

Seven reasons 2017 is a make or break year for blockchain

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While it is still too early to say whether or not blockchain will fulfil its potential, 2017 is shaping up to be the year we should find out for sure. At the very least, this will be the year that major enterprise level blockchains start to be used. Already within the global blockchain community, there is a real sense that the breakthrough moment is about to be reached, where this technology comes of age and demonstrates use-cases in real world scenarios.

With that in mind, seven global developments and challenges can be identified within the blockchain space that are making 2017 the year it steps out of proof of concept and into production and bringing to the fore the issues this creates.

Enterprise applications

Over the course of the past two years, major enterprises have been exploring blockchain as a potential technology. We have seen proofs of concept from multiple firms, now enterprise-level blockchains are in active production. Companies including major banks and financial institutions and global tech companies such as IBM, are taking dedicated steps beyond a mere proof of concept.

Confused by blockchain? Check out: Hype vs. reality: We investigate the potential in blockchain

Recently, Microsoft took one step further and began development of blockchain as a service. They will soon be providing access to a cloud-based blockchain. This will allow other companies to sign onto Microsoft's already active platform, rather than building their own. If Microsoft is able to increase the user base of its platform, smaller firms will have access to this will open blockchain. Instead of allocating resources to developing a blockchain, firms will be able to use one already in operation by just downloading an app.

Moving beyond financial services

In recent years blockchain has been predominately spoken about in terms of financial services and most of the development with this technology has been in this area, a change is underway.

Early adopters in other industries are beginning to develop blockchains. While it is usually true to say that technology in financial services tends to be five years ahead of other industries, in terms of blockchain, multiple sectors are fast catching up.

For example, Lufthansa's technology subsidiary, Lufthansa Industry Solutions, recently launched the initiative *Blockchain for Aviation*. This project aims to bring together technical expertise and develop potential uses for blockchain in aviation. Similar projects are under development by energy providers and in multiple sectors. While finance still leads the way, this will change in short order.

Five clear blockchain uses outside finance - We look at some of the areas tipped for blockchain disruption

Privacy concerns solutions

Blockchains by their very nature tend to be open technology; each participant on the chain verifies every action taken on it. As blockchains are utilised more and more for enterprise applications, this open nature is coming into conflict with commercial confidentiality. Often, corporate actions have to be confidential due to, amongst other reasons, legal requirements, the need to protect intellectual property or simply that a project is not ready yet for public consumption. Confidentiality and privacy are in many cases, must have features for financial and other enterprise applications.

To rectify these issues, but maintain blockchains immutable nature, development is well under way to integrate zero-knowledge proofs into blockchains. This technology allows for blockchain's consensus algorithmic model to continue but with the need for confidentiality satisfied. Zero-knowledge proofs allow one party to prove to another that a given statement is true, without revealing the confidential information behind said statement.

Consortiums continue

With the growth of blockchain into multiple industries and its increasing use within industries, multiple attempts have been made to bring together consortiums of companies to develop blockchain technology together. While R3 continues to have major issues, with high-profile backers pulling out, the others are going from strength to strength.

Both Hyperledger and the Ethereum Alliance are expected to grow globally this year, these consortiums are propelling blockchain to become an industry in its own right.

The Enterprise Ethereum Alliance could prove a decisive step for enterprise blockchain. Check out: <u>Ethereum wants to be the OpenStack of enterprise blockchain</u>

A community of blockchain

With blockchain developing into an industry in its own right, there are the beginnings of a global community around this technology. In 2016, around half a billion dollars was invested into blockchain through traditional investment means. The blockchain community is seeking to, and is likely to pull off, a massive increase in this level in the years to come, but not through traditional investments.

In the blockchain community multiple companies are using initial coin offerings (ICO) to fund their blockchain projects. In this system a cryptocurrency is issued that investors can purchase on a blockchain, in effect using blockchain to fund blockchain. In this system, the community around blockchain can be leveraged to massively increase the support and funding for blockchain projects. The community can help support the development of this blockchain industry by using its own tools and processes.

Growth of private blockchains

As consortiums and the blockchain community develop this technology with vary in degrees of openness, alongside these developments private blockchains are in production.

As opposed to the standard, open to all blockchain, these have closed systems. The advantage of this for internal use is that the data retains the immutable and provable nature, but is only accessible to selected individuals. For example, these kinds of private blockchains are in development by banks to automate internal compliance functions.

Could the future of blockchain be a blend of public, private and hybrid? <u>Public vs. private blockchains: It</u> <u>could all prove a bit like the cloud</u>

Performance issues

Half way through 2017, the future of blockchain is strong. With much of its potential as a technology starting to be realised and issues handled. However, there remain problems with performance that could hold this technology back. For many end-user solutions in financial services and capital markets, a blockchain's transaction speeds are simply not fast enough. While multiple companies are seeking to solve this, with some

utilising hybrid blockchains, the fact remains; unless performance can be raised, blockchain will not explode onto the markets in the way many expect.

It is too early, just, to say if blockchain will fulfil the potential that many in the technology world suspect it has. However, 2017 will be a pivotal year for this technology. As multiple companies move from POC to production, blockchain is on the verge of becoming a widespread technology, or failing.

Original article can be found here <u>http://www.idgconnect.com/blog-abstract/27782/seven-reasons-2017-break-blockchain?region=asia</u>.