IBM Watson Health Announces Collaboration to Study the Use of Blockchain Technology for Secure Exchange of Healthcare Data

The joint initiative with the FDA is aimed at leveraging blockchain technology to improve public health.

ARMONK, NY - 11 Jan 2017: IBM Watson Health (NYSE: IBM) has signed a research initiative with the U.S. Food and Drug Administration (FDA) aimed at defining a secure, efficient and scalable exchange of health data using blockchain technology. IBM and the FDA will explore the exchange of owner mediated data from several sources, such as Electronic Medical Records, clinical trials, genomic data, and health data from mobile devices, wearables and the "Internet of Things." The initial focus will be on oncology-related data.

Transformative healthcare solutions are possible when healthcare researchers and providers have access to a 360-degree view of patient data. Today, patients have little access to their health data and cannot easily share with researchers or providers. Giving patients the opportunity to share their data securely, for research purposes or across their healthcare providers, creates opportunities for major advancements in healthcare. Blockchain technology, which enables organizations to work together with more trust, is designed to help make this a reality.

By keeping an audit trail of all transactions on an unalterable distributed ledger, blockchain technology establishes accountability and transparency in the data exchange process. In the past, large scale sharing of health data has been limited by concerns of data security and breaches of patient privacy during the data exchange process.

A recent IBM Institute for Business Value paper 'Healthcare rallies for blockchains[1]', based on a survey of about 200 healthcare executives, found that more than seven in ten industry leaders anticipate the highest benefits of blockchain in healthcare to accrue to managing clinical trial records, regulatory compliance and medical/health records.

IBM and the FDA will explore how a blockchain framework can potentially provide benefits to public health by supporting important use cases for information exchange across a wide variety of data types, including clinical trials and "real world" evidence data. New insights combining data across the healthcare ecosystem can potentially lead to new biomedical discoveries. Patient data from wearables and connected devices for example, can help doctors and caregivers better manage population health.

The collaboration will also address new ways to leverage the large volumes of diverse data in today's biomedical and healthcare industries. A secure owner-mediated data sharing ecosystem could potentially hold the promise of new discoveries and improved public health.

IBM brings extensive expertise in blockchain technology, for example, IBM is founding member and key contributor to the Linux Foundation's Hyperledger project.

As the promise of blockchain in healthcare becomes increasingly evident, IBM will work to define and build the technological solution for a scalable and decentralized data sharing ecosystem.

"The healthcare industry is undergoing significant changes due to the vast amounts of disparate data being generated. Blockchain technology provides a highly secure, decentralized framework for data sharing that will accelerate innovation throughout the industry," said Shahram Ebadollahi, Vice President for Innovations and Chief Science Officer, IBM Watson Health.

The initiative with the FDA is a two-year agreement. IBM Watson Health and the FDA plan to share initial research findings in 2017.

About IBM Watson Health

Watson is the first commercially available cognitive computing capability representing a new era in computing. The system, delivered through the cloud, analyzes high volumes of data, understands complex questions posed in natural language, and proposes evidence-based answers. Watson continuously learns, gaining in value and knowledge over time, from previous interactions. In April 2015, the company launched IBM Watson Health and the Watson Health Cloud platform. IBM Watson Health is helping to improve the ability of doctors, researchers and insurers to innovate by surfacing insights from the massive amount of personal health data being created and shared daily. For more information on IBM Watson, visit: ibm.com/watson. For more information on IBM Watson Health, visit: ibm.com/watsonhealth.

About IBM Blockchain

IBM is rapidly expanding its blockchain capabilities and actively working with companies to understand what it takes to make blockchain ready for business. Financial services, supply chains, IoT, risk management, digital rights management and healthcare are some of the areas that are poised for dramatic change using blockchain networks. For more information about IBM Blockchain, visit www.ibm.com/blockchain.

[1] Healthcare rallies for blockchains https://www-01.ibm.com/common/ssi/cgi-bin/ssialias? htmlfid=GBE03790USEN&

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