Blockchain Is a Technology for Collaboration



By Andrew Shipilov, INSEAD Professor of Strategy

The unique strength of blockchain is authenticating "stuff" to enable trust between partners.

Even though blockchain is frequently in the news, it is still poorly understood. Conventional wisdom is that blockchain essentially concerns cryptocurrency speculation, or at the very least, people believe that this technology's primary use entails financial transactions.

I recently attended the **Future of Blockchain Summit** in Dubai. The buzz around the summit was that blockchain is much broader than bitcoin and cryptocurrency. Indeed, it is one of the solutions that can enable collaboration among organisations both within and across the public and private sectors. It can also enable unique customer experiences in areas as diverse as government services or tracking the origins of diamonds.

This summit was sponsored by **Smart Dubai**, a government entity tasked with Dubai's complete digitisation within the next few years. This includes financial services, health care, real estate, identity... you name it. Blockchain is a good technology to enable full digitisation, because it is helping

government departments to better exchange information with each other as well as to facilitate the exchange of information between governments and private firms.

Blockchain's true value proposition

I was privileged to interview Dr. Sohail Munir, Advisor for Emerging Technologies and Digital Transformation at Smart Dubai. He shared his insights into how Dubai is currently leveraging blockchain.

Blockchain has many imperfections. However, it is unbeatable at one thing: Authenticating "stuff" that moves between different partners, whether it be a physical product (e.g. diamonds, art or food) or a digital one, such as data itself.

Let's take a look at some examples. A company called **Everledger** built a system that allows tracking diamonds from their source, in order to help stakeholders ensure their diamonds are conflict-free. Exchanges, retail shops or end customers can find good uses for blockchain-based authentication mechanisms for these stones. Start-up **Verisart** is building a system to allow artists to register and track their own paintings. If the paintings' features, as well as the record of ownership, are on blockchain, individual collectors can be more certain that the artworks are genuine. Likewise, assuming one can find trustworthy custodians, some other company can issue tokens that certify the art's ownership. Regular people (and not just professional collectors) could invest in the art with full knowledge of its provenance.

Data security

Blockchain can also secure data. At the conference, I heard about medical researchers who are working on marrying artificial intelligence with blockchain. Imagine that you have trained an AI algorithm to use scans to discover a brain haemorrhage without invasive procedures. However, to do this analysis on an individual patient, the algorithm – deployed in thousands of hospitals around the world – needs preliminary data. These starting values can be gathered from separate hospitals and stored on a tamper-proof blockchain. Blockchain ensures that these values are correct, and that the algorithm will therefore have a high probability of making a correct diagnosis. In this case, researchers are not putting patients' data on blockchain; rather, they enter analytical inputs that allow AI-enabled machines to make the right decisions.

Another interesting takeaway was that end users don't care about blockchain per se. They do care about the authentication and traceability of products (or data) that blockchain enables. They do care about the ability of government departments to work well with one another as well as with the private sector. One of the presenters made a very good point: "If you have to teach your mother how to use blockchain to order stuff for your fridge, then you have failed." That is, whatever solutions and new business models using blockchain that your firm comes up with, your customer's experience must be very easy and certainly should not require technical knowledge. Consumers should interact with smart screens, simple apps or websites to solve their problems, and blockchain should enable this interaction even when it requires sharing data across multiple partners.

Finally, quite a few presenters talked about blockchain as software for collaboration among companies. Since blockchain provides tamper-proof evidence of transactions, it can store data about agreements that the companies have entered into with one another. The execution of these arrangements can be automated even when not all partners are fully trusting.

Looking ahead

Extracting maximum value from such partnerships is the subject of a new online programme my colleague INSEAD Assistant Professor of Strategy Nathan Furr and I are starting at INSEAD. The course will delve into how emerging technologies – such as blockchain – help companies work together and capitalise on digital partnerships, platforms and ecosystems.

Video interview: Mediaquest

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