What does cybersecurity mean to you?

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- securing identity of users and machines
- centralize information & control
- decentralize security

CUSTOMERS
- 2 of the top 10 CUs
  - DoD
  - EPRI
  - JLR

EQUITY HOLDERS
- Gen. Petraeus
- iqt.org
- RPX
- JLR
tyfone

securing identity of users and machines

130+ patents

cloud

secure element
Disclaimers on opinions expressed:

Personal. Does not represent tyfone/investors/customers

Foundational. Does not imply you do not know it already

Generalized. Therefore there are exceptions
Cybersecurity = Data Protection + Access Control

The occupant of cyberspace is digital data

Data can be information, command/control, or identity

You want your data protected

You want only you or someone you authorize to control it
**Data**  Information  Command/Control  Identity

At rest  In transit  **No boundaries**

**Protect the data by locking 1s and 0s in a digital lock box**  **ENCRYPTION**

**You need access to your data. So the lock box has to be unlocked**  **DECRIPTION**

**NOTE THAT**
1) Data protection is only as good as how safe your keys to unlock are
2) Don’t let fancy words like homomorphic fool you into thinking otherwise

**ASK THESE QUESTIONS**
1) Where are the decryption keys?
2) Can these decryption keys be cloned without me knowing? i.e. how do you know it is me?
How do you know it is me

AUTHENTICATION

What you know: 

What you are:

VERIFICATION

Tell me something only you know

Centralized or Proxy for centralized
And, Cloned

Decentralized and unclonable

ASK THESE QUESTIONS
1) Can my identity be cloned in bulk with others?
2) If secure element is used to store my identity how was it programmed? And is that person taking the liability?
Cybersecurity = Data Protection + Access Control

**Business trade-off**
- Cybersecurity ↑
- Convenience ↓
- Marketing ↑

**Regulatory balance**
- Cybersecurity ↑
- Privacy ↑
- Liability ↓
Backup slide