Why Cryptocurrencies?

- Blockchains are getting a lot of attention in multiple spaces: economics, law, real estate, and of course, technology.
  - But not all applications of blockchains are created equal
  - It's often said by individuals that the future is in "blockchain, not Bitcoin", but it's really not that simple when it comes to *proper* applications of this technology
  - I want to talk to you about the distinction between *open* blockchains, and *closed* blockchains, and the *distinct properties* that make cryptocurrencies and the blockchain so useful.

- So what are these properties that make open blockchains like Bitcoin & Bitcoin Cash, Litecoin, Ethereum, and others so valuable; what problems do they solve?
  - First, these currencies are *decentralized* – no single party controls the issuance of these currencies or transaction validation.
  - And because they are decentralized, they are *censorship resistant* – because there is no trusted central authority, nobody can stop transactions. Send money to anyone without fear of seizure or frozen funds.
  - Because these currencies are decentralized and censorship resistant, they are *global and borderless* – transact with anyone, anywhere – instantly and for low fees

- *Decentralization* is the most powerful part of open blockchain cryptocurrencies – the lack of a central mint, clearing house, or any other authority over the chain
  - Instead of trust, Bitcoin relies on cryptography, peer-to-peer networks, and game theory to secure transactions.
  - A large global network of people just like you and I run software with a set of rules, enforced by cryptography, that secure the network.
  - This means a much better security model than our traditional financial system – with central authority, greed and corruption happen and cause problems.
  - With decentralized systems, there's no single point of failure that can bring down the network – and that's quite powerful

- Because of this decentralization, open blockchains are *censorship resistant*. Transactions between parties on open blockchain currencies can't be stopped.
  - Imagine the application for journalists, for dissidents, and even emerging legal industries like the cannabis industry
  - Right now, the US government is attempting to steal all the revenue from Edward Snowden's book – there's a real application for Bitcoin
  - Think of the legal cannabis industry in the US – legal on a state level but barred entirely from the banking system due to federal law – there's an application for Bitcoin, or even industry specific chains like Potcoin

- And finally, these currencies are *global and borderless* – way different than the existing financial system
  - Imagine trying to send money to family overseas – wires will take 30% and take days to get there. With cryptocurrencies, send money anywhere nearly instantaneously, fully settled in minutes, and for fractions of a penny.
  - Donate to international causes, again in an instant. No need for complex processing, dealing with chargebacks, or losing valuable money to fees.
  - This is a tremendous shift from what we're used to. A system that's slow, expensive, and unreliable is being replaced with one that's simply the opposite.

- So now, we can see that not all these properties are met with every application of a blockchain
  - Plenty claim that they'll revolutionize their industry with a blockchain, but they don't want an *actual* open blockchain. Look at a corporate controlled cryptocurrency like Facebook's proposed Libra. It's not decentralized, censorship resistant, or borderless. It's more of the same centralized system we're used to.
  - If one company controls the entire network, it simply cannot have those properties. History can be rolled back any time, transactions can be censored, and the system can't be global because there's one single target for regulation.
  - Now, this is not to say that all private blockchains are useless. There are valid use cases like in healthcare, where an internal blockchain can prevent one rogue party from tampering with records. But for public facing applications like currencies, private blockchains don't cut it.

- I strongly believe that open blockchains matter, and that they solve serious problems with our legacy financial and IT systems.
  - However, it takes a discerning eye to see which ones truly solve problems and which ones don't
  - I encourage everyone to explore this technology deeper, and understand how it works.
  - You don't have to be a computer scientist to understand at a surface level how blockchains work, and why they have these incredibly valuable properties