

# INTRODUCTION TO DATA ECONOMICS FOR EXECUTIVES

Q4 2020

by the **Data Economics Company**



# DATA ECONOMICS - WHAT IT IS

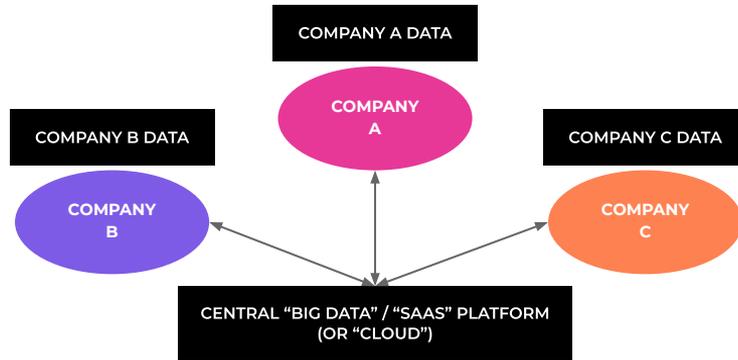
- **Data Economics** is the science of defining, valuing, and utilizing meaningful outcomes that can be identified by results measured by digital data.
- **Data Economics allows digital data from a variety of owners/generators to be “quantized” into Data Assets.** Data assets are organized into individually identifiable quanta and packaged with rich context representing meaningful outcomes. They then interact with digital data from other owners/generators in a way that can create combined meaningful and valuable new outcomes.
- **Data Economics thus explores how digital data can serve as both a means to express value as well as a medium of economic exchange,** when packaged to communicate outcomes and incentives that are meaningful to Participants in a shared language, connected and enabled by a **Data Economic Network (DENET).**
- **The Data Economic Company is engaged in developing the science of Data Economics as well as Data Economic Solutions** addressing high-impact real-world opportunities in challenges across industries using its proprietary **Lydion Data Economic Toolkit.**



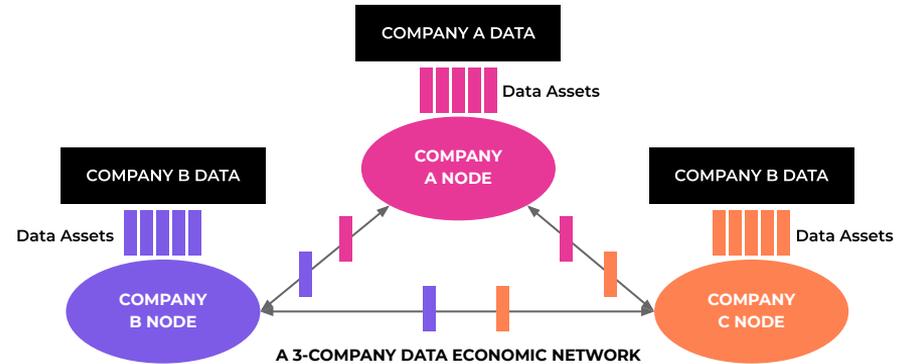
# DATA ECONOMICS - WHAT IT ENABLES

- Participants in a Data Economy can design incentive systems that attach value to outcomes or results, even when none of them individually has the ability (or the complete data needed) to calculate or measure those outcomes or results
- Participants can hold each other accountable for data reporting, data contributing, or results measurement without the need for intermediary data aggregators or retrospective data analytics
- Participants can design financial instruments that are directly based on a Data Economy's outcomes (e.g. payment each time the Data Economy generates X numbers of meaningful results to the participants) *and* can enable derivative financial instruments (e.g. outside investors can play a "spread" based on expected results of the DE, or can buy "futures" on the DE and buy some of the expected financial outputs based on future outcomes)

# Comparing Traditional Enterprise “Big Data” and “SaaS” Platforms to a Data Economic Network Platform



1. Data has to be sent to a centralized service, usually outside your network firewalls and physical location
2. Data has to be formatted and analyzed at your cost, with no guarantees of insights that translate to revenue or other added business value
3. Data treated as a flat commodity without meaning and history thus “bought and sold” using traditional business models
4. Lose control and oversight of data once it leaves your network, with no transparency on how it is used
5. No means to gain credit for future value enabled by your data for those it gets “sold” to.



1. **Control exactly who uses every bit of your data, and how**
2. **Use any dataset or datastream - wherever it may be located: Your Private Data does not leave your walls**
3. **Same data can be used for multiple utilities generating multiple revenue streams, without “selling” or losing control of the underlying datasets**
4. **Track and verify what each piece of data being used in the network means and where it came from - independently and without having to trust anyone else - through a decentralized, encrypted audit trail**
5. **Ensure that you receive due credit for each instance of utilization of every piece of your data**

# WHY IS DATA ECONOMICS IMPORTANT TO MY BUSINESS & INDUSTRY?\*

## 1. UNDERSTAND, EXPRESS, OPTIMIZE THE VALUE OF DATA

Companies are increasingly dependent on “big data” sources to make critical strategic decisions, but few companies fully understand the strengths and shortfalls of these datasets, or how to fully realize their potential value.

**Data Economics is relevant to businesses because it provides a framework for understanding, expressing, and optimizing the economic value of enterprise and customer data.**

## 2. NOT JUST EXHAUST: MAKING YOUR DATA WORK FOR YOU

Data Economics understanding will help your company identify and optimize new value types of your data, and will help you implement business models that can improve the economic return on your data without compromising data ownership, fidelity, safety, or privacy.

**Data is more than just the exhaust of your business and Data Economics lets you expand the utility of your data and make your data work for you.**

## 3. UNLOCKING VALUE: NEW PARTNERSHIP AND GROWTH OPPORTUNITIES

Data Economic frameworks also enable companies to evaluate opportunities to work with other partners in ways that can further increase the value of enterprise-generated data, and also facilitate business exchange in areas such as contracting.

**Not only can an improved understanding of Data Economics help contribute directly to data-related revenue streams, but it can also help you understand the valuation of your enterprise, products, and lines of business.**

*\*See the “Data Economics FAQ for Executives” for further details*

# THE DATA ECONOMICS COMPANY: ABOUT US

Q4 2020

## OUR LEADERSHIP



### **Arka Ray**

Specializes in: Data Analytics, Value analytics, economics, mathematics. Formerly: Microsoft, UC Berkeley, technology startups



### **Jennifer Hinkel, MSc**

Specializes in: Oncology, Health economics and policy. Formerly: LSE, NCCN, Genentech, consulting



### **Sirtaj Singh Brar**

Specializes in: Operations, implementations, enterprise data. Formerly: SAP, Genentech, Wells Fargo



### **Michele Svengsouk**

Specializes in: Visualization of data, design, publishing and storytelling. Formerly: Disney



### **Ashok Vaishnav**

Specializes in: Computer programming, data science, advanced analytics, statistics, data architecture



### **Abhinav Goyal, MBA**

Specializes in: Technology marketing, global supply chain, change management. Formerly: Cornell, Cisco, CSC, consulting



### **Ben Bagamery**

Specializes in: Data abstraction, game theory, implementing visualizations, mathematical models

# WHY WORK WITH THE DATA ECONOMICS COMPANY?

- We are the first company to leverage our proprietary (and patent-pending) **Lydion Data Economic Technology Toolkit** to help companies with enterprise-wide data economic implementations
- In addition to technical expertise, we have core team members and large extended networks to leverage deep knowledge on various sectors:
  - Large scale enterprise technology implementations and maintenance
  - Specialty & oncology biopharma/healthcare, market access
  - Climate science, sustainability, & environmental impact
  - Industrial supply chain, metals recycling, and energy
  - Finance & banking, including regulatory compliance and financial engineering
- Be at the cutting-edge of enterprise data management and optimization
- Build internal expertise on using the science of Data Economics to solve key industry problems and define the industry landscape



## THE DATA ECONOMICS COMPANY'S INITIATIVES (2021 - 2022)

Health Sciences	Industrials & Traceability	Climate & Environment	Agriculture	Finance & Valuation	Consumer & Telecom
<p><i>Solutions around the future of value and Market Access, Value-based pricing and contracting, Data-based outcome frameworks, and more</i></p>	<p><i>Solutions around track and trace mechanisms (and risk/insurance management) of industrial metals and materials worldwide</i></p>	<p><i>Solutions around Climate Change tracking, Industrial Pollution compliance, Grassroots Education, and more</i></p>	<p><i>Solutions around empowering Farmers through data - Traceability, Incentives, Insurance, Analytics</i></p>	<p><i>Solutions around Data-based Enterprise Valuation and Financing, Data Asset-backed derivatives, regulatory compliance, and more</i></p>	<p><i>Solutions around enabling Portfolios of Data Assets for consumers as new form of value, backed and verified by Telecom networks</i></p>

Each Initiative comprises multiple productized Data Economic Solutions addressing specific opportunities in the vertical.

Our research and discovery-driven structure enables the development of Data Economics as a science while developing and implementing its applications with partners across various sectors. Across all of these sectors, we leverage the **Lydion Data Economic technology toolkit** for implementations of Data Economic Solutions.

# OUR ORGANIZATION

- The **Data Economics Company** was founded in 2020 and has acquired a number of products and entities to bring data economics technology implementation products and related knowledge services to the market
- Our **Lydion Data Economic Technology Toolkit** consists of:
  - **Lydion Core** Technology platform (core data economic engine)
  - **Lydion Studio** Developer platform (developer kit)
  - Data Economic **Application Modules** to enable streamlined development of customized Data Economic solutions
  - **Knowledge Services** to help companies identify opportunities for DE implementation and design/build/implement their Data Economies to meet business needs
  - **"The Lydion"** (lydion.com) and the **Lydion Publishing Platform**
  - **The Data Economics Alliance** research and publishing alliance to enable strategic R&D collaborations and partnerships

# ENGAGING WITH THE DATA ECONOMICS COMPANY



## PHASE I: DISCOVERY

**Working with your team** to determine 2021-2022 priorities, current business and data challenges, and developing a hypothesis on how one or more of our Data Economic Solutions can help address high-impact opportunities and challenges for your business or industry in general



## PHASE II: DESIGN & SIMULATION

**Use the Lydion Data Economic Toolkit** to design and implement prototypes of the Data Economic Application(s), that lets your team play in a virtual sandbox to iterate and optimize the design of your Data Economic Network via simulations using historical or sample data to ensure maximal impact as the Solution goes live



## PHASE III: LIVE DEPLOYMENT

**Once iterated and optimized in the simulation sandbox**, the Data Economic Network is deployed onto a live environment across your (and other) companies participating in the Solution, and The Data Economics Company continues to help you analyze, optimize, maintain and grow the impact of your Data Economic Networks

## Let's Get Started

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