# Linux Foundation Unites Industry Leaders to Advance Blockchain Technology

New open ledger project to transform the way business transactions are conducted around the world

**SAN FRANCISCO - 17 Dec 2015:** The Linux Foundation, the nonprofit organization enabling mass innovation through open source, today announced a new collaborative effort to advance the popular blockchain technology. The project will develop an enterprise grade, open source distributed ledger framework and free developers to focus on building robust, industry-specific applications, platforms and hardware systems to support business transactions.

Early commitments to this work come from Accenture, ANZ Bank, Cisco, CLS, Credits, Deutsche Börse, Digital Asset Holdings, DTCC, Eris Industries, Fujitsu, IC3, IBM (NYSE: IBM), Intel, J.P. Morgan, London Stock Exchange Group, Mitsubishi UFJ Financial Group (MFUG), R3, State Street, SWIFT, VMware and Wells Fargo.

Many of the founding members are already investing considerable research and development efforts exploring blockchain applications for industry. IBM intends to contribute tens of thousands of lines of its existing codebase and its corresponding intellectual property to this open source community. Digital Asset is contributing the Hyperledger mark, which will be used as the project name, as well as enterprise grade code and developer resources. R3 is contributing a new financial transaction architectural framework designed to specifically meet the requirements of its global bank members and other financial institutions. These technical contributions, among others from a variety of companies, will be reviewed in detail in the weeks ahead by the formation and Technical Steering Committees.

Blockchain is a digital technology for recording and verifying transactions. The distributed ledger is a permanent, secure tool that makes it easier to create cost-efficient business networks without requiring a centralized point of control. With distributed ledgers, virtually anything of value can be tracked and traded. The application of this emerging technology is showing great promise in the enterprise. For example, it allows securities to be settled in minutes instead of days. It can be used to help companies manage the flow of goods and related payments or enable manufacturers to share production logs with OEMs and regulators to reduce product recalls.

"Distributed ledgers are poised to transform a wide range of industries from banking and shipping to the Internet of Things, among others," said Jim Zemlin, executive director at The Linux Foundation. "As with any early-stage, highly-complex technology that demonstrates the ability to change the way we live our lives and conduct business, blockchain demands a cross-industry, open source collaboration to advance the technology for all."

Distributed ledger systems today are being built in a variety of industries but to realize the promise of this emerging technology, an open source and collaborative development strategy that supports multiple players in

multiple industries is required. This development can enable the adoption of blockchain technology at a pace and depth not achievable by any one company or industry. This type of shared or external Research & Development (R&D) has proven to deliver billions in economic value.

This collaboration is expected to help identify and address important features and currently missing requirements for a cross-industry open standard for distributed ledgers that can transform the way business transactions are conducted around the world.

For more information about the project and how to participate in this work, please visit: http://blockchain.linuxfoundation.org

#### Comments

### ANZ Bank

ANZ CTO Patrick Maes said, "We are pleased to confirm our participation in the open ledger project as we recognise that there is currently no industry accepted, enterprise-grade blockchain framework today that is fit for purpose for our industry. Our objectives around blockchain initiatives are that we will seek to learn, explore and contribute to the development of a global framework with our ecosystem partners, and ANZ is uniquely placed in this regard since we operate in 34 markets." Nigel Dobson, ANZ's General Manager of Payments Transformation said he sees involvement with the project as an opportunity to explore and contribute to real-world, bank-grade applications of the technology and wider frameworks. "I see significant potential opportunities in the future to improve our customer experience and potentially deliver productivity gains by solving real business challenges, with initial use cases in payments and particularly correspondent banking."

#### Cisco

"The Open Ledger project is a key turning point in the industry establishing enterprise grade blockchain technology. It's key for the industry to enable an open developer community around blockchain and it's great that so many colleagues are joining and supporting the effort to move the entire Internet community forward," said Dave Ward, SVP and chief architect, Cisco Systems.

# CLS

"CLS is pleased to participate in this broad industry-wide effort to standardize and advance Distributed Ledger Technology," said David Puth, CEO of CLS. "A common DLT platform on which product specific solutions can be built is key to the successful adoption of this technology."

### Credits

"Distributed Ledger Technology is quickly becoming the most exciting industry to help build out," said Credits CEO & Founder, Nick Williamson. "It's initiatives like the open ledger project that will help cut through the noise stemming from the hype cycle and start bringing substance to this nascent industry."

#### Deutsche Börse

"Deutsche Börse group sees great potential in blockchain technology, and is delighted to join this initiative. As a market infrastructure covering the entire value chain, we believe that the true value of the blockchain will only materialise as part of industry initiatives such as Hyperledger project," Jeffrey Tessler, Member of the Executive Board, Deutsche Börse AG.

### Digital Asset

"We are delighted that The Linux Foundation is providing a broadly-supported vehicle through which we can contribute the Hyperledger brand and enterprise grade blockchain solutions to the open source community," said Blythe Masters, CEO of Digital Asset. "The resulting impetus will benefit our clients and the entire global financial services industry who are seeking to build business applications on a trusted foundation."

#### DTCC

"DTCC, as an industry owned and governed financial infrastructure, shares the global interest in the potential of distributed ledger technology and is pleased to be part of this industry wide Hyperledger initiative to create governance, standards and ensure the core technology is open source and based on collaboration," said Mike Bodson, President and CEO of DTCC.

### IC3

"IC3 - Initiative for CryptoCurrencies and Contracts - is delighted to be a part of this initiative and bring the strengths of its team of academic researchers—rigorous security analysis, expertise in distributed systems and cutting-edge cryptography, and an interdisciplinary perspective—to this vibrant new community." - - Ari Juels, Jacobs Institute, Cornell Tech; Andrew Miller, University of Maryland; Elaine Shi, Cornell University; and Gun Sirer, Cornell University.

### *IBM*

"A broad, cross-industry and open source approach is critical to advance the potential for blockchain and make it mainstream," said Arvind Krishna, Senior Vice President and Director, IBM Research. "Even beyond building out standards, creating common code will allow organizations to focus on creating industry-specific applications that enhance the value of this technology."

# Intel

"Open source software is very well suited to be the basis of highly-complex technologies that require secure transactions," said Imad Sousou, vice president and general manager, Open Source Technology Center, Intel Corporation. "The open ledger project can help enable the industry to focus on a shared infrastructure to help create value and impactful innovation."

### London Stock Exchange Group

Moiz Kohari, Group Head of Technology Innovation, London Stock Exchange Group said: "LSEG is committed to an open source collaborative approach to the development of the building blocks for blockchain technology. We believe this technology has the potential to drive change across the industry but will need to be developed in partnership with clients and other industry participants under an open source approach. This needs to be done in a considered and rigorous manner to benefit the market as a whole."

# Mitsubishi UFJ Financial Group (MFUG)

"The evolution of information and communication technology including blockchain is the origin of new market creation," said Satoshi Murabayashi, Senior Managing Executive Officer and Group CIO, MUFG. "The new product and services supported by open innovation platform is key factor for Japan and world economy. MUFG supports this project for creating innovative financial services."

*R3* 

"R3 has long believed that an open source approach is the best vehicle for developing the foundational elements of a financial grade shared ledger that will benefit all market participants and their clients" said David Rutter, CEO of distributed ledger initiative R3, the largest bank consortium in history. "We're very excited to be a part of this effort led by The Linux Foundation, the marquee name in open source technology development."

## State Street

"Advancement in distributed ledgers can provide tremendous evolutionary opportunities in financial services, and drive new opportunities and efficiencies in institutional investing," said Antoine Shagoury, global cief information officer at State Street. "The work the open ledger project is focused on is an important first step as coordinating open standards will help this technology achieve the critical mass it needs."

#### **SWIFT**

"SWIFT is delighted to support this industry-wide effort to advance distributed ledger technology," said Craig Young, SWIFT's Chief Technology Officer. "Cooperation and collaboration – hallmarks of the SWIFT cooperative – will be key to ensuring the scalability and adoption of this technology."

# About The Linux Foundation

The Linux Foundation is the organization of choice for the world's top developers and companies to build ecosystems that accelerate open technology development and commercial adoption. Together with the worldwide open source community, it is solving the hardest technology problems by creating the largest shared technology investment in history. Founded in 2000, The Linux Foundation today provides tools, training and events to scale any open source project, which together deliver an economic impact not achievable by any one company. More information can be found at <a href="https://www.linuxfoundation.org">www.linuxfoundation.org</a>.

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