THE REALITIES OF ENTERPRISE BLOCKCHAIN

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6000 Years Ago...
Everything Old Is New Again..
Early Ledger Technology
Early Ledger Tech: Not Privacy Preserving!
Blockchain
In Reality: Flat File Database
Blockchain
Where Can Enterprises Use Blockchain?

- Cross team or cross organization transactions, auditing, and dispute resolution
- Auditable – Chain keeps audit record of data and state
  - Instant auditability if transactions are properly synced
  - Maintenance records, accounting, etc
- Permissioned – gated by member system
- Privacy – If properly utilized
Early Computing: Mainframe
Ethereum: A “New” Computer
Early Program Storage Tech: ROM
Smart Contracts
Smart Contract Bug Classes
Ethereum
History Repeats Itself
Repeat Until 5 Copies Print
# Computers: Great At Looping Humans

<table>
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<th>Reliable</th>
<th>Available</th>
<th>Comms</th>
<th>Security</th>
<th>Distrib</th>
<th>Fault Tol</th>
<th>Scalable</th>
<th>Isolation</th>
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**Notes:**
- "X" indicates the feature is supported.
- "*" indicates the feature is not supported.

**Keywords:**
- Reliable
- Available
- Comms
- Security
- Distrib
- Fault Tol
- Scalable
- Isolation
- ID

**Context:**
This table compares various computing platforms (Main, PC, Web, Mobile, Cloud, IoT, DAPP) in terms of their support for different features such as deterrence, reliability, availability, communications, security, distribution, fault tolerance, scalability, isolation, and identity.
How Cross Org Syncing Is Still Done
Quorum
Hyper Ledger Fabric
Where To From Here?
The Applied Realities

- Enterprise Blockchain are trusted platforms for publishing distributed applications.
- This platform is the integration of a computer, P2P network, and a database.
- Smart Contracts are the apps that run on this platform.
- The help solve problems where there is no central authority but there must be trust between parties.
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