



**Unlock the future
of business partner
integration with
blockchain**



With enterprises aiming for bigger markets with new business models adhering to government regulations, partner credibility has gained more importance. This makes it mandatory for a B2B integration product to provide features in the areas of security, data transparency, self-service, partner collaboration, custom query/reporting, operational analytics, audit readiness and industry regulatory compliance.

The best way to scale the existing B2B products to provide the above-mentioned features is by leveraging technology trends like Cloud hosting, API Integration, blockchain, etc. This will counter the risk of a full-fledged migration to another product, cuts the associated costs, and ensures smoother business-as-usual operations.

Leveraging blockchain for modern B2B scenarios

Out of the many technology trends which can positively influence the B2B technology landscape, blockchain stands out with few trademark features like fault-tolerance, security and traceability. Adoption of this technology will enable the above mentioned features for the modern B2B product.

A B2B chain is made of multiple parties contributing to the information flow at different points in time. In a traditional B2B approach, each party has its own mechanism for information flow and tracking. Also, the process of data processing and communication is mostly batch driven. Blockchain provides a holistic approach to multi-party transaction processing where the functions of data processing and communication are performed by a single system. In addition, 'distributed ledger' in blockchain can bring in a 'shared state' visibility among all the stakeholders of a trading partner network, thereby remediating the exceptions as they arise.

Blockchain could record supplemental events, such as those provided by IoT and smart devices, and provide a more detailed and synthesized

record of all information flows. The actual exchange of B2B documents that occurs today can continue to operate as is, and a blockchain could simply add a shared visibility 'overlay.'

Few interesting B2B use cases with blockchain

Supply chain visibility

Today, visibility in EDI relies heavily on functional acknowledgements. With blockchain, transparency, auditability and visibility is enabled to all participants in a supply-chain network. This will eliminate the need for functional acknowledgements. It will also safeguard the sequence of the transactions in a particular business process. Furthermore, new transactions will be validated in real-time by smart contract rules, which would reduce or maybe eliminate any exceptions altogether.

EDI data reliability & anonymity

A blockchain validates all the data by default. In its decentralized model, no single register has control of the blockchain. Taking the example of a B2B supply chain scenario, data consumers interact with the blockchain directly through apps and data providers record metadata on the blockchain independently.





Blockchain provides a holistic approach to multi-party transaction processing where the functions of data processing and communication are performed by a single system.

Blockchain-based EDI transactions allow users to control their data through private and public keys, allowing them to own it. Third-party intermediaries are not allowed to misuse the data they have access to. Hence, data coming out from a blockchain can be trusted.

Data security

Blockchain platforms are decentralized and this enables decentralization of customer data. In order for a data to be changed, not one but a set of nodes need to be compromised which have elaborate consensus algorithm. This ensures that a data change by an individual party is virtually impossible. As the data is distributed and shared by all parties, addition or change of data is possible only with the endorsement of all parties in the set of nodes. These features make blockchain suitable for a B2B/ EDI trading partner network scenario.

Better operational intelligence & analytics

Blockchain enhances the authenticity of data analysis by rejecting every entry that cannot be verified. Blockchain has a record of every update made to a transaction. In a typical supply-chain scenario, the latest status of a transaction will be visible to all stakeholders of a block network. This ensures the status of the data be real-time and readily usable for analytics and audits,

making the data presented in business/audit reports authentic and realizable.

Distributed ledger & partner collaboration

Usage of distributed ledger eliminates/reduces the need of an intermediary in a business transaction. Also, the records are stored in the ledger only where consensus has been reached by both parties involved. Hence, in a B2B partner network, partner interactions/ integrations are more autonomous, credible and efficient.

More agility in building dynamic ecosystems

One of the challenges in traditional B2B integration is partner on-boarding. This requires a Trading Partner Agreement to sort issues in an authentic and non-repudiate manner. Also, their connectivity and security needs to be established, tested and renewed regularly. This whole process impacts time to market. With blockchain not requiring a pre-existing relationship, B2B integration becomes more agile in establishing connections and on-boarding partners to meet business needs faster.

Conclusion:

Having given some thought to where blockchain can be used for B2B technology in order to complement and enhance its functionality, we also need to consider the challenges a business might come across while on-boarding its partner by adopting blockchain. Some of them are:

1. High investment and maintenance of framework / assets for appropriation of blockchain benefits and ROI
2. On-boarding small and medium business / non-EDI partners who might not have a strategy to adopt blockchain technology

While the core B2B functionalities of data transfer and transformation will be untouched by blockchain, it is only fair to say that blockchain is well on the way to keep running as a technology supplementing EDI framework.

About the authors

Surendra Singh Naruka

Practice Manager, Wipro Limited

Surendra has over 17 years of experience in technical consulting, solution architecture & design, project management, development and implementation in the area of B2Bi cloud integration. He is also involved in delivery of mission-critical cloud-hosted integration solutions that handle large volumes of complex data and transactions using industry-leading B2B integration / managed file transfer products.

Ramya Rengamannar

Consultant, Wipro Limited

Ramya has over 15 years of experience in B2B / EDI modernization, solution architecture, product comparison, and strategy around B2B integration. She has managed integration competency centre, EDI transformation, and led managed services engagements for global clients. She was instrumental in setting up and supporting Wipro's cloud-based B2BaaS solution.



Wipro Limited

Doddakannelli, Sarjapur Road,
Bangalore-560 035,
India

Tel: +91 (80) 2844 0011

Fax: +91 (80) 2844 0256

wipro.com

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For more information,
please write to us at
info@wipro.com

