

Al Blueprint for the Future

Coalition for Innovation, supported by LG NOVA

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The views and opinions expressed in the chapters and case studies that follow are those of the authors and do not necessarily reflect the views or positions of any entities they represent.

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Preamble

The Coalition for Innovation is an initiative hosted by LG NOVA that creates the opportunity for innovators, entrepreneurs, and business leaders across sectors to come together to collaborate on important topics in technology to drive impact. The end goal: together we can leverage our collective knowledge to advance important work that drives positive impact in our communities and the world. The simple vision is that we can be stronger together and increase our individual and collective impact on the world through collaboration.

"Blueprint for the Future" document (henceforth: "Blueprint") defines a vision for the future through which technology innovation can improve the lives of people, their communities, and the planet. The goal is to lay out a vision and potentially provide the framework to start taking action in the areas of interest for the members of the Coalition. The chapters in this Blueprint are intended to be a "Big Tent" in which many diverse perspectives and interests and approaches to impact can come together. Hence, the structure of the Blueprint is intended to be as inclusive as possible in which different chapters of the Blueprint focus on different topic areas, written by different authors with individual perspectives that may be less widely supported by the group.

Participation in the Coalition at large and authorship of the overall Blueprint document does not imply endorsement of the ideas of any specific chapter but rather acknowledges a contribution to the discussion and general engagement in the Coalition process that led to the publication of this Blueprint.

All contributors will be listed as "Authors" of the Blueprint in alphabetical order. The Co-Chairs for each Coalition will be listed as "Editors" also in alphabetical order. Authorship will include each individual author's name along with optional title and optional organization at the author's discretion.

Each chapter will list only the subset of participants that meaningfully contributed to that chapter. Authorship for chapters will be in rank order based on contribution: the first author(s) will have contributed the most, second author(s) second most, and so on. Equal contributions at each level will be listed as "Co-Authors"; if two or more authors contributed the most and contributed equally, they will be noted with an asterisk as "Co-First Authors". If two authors contributed second-most and equally, they will be listed as "Co-Second Authors" and so on.

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The Coalition is intended to be a community-driven activity and where possible governance will be by majority vote of each domain group. Specifically, each Coalition will decide which topics are included as chapters by majority vote of the group. The approach is intended to be inclusive so we will ask that topics be included unless they are considered by the majority to be significantly out of scope.

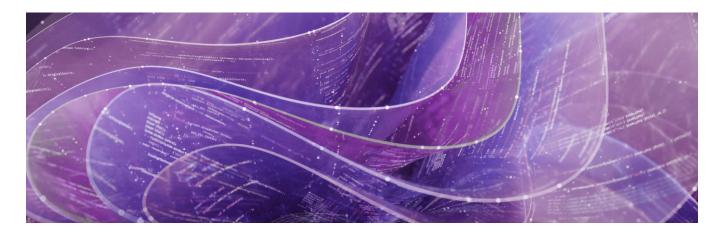
We intend for the document to reach a broad, international audience, including:

- People involved in the three technology domains: CleanTech, AI, and HealthTech
- Researchers from academic and private institutions
- Investors
- Students
- Policy creators at the corporate level and all levels of government



Chapter 3: Data Alliance: Can We Build an Ecosystem to Promote Data Alliance

Authors: Taylor Black, Sarah Ennis



Overview

The modern economy runs on data, yet we treat it like hoarded silver: locked in vaults, guarded by compliance teams, and seldom allowed to mingle. This fragmentation starves innovation; algorithms learn slowly, insights stay parochial, and social value decays in silos. Can we build a Data Alliance—an ecosystem where information flows with purpose, consent, and accountability? The proposition is audacious, but the cost of inertia is steeper.

Stakeholders

- **Consumers and citizens** who own the raw experience data
- **Enterprises and startups** hungry for richer training sets
- Cloud providers and integrators orchestrating secure exchange
- Researchers and academics pushing scientific frontiers

- Regulators and standards bodies enforcing trust and equity
- Civil-society watchdogs guarding against abuse
- **Investors and boards** seeking differentiated, defensible moats
- **Ethicists and legal counsel** translating rights into code

Challenges / Gaps

- 1. **Trust deficit**: fears of misuse, breaches, and competitive leakage
- 2. **Incentive mismatch**: value accrues to aggregators, not originators.
- 3. **Technical fragmentation**: incompatible schemas, divergent privacy controls
- 4. **Governance lag**: legislation trails innovation, creating gray zones.
- 5. **Cultural inertia**: data seen as proprietary fuel, not communal infrastructure



Our New Vision

Move from data ownership to data stewardship. Picture a **Federated Data Commons** where custodians contribute encrypted, schema-mapped datasets to shared compute zones. Smart contracts meter access: provenance logs chronicle every query; and differential-privacy guardrails blend protection with utility. Participants earn "data dividends" proportional to the collective value unlocked. The alliance becomes a flywheel: more trust \rightarrow more data \rightarrow better insights \rightarrow greater returns.

Examples

- **Health-trust sandboxes** allow hospitals to swap anonymized imaging data to train early-detection models, governed by patient-elected boards.
- **Supply-chain ledgers** link OEMs and logistics firms so carbon footprints follow a product from mine to market: verified, immutable, auditable.
- Smart-city federations enable mobility startups to query municipal sensors without copying raw feeds, thereby preserving resident privacy.
- **Financial crime consortia** share cryptographically hashed customer risk signals, cutting Anti-Money Laundering (AML) false positives in half.

Potential Benefits

- Exponential insight gains from cross-domain signal fusion
- Faster time-to-market for AI solutions, powered by diverse data
- Reduced compliance overhead via shared, audited frameworks

Democratic participation allowing smaller players gain access to big-league datasets

Strategic resilience resulting in no single point of failure or monopoly chokehold

Potential Risks & Mitigations

Risk	Mitigation
Data leakage or re-identification	Homomorphic encryption (1), differential privacy (2) budgets, zero-trust gateways
Free-rider dynamics	Tokenized reward pools tied to data quality and frequency of contribution
Balkanized standards	Founding charter mandates open APIs and conformance tests, rotating technical steering committee
Regulatory backlash	Pre-clear frameworks with watchdog groups; publish transparent impact assessments
Power consolidation	Cap voting rights: sunset clauses that force periodic renegotiation of rules

- (1) Homomorphic encryption allows computations to be performed on encrypted data without needing to decrypt it first.
- (2) Differential privacy adds noise to data or queries to protect individual privacy while preserving overall utility.



Next Steps

- (1) **Form a Charter Group**: convene cross-sector pioneers to draft principles, technical baselines, and incentive models.
- (2) **Stand up a Pilot Commons**: Choose one vertical (e.g., smart-home IoT) and light up a privacy-preserving data mesh on a neutral cloud region.
- (3) **Issue Data Tokens**: Experiment with micro-royalties so contributors see tangible upside early.
- (4) **Launch a Public Ledger of Trust Events**: Every access, audit, breach notification should be recorded in an immutable, human-readable log.
- (5) **Publish an Annual State of the Data Alliance Report**: Share metrics on value created, risk incidents, and community feedback, inviting new members.
- (6) **Lobby for Safe-Harbor Statutes**: Use pilot results to shape policy that rewards responsible sharing rather than punishing experimentation.

Conclusion

A Data Alliance is not utopian altruism; it is pragmatic infrastructure for the age of AI. As with railways and electrical grids before it, shared data rails unlock prosperity that is impossible in isolation. The question is no longer *whether* we can afford to share, but *whether* we can afford not to. The blueprint is on the table; the next move is

In practice, a stepwise approach is essential. Countries have strict regulations governing where data can flow and who can access it. For example, Europe has GDPR and China has its own data laws. If the data alliance ignores these rules, it will not work in many places. Start with special "safe zones" where the laws allow data sharing. Also, build flexible systems that can adjust to each country's rules. This helps the alliance grow globally while still following the law.

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Taylor Black is Director of AI & Venture Ecosystems in Microsoft's Office of the CTO, where he designs and leads cross-company initiatives that integrate innovation, product development, and community engagement. With 19+ years of experience launching and scaling ventures across enterprise, deep tech, and social ecosystems, he brings a multidisciplinary background as a developer, educator, lawyer, entrepreneur, and venture builder. He mentors and invests in early-stage startups through networks such as Conduit Venture Labs and Fizzy Ventures. Taylor also helps shape Catholic University of America's new institute at the intersection of AI, innovation, and human flourishing.

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Sarah Ennis is a Fortune 500 trusted advisor specializing in advanced technology innovation, with over two decades of experience leading groundbreaking AI solutions at scale. Globally recognized for her expertise in artificial intelligence, she designs and implements bespoke emerging technology products across industries. She is also the co-founder of AgentsGEO.ai, a patent-pending platform that helps brands monitor and improve their visibility in the AI ecosystem and deploy AI agents, ensuring they are discoverable and recommended by tools like ChatGPT, Gemini, and others through its proprietary GEOScorerTM technology. In addition, Sarah contributes part-time to Northeastern University's Master of Digital Media programs in AI, preparing the next generation of technologists and creative leaders. Her work bridges Silicon Valley innovation with global impact, and she is a distinguished member of the American Society for AI and contributor to the OpenAI Forum.





For more information about the Coalition for Innovation, including how you can get involved, please visit <u>coalitionforinnovation.com</u>.

View the Next Chapter

