



# **From Big Data to Shared Data: Is there a role for Blockchain and Smart Contracts?**

**THE 5th SYMPOSIUM ON DISTRIBUTED LEDGER TECHNOLOGY**

# Agenda

What is Big Data?

What is Shared Data?

What are the externalities fueling this paradigm shift?

What are data exchanges and how do they work?

What are the pros and cons of the data exchanges?

What if data exchanges were not about personal data, what data would we exchange and why?

## **Real World Use Case: Environmental Markets and Services**

Is there a role for blockchain and smart contracts?

What are the pros and cons of blockchain systems powering environment data exchanges?

Final thoughts





**Founded in late 2016,  
Civic Ledger, aims to be  
the global, distributed  
ledger that all civic life  
takes place on.**



**Katrina Donaghy  
CEO and Co-Founder**

Back to  
the Future

TRUST

GOVERNANCE

2016

SMART

CONTRACTS



TRUST

GOVERNANCE

2021

SMART

CONTRACTS



**SO, WHAT'S CHANGED?**



# BEST-SELLERS

---

Blockchain systems

DeFi

NFTs

Layer Two

Bridges

Digital Assets



YET SOME THINGS STAY THE

**S**A**M**E

**One billion dollars**





 **CME Group**  
A CME/Chicago Board of Trade Company



**Waiting for my owner's  
data to increase in value**



Share 

Big Data v Shared Data





# What is a Data Exchange??



# according to Wikipedia

Data exchange is the process of taking data structured under a source schema and transforming it into a target schema, so that the target data is an accurate representation of the source data.[1] Data exchange allows data to be shared between different computer programs.

# Government Data Exchanges

MyGovID

Relationship Authorisation Manager

National Archives

Data.gov.au

Data Exchange



# Pros and Cons



bias

discrimination

privacy violations

entry errors due to double handling

other unintended consequences





What if Data Exchanges were not about personal data, what data would we exchange and why?

# A Use Case



ESG





I Agree



# Pros and Cons

data will become even more valuable if its provenance, ownership and consent can be verified



not everything needs a blockchain





THANKYOU

Katrina Donaghy

KATRINA@CIVICLEDDGER.COM

