

**PROPERTY** insights

## Property in a digital era PARTZ

SOURCE: WWW.PWC.COM

> Bitcoin and its application in property purchase

## BY BRIAN CHUNG

HILE last week, we introduced the term bitcoin to those oblivious of this new age cryptocurrency and system of payment, this week, we share bitcoin whiz Andreas M. Antonopoulus' insights on how this technology is applied in property. Here is what he had to say:

## PERMANENT RECORDS

"One very common application is the registration of assets or ownership of tangible and non-tangible things like the registration of title over land and the ownership of assets like homes.

When you record something on blockchain, it cannot be modified ... it is immutable. Once recorded on the blockchain, the system of trust prevents anyone from reversing or overwriting it. That makes a record on

blockchain permanent, an immutable record which is really important in real estate transaction as it allows one to pass the title of a piece of land from person to person independently with no one being able to falsify the record or steal land through paper," Antonopoulos said.

Moreover, he mentioned that this technology can benefit the industry tremendously as it is able



to resolve a huge problem in real estate and property transactions the falsification of strata titles and property documents. His view is further enhanced

with the emergence of another bitcoin-based system, ethereum. Like bitcoin, ethereum has its own cryptocurrency known as ether. However, ethereum adopts a different technology that is based on the blockchain public ledger system known as Smart Contract. According to Antonopoulos, a smart contract is an electronic contract with all the contractual obligations of the buyer and seller. The contract is written and coded into an application, which will ensure both parties fulfilling their obligations.

Like blockchain technology that is built on trust and verification, these contracts are encoded in a public ledger in the ethereum community. If anyone tries to forge the contract, the

ledger will reject it. As such, this smart contract cannot be rewritten and altered as it is a permanent and immutable contract.

Transaction #1

Transaction #2 Alice

Transaction #3

INPUT

Joe

Bob

**DIRECT TRANSACTIONS** Besides the use of a contract, the technology will make transactions direct, fast and secure.

Antonopoulos also shared about the removal of third parties and its altered role. He said, "Another example relevant to real estate application is the function of escrow. In order to make transactions for real estate today, people have to use a third party agent, an escrow agent. This escrow agent charges a significant amount of money in most countries. During the process, that agent holds custody of the entire fund, which is dangerous. This means that the escrow agent has to be carefully

OUTPUTS

Alice

Bob

Gopesh

actions vetted and have foresight.

> Bitcoin can replace all of this by using multisignature, which allows the seller and buyer to transact escrow programmatically, with the third party acting as mediator only in the case of a dispute.

Buyer and seller will be able to execute a transaction on their own without the need of an escrow agent and without any of the parties having custody of the entire fund. Through bitcoin, you do not need to spend that additional 1% of the sale of the house – the escrow agent is no longer necessary.

It can also change the speed of escrow by doing it in hours instead of a month and changes the security because no one of the three parties can run away with the money. It is faster, cheaper and secure. It can be done in other industries related to real estates like purchasing assets, corporation, mergers and acquisitions.

## INTERNATIONAL PROPERTY PURCHASE

With the use of decentralised digital currency, one can assume that purchasing items and properties is a little easier, and it is. The chance of purchasing

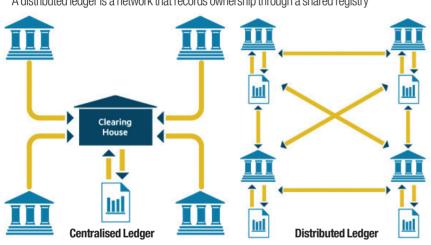
international property is further reinforced by the fact that bitcoin is not controlled by anyone, not even political and banking institutions. This attribute of bitcoin makes it easier for people buying property from another country. Although each country has its regulations, the use of bitcoin to purchase property abroad saves time and money as one does not need to change currency.

The Australia Real Estate website has stated that there are properties in the United States and Latin America being sold using bitcoin. The Wall Street Journal wrote an article in 2014 regarding a Lake Tahoe property, which was sold for US\$1 million in bitcoin.

Follow our column next week for more interesting information on bitcoin, its challenges and how stable a cryptocurrency it is.

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In contrast to today's network, distributed ledgers eliminate the need for central authorities to certify ownership and clear transactions. They can be open, verifying anonymous actors in the network, or they can be closed and require actors in the network to be already identified. The best known existing use for the distributed ledgers is the cryptocurrency Bitcoin.

FT graphics. Source: Santander InnoVentures, Oliver Wyman & Anthemis Partners

