Blockchain: The Next Big Disruptor is Here

Bowling Green State University
Bowling Green, Ohio
April 12, 2019
Reflecting on the Last 25 Years of the Digital Economy
Technologies of The Second Era of the Digital Age

Machine Learning

Animating the Physical World

Autonomous Vehicles

Distributed Energy

Technology in Our Bodies

Virtual Reality

Drones & Robotics

BLOCKCHAIN
The Internet of Information

- Web Sites
- Photos
- Word Docs
- PDFs
- PPT Slides
- Voice
The Internet of Value

- Money
- Intellectual property
- ASSETS
- Identity
- Social capital
- Reputation
- Attestations
- Energy
- Carbon credits
- Art
- Music
- Visual art
- Film
- Votes
- Other financial assets
- Contracts
- Loyalty points
- Deeds
- Coupons
- Swaps
- IOUs
- Other
- Futures
- Receivables
- Bonds
- Premiums
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The Middleman
Blockchain: The Second Era of the Internet
The Trust Protocol
Blockchains as Platforms of Information and Value Creation
CORDA v1.0 RELEASED!

R3 IS BUILDING THE NEW OPERATING SYSTEM FOR FINANCIAL MARKETS WITH OUR DISTRIBUTED LEDGER PLATFORM CORDA. WE’D LIKE YOU TO BE A PART OF IT.

GET CORDA

R3 LAUNCHES VERSION 1.0 OF CORDA DISTRIBUTED LEDGER PLATFORM

READ MORE
Today's Payment Rails Don't Cut It

In a world where three billion people are connected online, cars drive themselves and appliances can communicate, global payments are still stuck in the disco era.

Why? The payment infrastructure was built before the Internet with few updates.

*Symbols for SLOW, EXPENSIVE, UNRELIABLE, UNACCEPTABLE with respective descriptions.*

*World Trade Organization, Institute of International Finance, Federal Reserve*
Smart Contracts
I'M NOT AN ENGINEER, SO THIS MIGHT BE A DUMB QUESTION.

BUT WHY CAN'T WE 3-D PRINT A BLOCKCHAIN AND HTML IT INTO A BITCOIN?

ALICE CAN ANSWER THAT. I QUIT.
Understanding the Internet of Value
The Golden Eight: Blockchain Transformations Of Financial Services

1. Authenticate & Attest to Value
2. Transfer Value
3. Store Value
4. Lend Value
5. Exchange Value
6. Fund & Invest
7. Insure Value & Manage Risk
8. Account for & Audit Value
Trade Finance Will Be Done on Blockchain
ICO
Initial Coin Offering
Cryptoassets

1. Cryptocurrencies
2. Platforms
3. Utility tokens
4. Security tokens
5. Natural asset tokens
6. Crypto-collectables
7. Crypto-fiat currencies and stablecoins
Rethinking Business Architectures

The Theory of the Firm

Transaction Costs:
1. Search
2. Coordination
3. Contracting
4. Establishing Trust

Ronald Coase
(1910–2013)
The Changing Architecture of the Firm

- **Self-Organization**
- **Value Creation**
- **Traditional Hierarchy**
- **Critical Resources**
  - Physical Financial
  - Networked Intelligence

- **Extended Enterprise**
- **Industrial Age Corporation**
- **Distributed Value Creation**
- **Business Webs**
Unleashing a New Halcyon Age of Entrepreneurship
Blockchain Business Models

Open Networked Enterprises (ONE)

Decentralized Autonomous Enterprises (DAE)

Smart Contracts

Autonomous Agents

Low Complexity

High Complexity

Low Automation

High Automation
The DAO: Decentralized Autonomous Organization

watch the statistics

The DAO has been created

1172.78 M
DAO TOKENS CREATED

12.07 M
TOTAL ETH

132.32 M
USD EQUIVALENT

1.50
LAST EXCHANGE RATE
ETH / 100 DAO TOKENS

0 -
NEXT PRICE PHASE

0 -
SINCE CREATION PERIOD ENDED
CREATED 28 MAY 09:00 GMT

Thank you all for your contribution

daohub.org
Seven Open Networked Enterprise Business Models

1. Blockchain Cooperatives
Creating a True Sharing Economy
Seven Open Networked Enterprise Business Models

1. Blockchain Cooperatives
2. The Rights Creators
The Music Industry
Seven Open Networked Enterprise Business Models

1. Blockchain Cooperatives
2. The Rights Creators
3. The Re-Intermediators
Creating New Value in the Middle
Seven Open Networked Enterprise Business Models

1. Blockchain Cooperatives
2. The Rights Creators
3. The Re-Intermediators
4. The Blockchain Supply Chain
The Blockchain is the New Supply Chain
Welcome to Sweetbridge

Let's find a better way

Download Whitepaper

EXPLORE MORE

sweetbridge.com
Seven Open Networked Enterprise Business Models

1. Blockchain Cooperatives
2. The Rights Creators
3. The Re-Intermediators
4. The Blockchain Supply Chain
5. Animating the Physical World
The Internet of Things Will Need a Ledger of Things
Seven Open Networked Enterprise Business Models

1. Blockchain Cooperatives
2. The Rights Creators
3. The Re-Intermediators
4. The Blockchain Supply Chain
5. Animating the Internet of Things
6. The Platform Builders
Blockchains as Platforms of Information and Value Creation
Seven Open Networked Enterprise Business Models

1. Blockchain Cooperatives
2. The Rights Creators
3. The Re-Intermediators
4. The Blockchain Supply Chain
5. Animating the Internet of Things
6. The Platform Builders
7. Bigger, Better Data
OLD: Digital Feudalism

GOVERNMENT  BANKING  RETAIL  HEALTH  EDUCATION  SOCIAL  LOCATION  OTHER
General Data Protection Regulation
NEW: Citizen-Owned Dynamic Identity

- Secure identification & authentication
- Rich data for life planning and management
- Personal data monetization
Big Data and the Intermediaries
Seven Open Networked Enterprise Business Models

1. Blockchain Cooperatives
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3. The Re-Intermediators
4. The Blockchain Supply Chain
5. Animating the Internet of Things
6. The Platform Builders
7. Bigger, Better Data
Blockchain Transformations for Government

1. Better, cheaper government (finally)
IBM Kicks Off Blockchain Initiative with Dubai Government

Dubai Wants All Government Documents on Blockchain By 2020

Sweden’s Blockchain Land Registry to Begin Testing in March

It Takes Two to Tango: Georgia’s Government To Implement BitFury’s Blockchain Project in 2017
Welcome to e-Estonia

"e-Estonia" is a term commonly used to describe Estonia’s emergence as one of the most advanced e-societies in the world – an incredible success story that grew out of a partnership between a forward-thinking government, a pro-active ICT sector and a switched-on, tech-savvy population.

Components for Digital Society:
BLOCKCHAIN FOR GOOD

CarbonX is combating climate change with blockchain technology.
Blockchain Transformations for Government

1. Better, cheaper government (finally)
2. Strengthening our democratic institutions
A Crisis of Legitimacy
A Crisis of Legitimacy

Legitimacy is:

the capacity of a political system to engender and maintain the belief that existing political institutions are the most appropriate and proper ones for the society.

Seymour Martin Lipset
A Second Wave of Democracy

If the first wave of democracy established elected institutions of governance, but with opacity, a weak public mandate, an inert citizenry and representatives beholden to powerful interests…

…the second wave will be characterized by transparency, a culture of public deliberation built on active citizenship and representatives accountable to citizens.
Blockchain and Democracy

1. E-Voting

2. Transparency

3. Accountability to citizens through smart contracts

4. New platforms for citizen engagement
Blockchain Transformations for Government

1. Better, cheaper government (finally)
2. Strengthening our democratic institutions
3. Reinventing Central Banks
Blockchain and Central Banks
Blockchain Transformations for Government

1. Better, cheaper government (finally)
2. Strengthening our democratic institutions
3. Reinventing Central Banks
Blockchain and the University

The Ivory Tower

Background photo is Public Domain.
Blockchain and the University: Student Records

More colleges are using the blockchain for student records

Dive Brief:
- ECPI University, a for-profit college based in Virginia, is among the latest colleges to offer verification of student degrees via blockchain, according to The Washington Times, which notes that Virginia Tech is in the early stages of considering a similar offering.
- The university, which partnered with blockchain digital credentialing firm Credibility, will use the system to create digital certificates for its students.

Fujitsu and Sony Global Education begin blockchain field trial for course records management

Fujitsu and Sony Global Education have commenced a field trial to evaluate the usefulness of blockchain technology in the management of course records and grade data.

Sony and IBM Team to Secure Education Data with Blockchain

Sony has developed a new educational platform in partnership with IBM that uses blockchain to secure and share student records, the two firms announced today.

Through its subsidiary Sony Global Education, the Japanese electronics conglomerate plans to launch the service sometime next year. Underlying the platform is the IBM Blockchain offering, which was officially launched in March.

The platform will allow educators to exchange information on student progress and achievements. Sony, according to the announcement, is opening both primary and higher educational institutions to its system.

UAE University launches the blockchain records app to manage academic records

Augusto Ribeiro/Septima

Feb 20, 2 min read

The UAE University has launched a blockchain-based app to manage academic records.

The app, called BlockRecord, is designed to provide a secure and transparent way for students to access and manage their academic records.
Paradigm shifts involve **dislocation, conflict, confusion, uncertainty**. New paradigms are nearly always received with coolness, even mockery or hostility. Those with vested interests **fight the change**. The shift demands such a different view of things that established leaders are often last to be won over, if at all.
In 2016 the BRI launched the definitive investigation into blockchain strategy, opportunities and challenges.

Led by 50 of the world’s leading blockchain thinkers and practitioners.

Sponsored by many of the world’s most important companies and governments.

54 projects completed as of Feb 11, 2019.


BRI: The New Program – members get access to all research including a new and growing set of projects, along with a series of collaborative activities.
Realizing the New Promise of the Digital Economy

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