The Triumph of Data Over Algorithm
Blockchain + Artificial Intelligence / Machine Learning
– Practices & Trends in Financial Services
Agenda

What problem are we solving?

How are we solving it?

Who are we solving it for (use cases in FS)?

What does the Blockchain ∩ Machine Learning look like?

When and why did we fall in love with data?

Summary
Over the journey from Coase’s 1937 to now, the benefit of connected value webs has begun to outweigh the complexity to manage (trust) them.
What did we do to the Internet

Internet of Connectivity (TCP/IP)

Internet of Information (Web)

Internet of Trust (Blockchain)

Internet of VoIP

Internet of Locations

What problem are we solving
How are we solving it?
Who are we solving it for?
BC + ML
In love with data?
Summary

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@gurialhuwalia
Our 3 recent generations of systems buildout

Systems that Automate

Systems that accommodate Change

Systems that Learn
Our 3 recent generations of transaction systems

- **Mainframe based transactions**: Centralized
- **Web & Mobile based transactions**: Distributed
- **Blockchain based transactions**: Decentralized
Solution Part #1: The shift to replicated database with trust across multi-parties is predicated on decentralized governance.

Consensus protocols are the conscience of blockchain.
Solution Part #2: Models being practiced variously for – sharing → privacy → trust → adoption *

There are techniques with increasing maturity to solve the core dilemma of *Data Isolation (Hoarding) vs. Sharing depending on the solution to be built.
So at Digital Twin Labs we evolve a value proposition for the knitting of Blockchain and AI/ML

**Adopt and respond to ever faster change and innovation resulting from transactions**
Use cases in financial services being practiced when you bring Blockchain & AI/ML together

- Regulatory compliance
- Real time reconciliation and integration
- Determining insurance payouts
- Bank processing of (unmatched) invoices
- Dispute resolution
- Customer service centers; "learn" from escalation to human tier
- Lower cost at increasing STP
- Trade finance administration
- Risk-recording and asset registry for transparency
- Mortgage process
AI / ML’s special love for data makes its relationship with Blockchain special

To understand this we have to go to the summer of data love, 2001

From Banko & Brill (Microsoft)

As you add more data even with the algorithms being the same, error rates went down.
Wrap up

Lower transaction economics with 3rd generation of transaction systems (blockchain) enable more measurement in financial sector.

More data (and trusted) from Blockchain leads to better models and accuracy. New data leads to qualitatively new models.

Reality is there’s synergy of innovation across blockchain infrastructure, applications, and operators. Need for research on regulatory separation.

Every week more technology techniques and implementation practices mature to solve gaps. Global consuming brands are engaged. No one is taking the idea back.