- If 40% +/- of bitcoin transactions are unable to be completed because of lost passwords, how is residential real estate ever going to be transferred on blockchain protocol?

- ANSWER: This is a big issue for consumer transactions, and there are companies working on various types of technologies to resolve the issue of lost private keys. Until there is a way to make sure your "private key" is secure (i.e., not lost and available to you and your heirs to enable you to transfer) --it won't happen.

- Why is blockchain protocol so much more secure than our (very unsecure) internet today? Why should we not be afraid of Russian hackers?

- ANSWER: The entire system would have to be hacked as each node in the distributed ledger is on a separate server. So if just one was hacked the others in the system would "see" that one ledger was not the same and it would not be a valid approver of the transaction.

- Why will "miners" want to validate real estate transactions? Will they have to be paid? How will those fees be determined and how will one know that someone is really watching?/verifying?

- ANSWER: Mining is really a Bitcoin concept and the miners--those nodes doing the work to solve the algorithms and confirm transactions--earn Bitcoin. But other systems such as Propy are fee based, and it is likely that any adoption of blockchain by a recorder's office would have the recorder's office itself be a party that needs to verify the transaction.

- How will blockchain handle subdivisions, condominiums, lease transactions?

- ANSWER: Same as they are now done--a new record is created when the property is submitted to the Condo regime and then a new record for each unit begins.

- In the example given about the purchase of a bottle of wine (which maybe is never going to be a blockchain transaction??), how would the escrow smart contract know if the bottle of wine was actually received? This may apply to keys to real estate being delivered?

- ANSWER: Due diligence is always required to know if an asset exists. But if the asset has been given into the custody with the escrow smart contract holder it is the same as giving something to an escrow agent. Then the devil is in the details on what will make that party comfortable that they have "custody." The smart contract could also be programmed to require the buyer to confirm physical delivery of the keys was made before release of funds.

- Given how volatile bitcoin seems to be, how is the general public going to be comfortable transferring real estate for cryptocurrency?

- ANSWER: Many Bitcoin get immediately exchanged for Dollars or Euro now just as other foreign currency transactions do. So that will likely be the case for some time.

- When you say that the transaction is "approved", what does that mean? Assuming that the only ones who have a vested interest in the transaction (as opposed to the hundreds of other nodes receiving the blockchain) if no one receiving the blockchain is interested enough to look at it or respond, by what process do we say it is validated?

- ANSWER: There is compensation for verifying--some of the platforms are fee based. Bitcoin used its own currency to reward the miners/verifiers. In the transaction parameters it will state how many are required to verify/approve that it is a valid transaction.

- What is a ledger? Is there somewhere that the current status (the result of all transactions up to this instant) is set forth, or is there only a chain of transactions which would have to be read and interpreted from day one, by someone who is relying on entity A as having the assets on this date which it intends to convey.

- ANSWER: the ledger is the record of all transactions, and is in the blockchain software. In RE records the ownership records would have to be loaded digitally into the network. A chain of the entire ownership record would be available for viewing from the day the record is added to the blockchain.

- What is the size of a file which contains the history of all the real estate transactions for a county the size of Cook County? Does that file reside on each Node, or is there just the ability to access the file?

- ANSWER: yes these would be huge servers and the file would reside on each node either through a download, on that node's server or from its storage in the cloud. If you are not a node, your access is limited to view only.

- Various articles (for instance, in Scientific American) has warned that the computing power required for Bitcoin is a serious challenge to global warming. Is that just because of the computer-intensive procedures required for mining Bitcoin, or is there a serious power requirement that is inherent in so many computers having to track the large files involved in blockchain technology.

- ANSWER: All the servers for these large applications need to be powerful and will consume electricity. The challenge is finding clean energy to process computer power, which applies to computing in general, including blockchain computing.

- How do you ensure the payment via bitcoin or other similar type currency is not facilitating money laundering? Do you want certain representations or covenants?

- ANSWER: Yes, you do and you can build in KYC and AML (know-your-customer and anti-money-laundering) processes and checks into the smart contract to execute the transaction.

- Is there any practical way to do a contract or lease now with blockchain, as distinguished from DocuSign?

- ANSWER: None of which I am aware. DocuSign is intended for digital signatures. Blockchain serves a much broader purpose of digitizing assets and transactions.

- Although blockchain technology has the potential to increase the integrity of "down the chain" transactions, doesn't the integrity of the entire system depend on the validity of the initial transaction/recordation involving property? How are companies looking to make the initial transfer from a centralized to a blockchain system to ensure a valid set of first records?

- ANSWER: This will be a municipal responsibility in the first instance for the real estate records, backed by title insurance--they will have to be downloaded digitally and verified.

- Do these systems have override functionality to deal with changes in property rights outside of typical transactions (eminent domain, successions, correction for fraudulent transfers, tax sales, etc.)?

- ANSWER: It is possible to program the blockchain protocol to allow for changes in property rights, which can be implemented by the county or other governmental agency. There will also be abilities to record corrective deeds etc. just as you would in the current systems.

- To construct the various contracts that are need to make the transaction work, am I going to need to be (or have on my staff) a programmer?

- ANSWER: IP literate folks will be more and more important --but not really programmers unless a particular transaction is unique and needs unique smart contracts.

- I'm curious what your thoughts are on Kevin O'Leary's announcement of the anonymous NYC Hotel that's looking to offer a tokenized security that gives investors ownership of the hotel (Theoretically if they bought every coin they would own a third of the hotel).

- ANSWER: There are many regulatory hurdles, including securities regulations that need to be overcome, but this concept is something many companies in the real estate sector are looking at.

- Why would people want their transactions listed on a website?

- ANSWER: The real estate transfer records are currently public--this would be the same-- it would not prohibit ownership in a trust or other such mechanism for the individual to be anonymous to the same extent as now.

- This may be pretty basic, but please explain how bitcoin would run out, or be mined to exhaustion. If no one controls it, how is it "issued" and how would there be a finite supply?

- ANSWER: There is a computer protocol that is programmed to issue Bitcoins to Miners. The computer protocol is designed to issue a finite number. The protocol however does not control transfers or exchanges of the Bitcoin once it has been issued/earned.