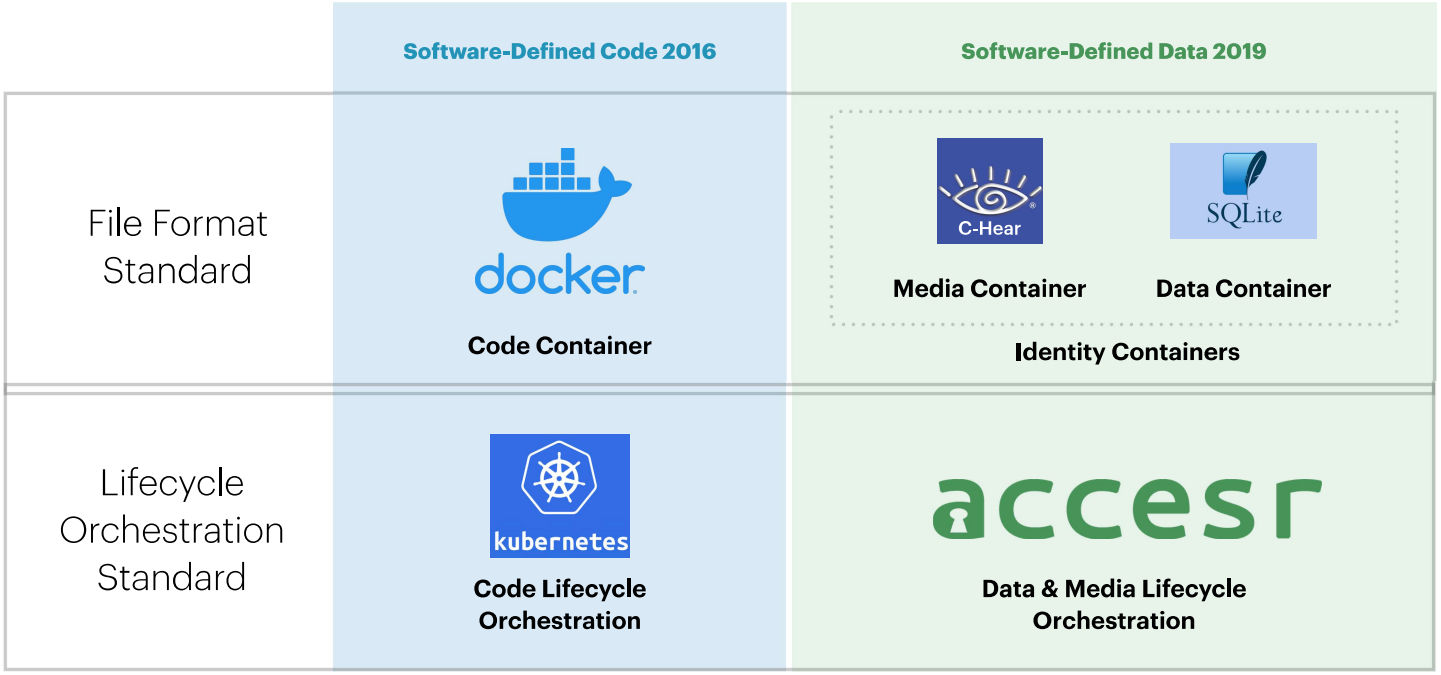
1. They're "read-only" or "Immutable" for edge caching and performance, for blockchain interoperability, and to ensure data quality, provenance, and trust.
2. They're encrypted with your keys, so you control access.
3. They each have a unique identifier to limit the number of legitimate copies and to track all data interactions with every copy.

Smart Data Contracts define and enforce data licenses, regulations, policies, and preferences, allowing data owners to remotely control each Data Container:

1. Who can access our data?
2. When can they access our data?
3. Where can they access our data?
4. What questions can they ask of our data?
5. How do they need to protect our data?

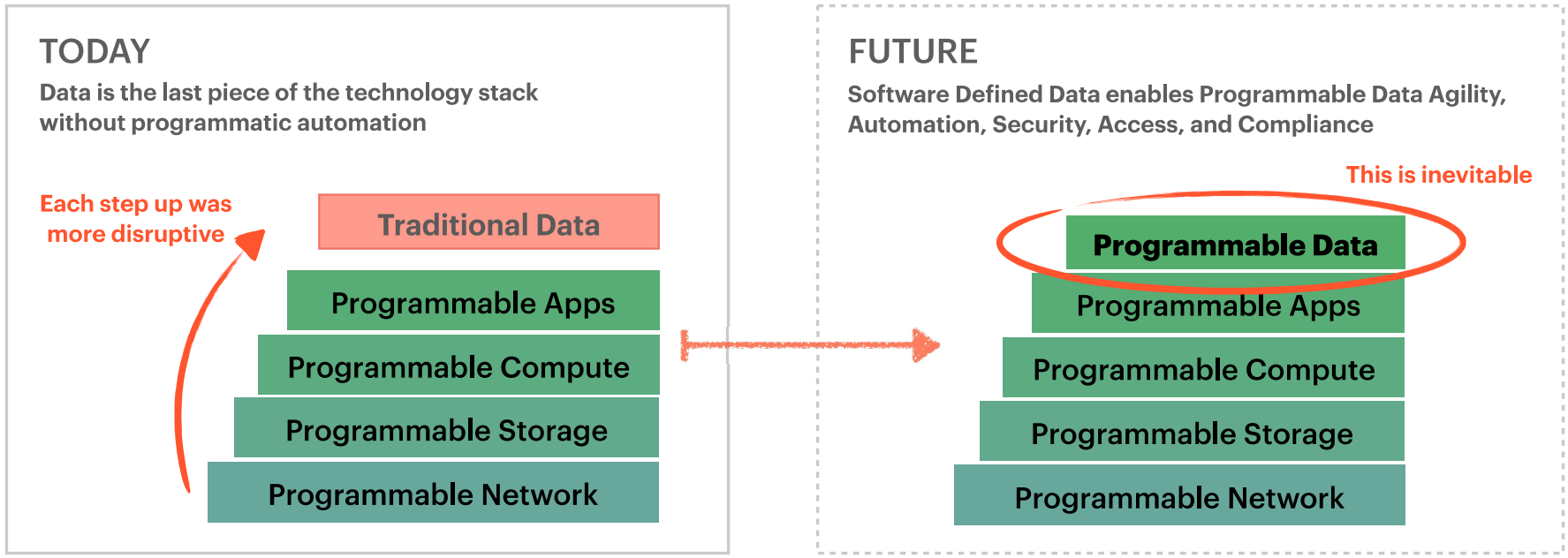
Smart Data = Kubernetes for Data

Media, Identity, and Data Container Lifecycle Orchestration



Smart Data = Programmable Data

Developers and Architects can think of Smart Data as Programmable Data Objects



What can Smart Data do?

Smart Data helps broker all sorts of sensitive agreements, transactions, and interactions in a more private and secure manner

1. **Data Monetization** - Smart Data can control and report its use, take automated protective action, and even self-destruct. Data can be monetized differently based on who, when, where, what, and how it's used.
2. **Data Provenance** - A Universal Unique Identifier (UUID) ensures a fixed number of legitimate copies. All data and media (NFTs) can be secured and licensed for specific uses and universally monitored.
3. **Data Compliance Automation** - Smart Data enforces and automates privacy, security, and marketing compliance as well as internal data policies and regulations like GDPR, CCPA, and CPRA.
4. **Data Remote Control** – Built on Solid PODs, Master Data Controllers provide a single location for all our data transactions to tailor our approved data uses. We can allow specific people to ask specific questions about our data within specific geographies and time frames.
5. **Data Self-Awareness** – Smart Data is capable of environmental awareness, group intelligence, and can automatically respond to internal and external events.
6. **Data Trust** - Smart Data reduces fear of technology by tailoring the uses of our data within exchanges we value as people and organizations, enabling an exponential increase in secure and private data exchange.
7. **Data Security** - Smart Data provides data trust over contested or potentially compromised networks which is a high priority for national CyberSecurity.

Edge Compute Market

Cross-vertical solutions are top use cases by value

Industry	% of total edge use cases	2025 hardware value,[1] $ billion
Travel, transport, and logistics	24	~35–43
Cross-vertical	9	~32–40
Retail	10	~20–28
Media and entertainment	1	~17–25
Public sector and utilities	10	~16–24
Global energy and materials	13	~9–17
Advanced industries	10	~5–13
Healthcare	10	~5–13
Infrastructure	6	~4–11
Chemicals and agriculture	5	~4–11
Banking and insurance	1	~2–7
Consumer	4	~1–5

Total: ~$175 billion–$215 billion

[1]Hardware value includes opportunity across the tech stack (ie, the sensor, on-device firmware, storage, and processor) and for a use case across the value chain (eg, including edge computers at different points of architecture).

“While 10% of data is processed outside of the datacenter today, 75% of data will be processed outside of a traditional datacenter, or cloud, by 2025”

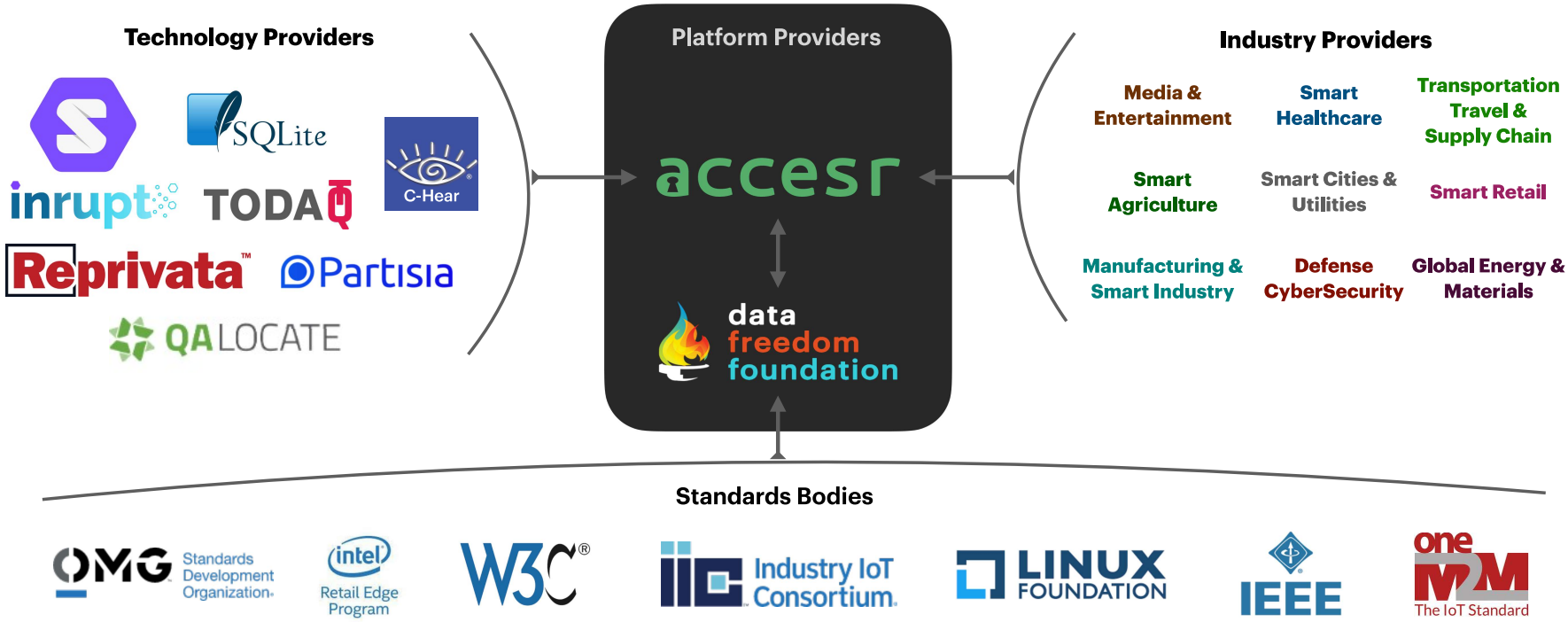
Michael Dell - 2021

“Worldwide spending on edge computing will reach $250 Billion in 2024 with an annual growth rate of 12.5 percent over the 2019–2024 forecast period”

IDC - 2021

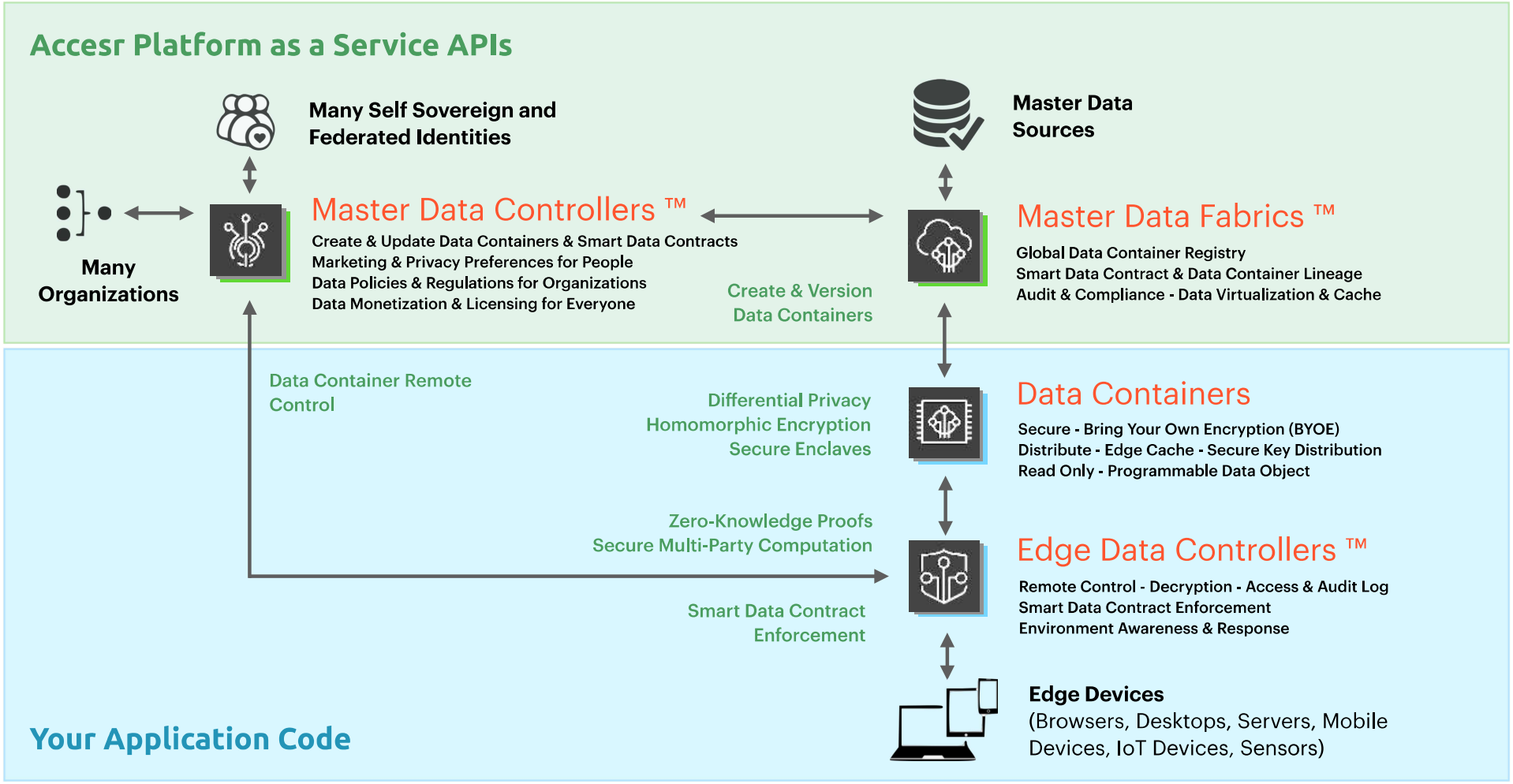
Aggregator Business Model

Accesr, as the Platform Provider for all Smart Data solutions, collects recurring intellectual property licensing royalty from all partner solutions, recurring subscription platform usage revenue, recurring customer support revenue, as well as non-recurring consulting and service revenue.



Appendix

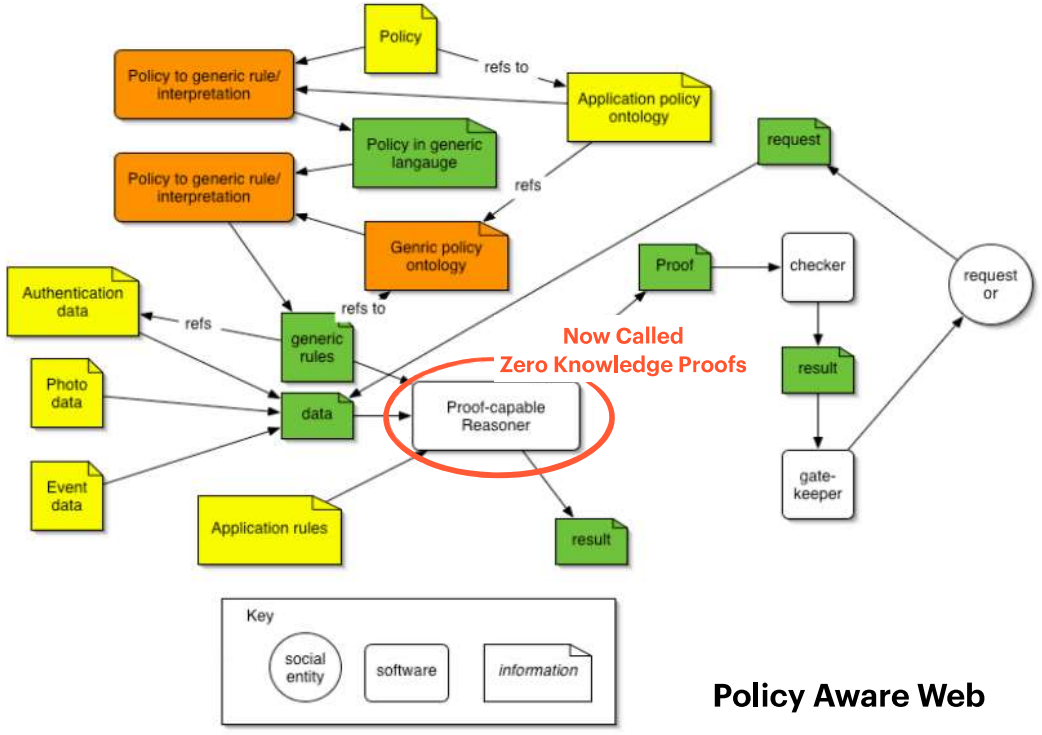
Supplemental Study Materials


Accesr Platform as a Service APIs
Many Self Sovereign and Federated Identities
Master Data Sources
Many Organizations
Master Data Controllers ™
Create & Update Data Containers & Smart Data Contracts
Marketing & Privacy Preferences for People
Data Policies & Regulations for Organizations
Data Monetization & Licensing for Everyone
Create & Version Data Containers
Master Data Fabrics ™
Global Data Container Registry
Smart Data Contract & Data Container Lineage
Audit & Compliance - Data Virtualization & Cache
Data Container Remote Control
Differential Privacy
Homomorphic Encryption
Secure Enclaves
Data Containers
Secure - Bring Your Own Encryption (BYOE)
Distribute - Edge Cache - Secure Key Distribution
Read Only - Programmable Data Object
Zero-Knowledge Proofs
Secure Multi-Party Computation
Edge Data Controllers ™
Remote Control - Decryption - Access & Audit Log
Smart Data Contract Enforcement
Environment Awareness & Response
Smart Data Contract Enforcement
Edge Devices
(Browsers, Desktops, Servers, Mobile Devices, IoT Devices, Sensors)
Your Application Code

Unadopted Internet Standards

All ended 2011 with release of GDPR

1. Platform for Privacy Preferences (1997 to 2006)
2. PORTIA Privacy, Obligations, and Rights in Technologies of Information Assessments (2003 to 2011)
3. **Policy Aware Web (2005 to 2006)**
4. Policy Languages Interest Group (2006 to 2011)
5. Transparent Accountable Datamining Initiative (2006 to 2011)
6. The EnCoRe Project—Ensuring Consent and Revocation (2009 to 2011)

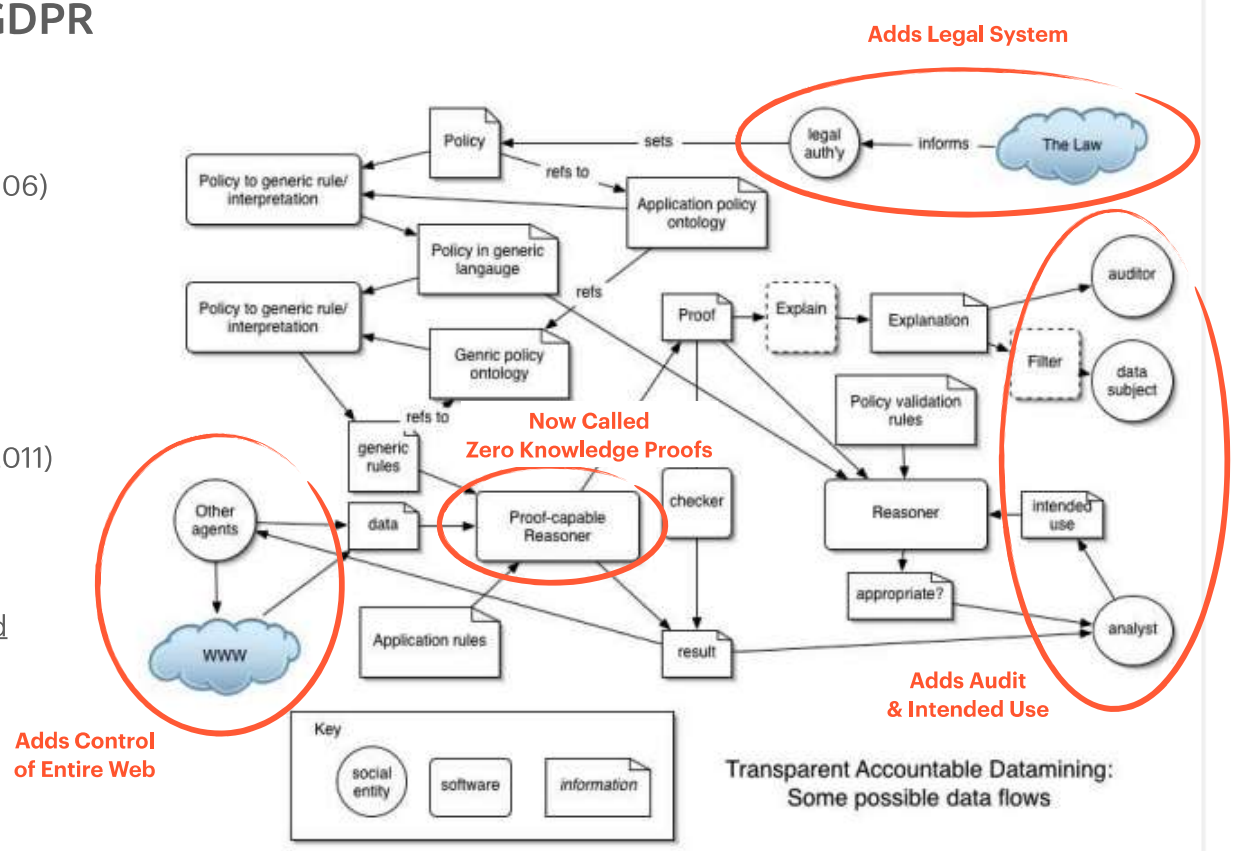


Policy Aware Web

Unadopted Internet Standards

All ended 2011 with release of GDPR

1. Platform for Privacy Preferences (1997 to 2006)
2. PORTIA Privacy, Obligations, and Rights in Technologies of Information Assessments (2003 to 2011)
3. Policy Aware Web (2005 to 2006)
4. Policy Languages Interest Group (2006 to 2011)
5. **Transparent Accountable Datamining Initiative (2006 to 2011)**
6. The EnCoRe Project—Ensuring Consent and Revocation (2009 to 2011)



Smart Data Contract Programmable Options

Proactive Automated - Existing Software Mechanisms

Temporal: When can I collect and use data about you?

On the day of travel
90 minutes before my flight

Duration: How long can I store your data?

How long may I retain personally identifiable information (PII)?
How long may I retain non personally identifiable information (PII)?

Identity: What persona are you when I interact with you?

I'm a frequent flyer traveling for work
I'm on vacation traveling with my family
I'm not the traveler, but I bought the ticket for someone else

Location: Where can I collect and use data about you?

I'm in the airport
I'm NOT in the airport

Aggregation/Nesting: How may I aggregate data about you?

What sources may I aggregate your data - tracking, purchases, travel?
Must this aggregation include anonymization?

Proactive Automated - Zero Knowledge Proofs & Secure Multiparty Computation

Functional: How can I collect and use data about you?

For marketing (offers) about this airline
For marketing (offers) about a partner of I'm in the airport
For information about my flight, the terminal, and the airport

Proxy Purpose: Under what conditions can I share your data?

In the event of a delayed flight, send me relevant third-party offers
Identify third-parties for functional, temporal or spacial marketing
Can I sell your data to third-parties? If so, what do you want in return?

Proxy Entity: With whom can I share information about you?

Let my car service know I've landed
Tell someone specific about a delayed flight
Allow someone specific to make itinerary changes

Reactive - Manual Audit/Compliance/Fraud

Scoring: Can I calculate scores from your data?

Tracking: Can I use third-parties to record behavior?

Privacy Enhanced Technologies (PETs)

World Economic Forum Initiative

WHITE PAPER - The Next Generation of Data Sharing in Financial Services: Using Privacy Enhancing Techniques to Unlock New Value

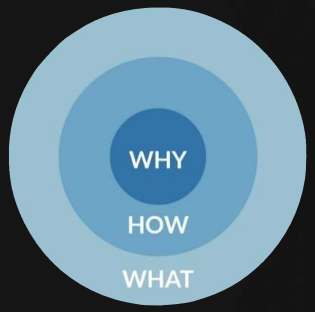
Includes 250+ contributions from subject matter experts over 10+ months of research and several global workshops created in collaboration with Deloitte

Accesr = trustable framework through which PETs can be contracted and orchestrated

The Change Game

Ubiquity is our End Game

THE GOLDEN CIRCLE



Simon Sinek - Inspiring Action

THE LAW OF DIFFUSION OF INNOVATION

Simon Wardley - Organizational Warfare
Chris Maloney - Innovate or Die
Chan Kim and Renée Mauborgne - Red Ocean Blue Ocean
Geoffrey Moore - Crossing the Chasm