

Expert Insights

Blockchain is Here for the Enterprise: The Hyperledger Project



Brian Behlendorf

Executive Director, Hyperledger Project

Brian Behlendorf is the Executive Director of Hyperledger Project. He was a primary developer of the Apache Web server, the most popular web server software on the Internet, and a founding member of the Apache Software Foundation. He has also served on the board of the Mozilla Foundation since 2003 and the Electronic Frontier Foundation since 2013. He was the founding CTO of CollabNet and CTO of the World Economic Forum. Most recently, Behlendorf was a managing director at Mithril Capital Management LLC, a global technology investment firm.

We are about to see a complete transformation in the way we exchange and track data and assets across industries. Creating standards for a cross-industry distributed ledger has the opportunity to revolutionize the way we do business, increasing trust, accountability and transparency while simultaneously streamlining business processes. With distributed ledgers, virtually anything of value can be tracked and traded and in a permanent, secure way that makes it easier to create cost-efficient business networks without requiring a centralized point of control.

While blockchain technologies were initially created to support the anonymity and secure the exchange of cryptocurrencies in the 2000's, perhaps most famously in the Bitcoin¹ system released in 2009, the technology has business applications far beyond cryptocurrency. Companies across industries have already begun to apply blockchains to financial assets, manufacturing, intellectual property or real estate. In many cases, these systems have nothing to do with cryptocurrencies, but are simply common ledgers and smart contract platforms.

This is where the Hyperledger² Project (HLP) comes into play. The HLP was founded in December 2015 as a collaborative effort created to advance blockchain technology by identifying and addressing important features for a cross-industry open standard for distributed ledgers that can transform the way business transactions are conducted globally. As we have seen with many early-stage and complex technologies that fall under the collaborative project umbrella at the Linux Foundation³, the beauty of cross-company and industry open source projects is that organizations can share the unprofitable and unsexy work of building the libraries and standards that underlie systems. A shared code base also serves as an excellent way of concurrently building a standard for coexisting on a blockchain.

The HLP envisions a world of many chains, some public like Bitcoin, some private, some "unpermissioned" like Bitcoin, some "permissioned" like you will likely see in healthcare settings, at least initially. Hyperledger aims to provide tools for communities to build their own chains, rather than driving everyone to one chain. Much like the Apache web server project drove people to build their own websites, rather than encouraging everyone to just use one big site.

The joint goal is to develop a common distributed ledger technology that is shared, transparent and decentralized, which makes it ideal for enterprise applications in finance and a myriad of other areas including retail, banking, manufacturing and the Internet of Things. Designed for collaboration and with a strong focus on privacy, confidentiality and auditability, Hyperledger allows anyone to create their own blockchain shared ledger for their own company, industry or personal use case.

The Project's mission is four-fold:

1. To create an enterprise-grade, open source distributed ledger framework and code base, upon which users can build and run robust, industry-specific applications, platforms and hardware systems to support business transactions.
2. To create an open source technical community to benefit the ecosystem of the HLP solution providers and users focused on blockchain and shared ledger use cases that will work across a variety of industry solutions.
3. To promote participation of leading members of the ecosystem including developers, service and solution providers and end users.
4. To host the infrastructure for the HLP, establishing a neutral home for community infrastructure, meetings, events and collaborative discussions and providing structure around the business and technical governance of HLP.

With more than 80 members (as of August 30, 2016), the HLP is among the fastest-growing projects at The Linux Foundation with an impressive membership base. As a premier member, Hitachi will likely play an important role in the project. It is still early days, but as we advance in establishing open source standards across blockchain technology, we will see a significant evolution in how we conduct transactions across industries.

*1 Bitcoin is a registered trademark of bitFlyer, Inc.

*2 Hyperledger is a trademark of The Linux Foundation.

*3 Linux Foundation is a registered trademark of The Linux Foundation. Linux is a registered trademark of Linus Torvalds.