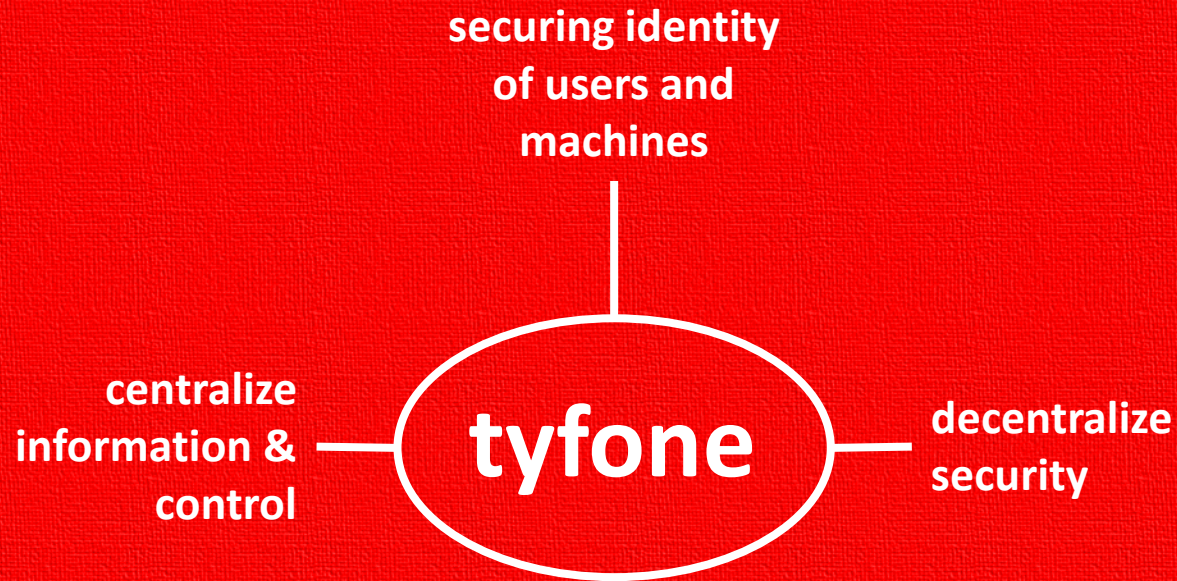


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# What does cybersecurity mean to you?

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CEO – Tyfone, inc.  
Portland | Bangalore | Taipei

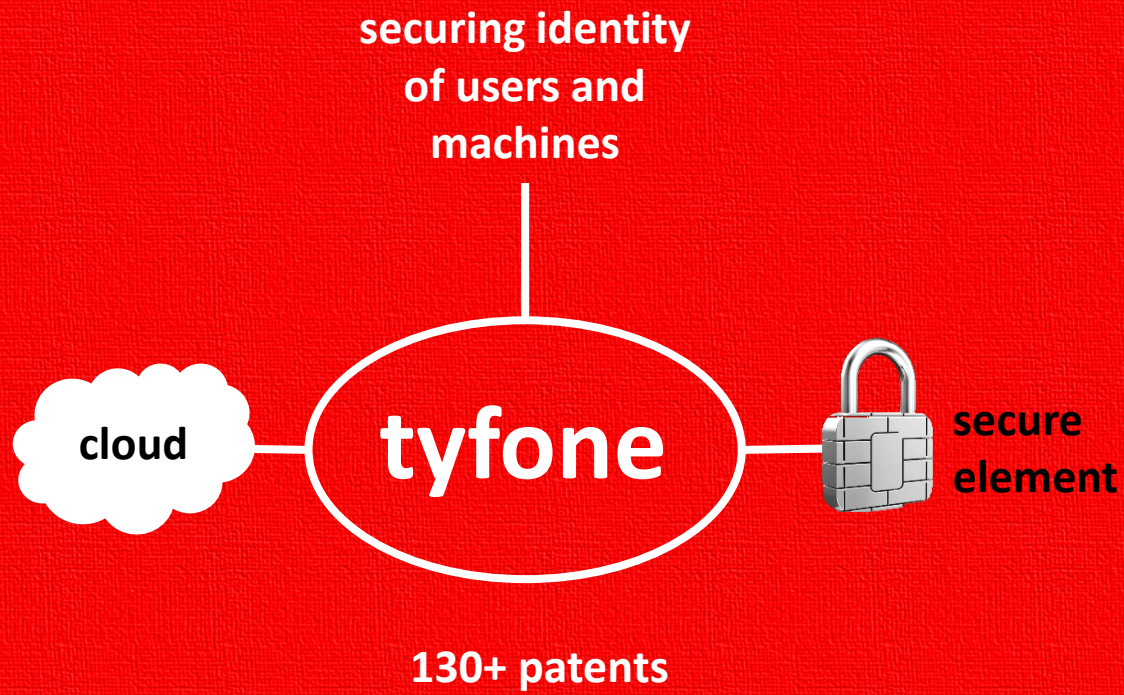




**CUSTOMERS**  
2 of the top 10 CUs  
DoD  
EPRI  
JLR

**EQUITY HOLDERS**  
Gen. Petraeus  
iqt.org  
RPX  
JLR







## **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



**The occupant of cyberspace is digital data**

**No boundaries**

**Data can be information, command/control, or identity**

**You want your data protected**

**You want only you or someone you authorize to control it**

**Cybersecurity = Data Protection + Access Control**





**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**

**DECRYPTION**

## **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

\*\*\*\*\*

621940

What you are

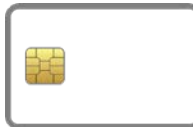


### VERIFICATION

Tell me something only you know

**Centralized or  
Proxy for centralized  
And, Cloned**

What you have



**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**







**CENTRALIZED  
CLONABLE ID**

## TRADITIONAL



**UGLY**

**DECENTRALIZED  
UNCLOABLE ID**



Identity

**GOOD**

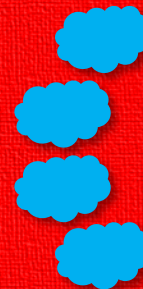
## BLOCKCHAIN



Information  
Control



**BAD**



Information  
Control



**BEST**



Identity