THE FUTURE OF CYBERSECURITY
AT THE INTERSECTION OF CLOUD AND BLOCKCHAIN

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What are our concerns for the future of Tech?

• Big Cloud growth leads to risk concentration concerns & more direct cloud attacks
• Massive increase in compute in all dimensions (Cloud, Big Data & IoT)
• ... enabled by 2 game changers: 5G & Quantum Computing
• Challenges ability to “scale up” security
• Risks a long term loss of privacy
  • GDPR is not the last privacy regulation, more are coming – with possibly stricter requirements
  • National governments will race to implement privacy laws to protect citizens and punish foreign competitors
  • Enterprises bracing for greater accountability (and liability) for PII (personally identifiable information) stewardship and breaches
Enterprise Directions to Mitigate Risk

• Viewing cloud as the platform for delivering pervasive cybersecurity: Security as a Service

• Security at Scale via Automation
  • DevOps/DevSecOps
  • Machine Learning/AI/Data Sciences

• Highly virtualized architectures and frameworks
  • Zero Trust & Software Defined Perimeter
  • Microsegmentation
  • Containerized, Microservices & Serverless
  • Structured frameworks and orchestration to shrink threat windows
  • Highly dependent upon identity and crypto implementation

• Cloud security skills upgrade needed

• Exploring how Blockchain can be leveraged as a security solution
Blockchain as a Security Game Changer?

• Blockchain: the immutable logging infrastructure at the heart of cryptocurrencies
  • Implementation growing outside of Bitcoin, e.g. supply chains
  • Distributed, sometimes seen as “anti-cloud”

• Wide variety of implementations: Permissioned vs permissionless, Consensus models, Chaining, Forking

• Cyber security is very dynamic and in some ways resembles a supply chain

• Blockchain provides a security, transparency, accountability layer on top of cloud, and puts it in the hands of the users

• Blockchain + Cloud = Worldwide ledger of trust
Cybersecurity at the Intersection of Cloud & Blockchain

• We predict a few standard Blockchains will be implemented as Global utilities for Cybersecurity:

1. Professional Credentialing: a Blockchain tracking a professional’s expertise and education as a pseudo-cryptocurrency

2. Organizational Assurance: a Blockchain as an IT audit trail for a service provider’s governance, compliance

3. Technology Stacks: a Blockchain that enumerates the different technical components of a solution (like the ingredients label in food)

4. Threat Intelligence: a Blockchain that allows trusted sharing of threat data
Thank You!

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