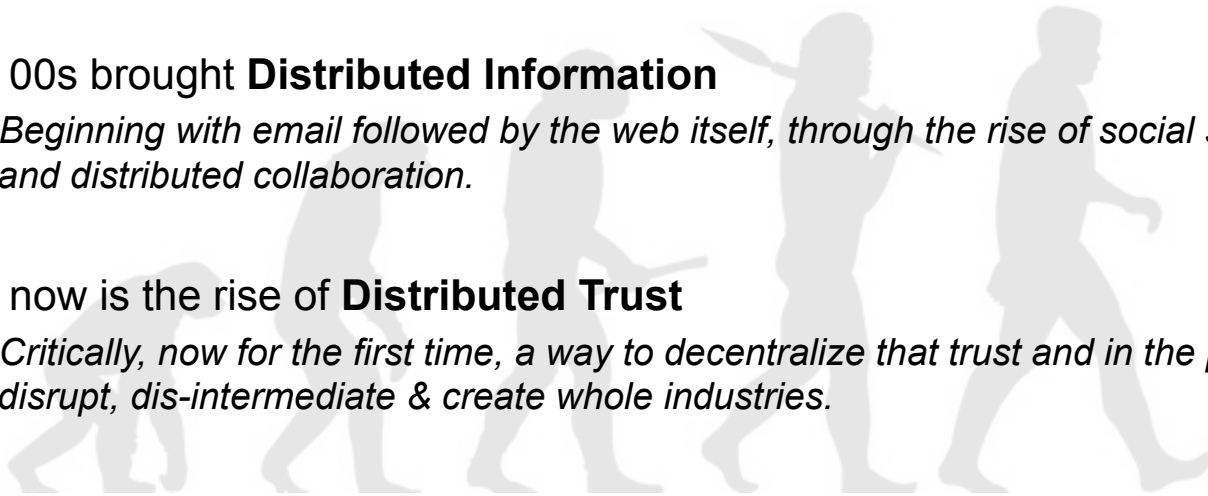




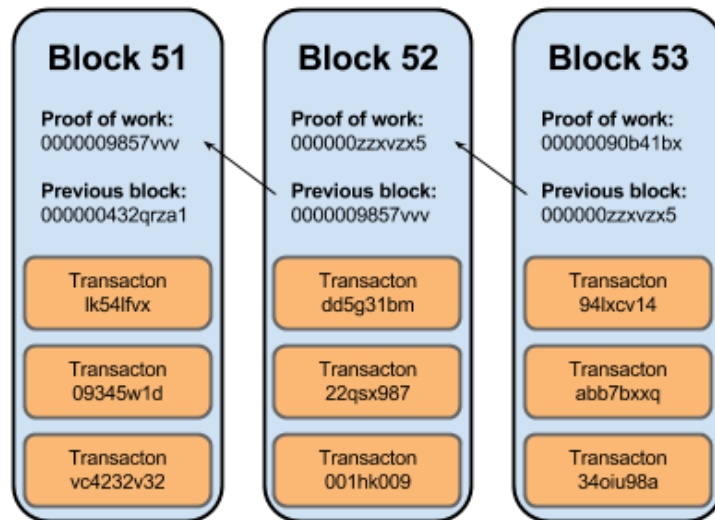
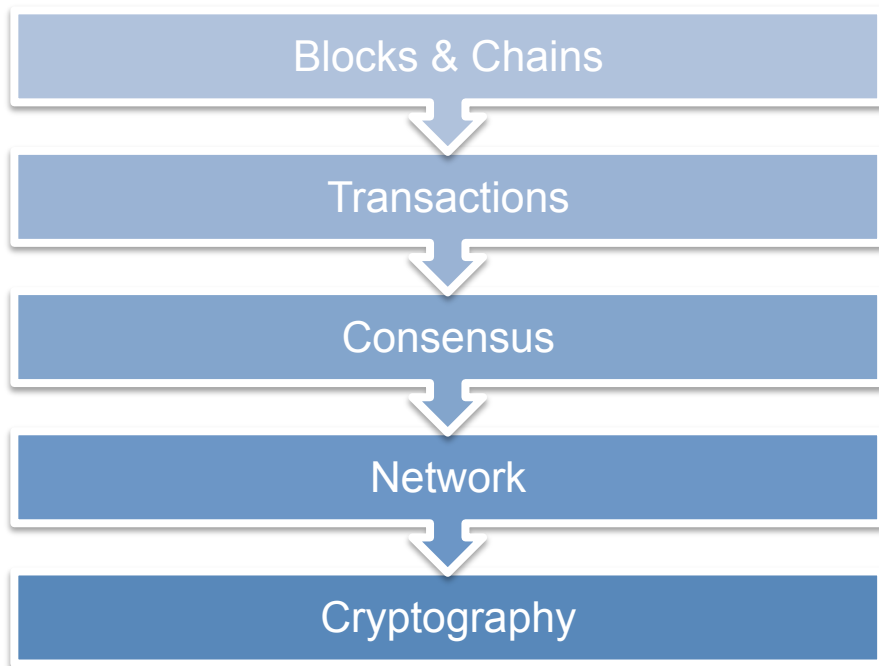
BITCOIN & BLOCKCHAIN

EVOLUTION

- 80s - 90s began with **Distributed Systems** (and applications)
 - *The Internet. Tuxedo, CORBA, J2EE and a myriad set of client server technologies & businesses.*
- 90s - 00s brought **Distributed Information**
 - *Beginning with email followed by the web itself, through the rise of social sharing and distributed collaboration.*
- 10s - now is the rise of **Distributed Trust**
 - *Critically, now for the first time, a way to decentralize that trust and in the process disrupt, dis-intermediate & create whole industries.*



CHARACTERISTICS OF A BLOCKCHAIN



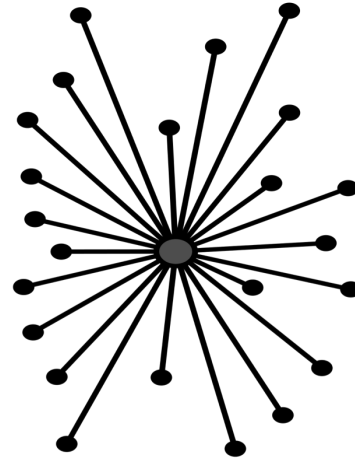
BLOCKCHAIN or DATABASE

Disintermediation

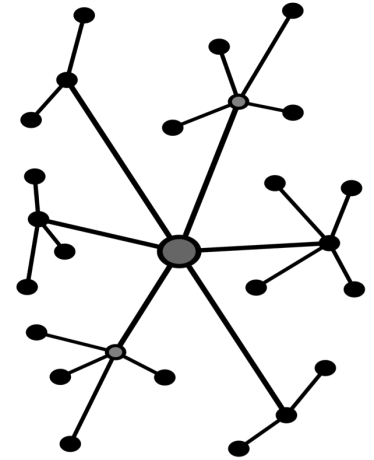
Blockchains enable multiple parties who do not fully trust each other to safely and directly share a single database without requiring a trusted intermediary.

Confidentiality

All participants in a blockchain see all of the transactions taking place.



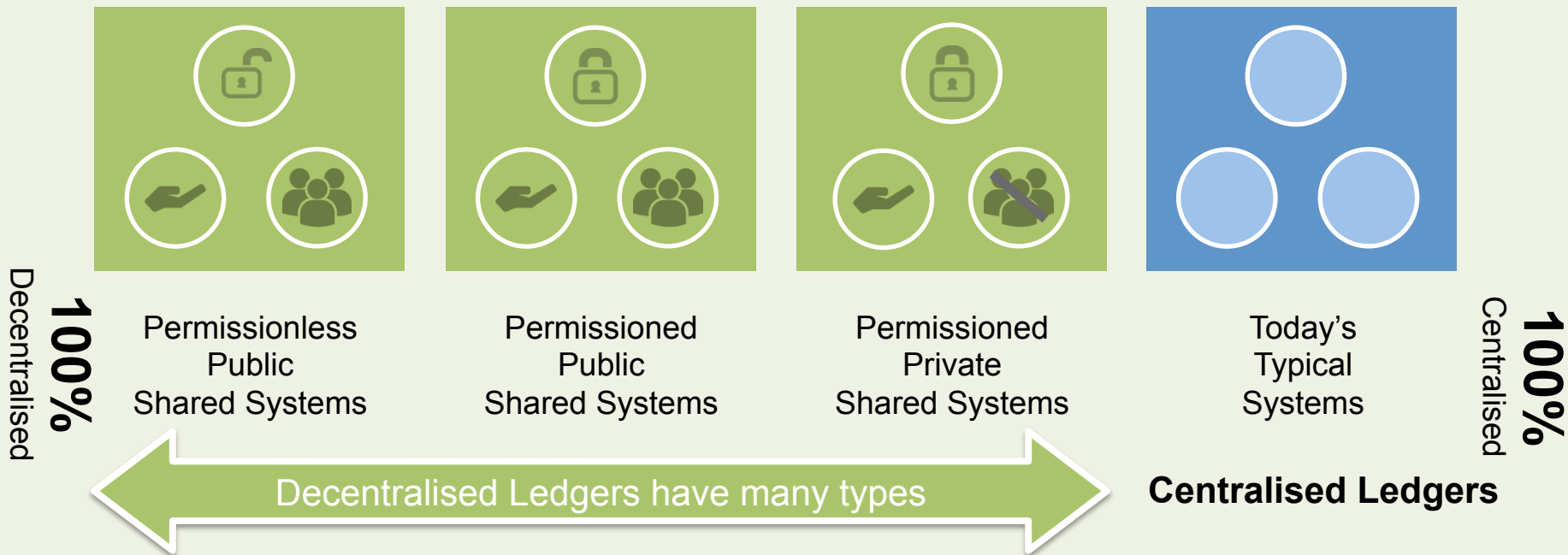
Centralised



Decentralised

Technology Evolutions

MANY BLOCKCHAIN TYPES



WHAT CAN WE USE IT FOR?

- Everything!
- Nothing special – it's just a database!

- Financial systems; payments & settlement
- Provenance tracking.
- Interorganizational record keeping.
- Multiparty aggregation.

- Anywhere that you want “shared view of truth”, with multiple writers and readers, but without central control.

CONSIDERATIONS

- Public or Private or Consortium?
- On / off chain assets?
- Consensus Algorithm
- Smart Contracts (?)

WARNING!

- Not all blockchains are equal!
- Some of the technology is very early stage
- You have to re-org the business as well as the technology