Devvio Data Management

Devvio efficiencies and scale enable blockchain implementations at equivalent levels to current database management systems, but with the added benefit of richer data sets.

Datasets are structured in powerful and valuable format that can be used with analysis tools like visualization systems or machine learning / AI.

Devvio Data Management enables increased levels of reporting, visualization and analysis, security, interoperability and privacy of data.

Devvio enables blockchain AI convergence at scale and cost.

With Devvio AI development becomes more observable.

Devvio enables AI training to become less expensive.

With Devvio malicious alterations are limited, if not prevented protecting AI systems.

Immutability of data records.

Devvio changes the cost structure and throughput of blockchain enabling the ability to maintain datasets in a powerful and valuable format that can be used with analysis tools like visualization systems or machine learning / AI.

Devvio Blockchain Data Management

When one looks at what is fundamentally stored on a blockchain — time-sequenced data — it makes sense that data and analytics leaders have looked to leverage blockchain in the data management domain, using the current data context to describe blockchain broadly as shared databases. Blockchain provides for a time-sequenced data format that is both ideal for machine learning and impossible to achieve in large data sets held in traditional databases.

Before Devvio's scalable solution, however, blockchain solutions did not have the scalability and cost to utilize it in real world-applications. With Devvio's Data Management, one can now maintain large-volume and high-throughput datasets for analysis, visualization, machine learning and artificial intelligence use. Devvio completely changes the data paradigm, enabling new capabilities in the information ecosystem. Maintaining a full history of data as it occurs, enables new levels of reporting, visualization and analysis, security, interoperability and privacy of data at global scale and cost all of which leads to the convergence of blockchain and AI.

Devvio smart contracts enable automation of business processes.

Interoperability across systems.

The Devv Blockchain is Byzantine Fault Tolerant. It is distributed and all transactions are assured through a consensus protocol.

The Devv blockchain can support tens of millions of transactions per second.

Devvio provides a backbone for designing and implementing shared operational and technical frameworks.

Devvio implements shared frameworks that adhere to regulatory requirements.

One of Devvio's key enabling elements is the patented ability to implement, manage and scale independent shards horizontally without sacrificing global state management.

Data can be encrypted on both public and private shards, and references to off-chain data can be maintained on-chain.

Devvio can maintain both short-term and long-term storage for an immutable record of transactions. This provides full backups, disaster recovery, and prevention of ransom attacks.

Devvio allows Integration with private and public blockchains, and ease of onboarding and integration.

Devvio provides for multiparty integration with incumbent systems, and management of security and granular permission settings across parties.

KEY BUSINESS BENEFITS

Devvio Enabling Blockchain AI Convergence

In blockchain, all data is stored in an immutable format where all transactions are innately ordered as they are received. This is a powerful and valuable data construct. Given that the data that is stored is time-ordered, machine learning or artificial intelligence algorithms can be used to understand not only the current state, but historical information on how systems operated and evolved. This historical data can be used to provide rich analytic insights that can be used to improve products and customer experiences. Only Devvio has the transactional throughput and scalability for commercial blockchain implementations that can match established database management system implementations. This throughput is the key to enabling the convergence of blockchain and AI.

Modern artificial intelligence and blockchain are two of the most powerful technologies shaping the future of global digital information. Combining these technologies opens a whole world of possibilities. Artificial intelligence enables human-like pattern detection efficiency, but on extremely large datasets. Blockchain enables security, transparency and decentralization in addition to the innate robustness of its time ordered data format. It is easy to see how AI and blockchain complement one another. This is the basic premise of where Devvio's blockchain technology can revolutionize the next generation of AI.

Devvio's blockchain enables a number of AI benefits. Training AI becomes less expensive. The robust nature of blockchain data innately gives AI systems improved abilities for classification, prediction, pattern recognition, optimization, and general intelligence. Additionally, data is immutable and secured, distributed, and has more robust provenance.

Devvio Security

Devvio's security OS delivers best in class security benefits, solving the major problems facing cybersecurity professionals today. For over three decades, Byzantine fault tolerance (BFT) has become the gold standard for security in distributed systems. As the name suggests, Byzantine fault tolerance means that a system can tolerate (i.e. still achieve consensus in the presence of) Byzantine faults – the category of faults where nodes may be malicious. In effect, this means that there is no central point of failure, and even if a number of servers in a network are compromised, the system as a whole maintains its integrity and security. Devvio enables the deployment of a Byzantine Fault Tolerant security backbone across the entire communications and IoT network providing security solutions that enable identity, authentication, resiliency, the reliability of information, and surety of access to communication networks and digitized assets. Devvio has

Only Devvio has the transactional throughput and scalability for commercial blockchain implementations to match established database management system implementations enabling the convergence of blockchain and AI.

Devvio can deliver best-in-class BFT solutions at a cost and scale that drives strong ROI for enterprise asset management use cases.

Devvio is able to support greater control, granularity and trust to data sharing. This will represent a core catalyst for automated business models involving broader ecosystems and will solve some of the most pressing issues for the future of leveraging Communications and IoT networks.

Devvio can extend a best-in-class Security overlay for all extended data management solutions including IoT, Financial Services, Payments, Compliance, Identity, Mobility and Supply Chain.

Devvio provides security solutions that enable identity, authentication, resiliency, information reliability, and assured access to communication networks and digitized assets.

Data coming from devices can be verified as being authentic, and can be stored on an immutable ledger, providing valuable proof of provenance.

Devvio's solution allows privacy to protect an enterprise's private data even while engaging in multiparty collaboration.

built a large patent IP portfolio around the security capabilities and enabling technology in this space.

Devvio Immutability

Devvio's ability to create a blockchain ledger that will remain a permanent, indelible, and unalterable history of transactions is a definitive feature that is a key benefit for security systems. Additionally, Devvio's immutable records are distributed and held across multiple computers.

Devvio's blockchain implementation brings an unprecedented level of trust and disaster recovery to the data enterprises use on a daily basis — immutability and decentralization provide full data integrity and disaster recovery. With blockchain, enterprises can prove to their stakeholders that the information they present, and use has not been tampered with, while simultaneously transforming the audit process into an efficient, sensible, and cost-effective procedure.

Devvio Best-in-Class Scale

One of the top technical challenges facing Blockchain technology deployment is the ability to scale and do so at an effective price point while maintaining security. These requirements are foundational to running secured networks in mission-critical, high-risk and high data volume (sometimes low-bandwidth) environments. Devvio has solved the sharding problem, enabling horizontal scaling and therefore a solution for scaling challenges. This provides an operational platform to build a global scale end-to-end asset management network that can manage tens of millions of transactions per second.

Devvio Interoperability

The ability to securely and reliably interconnect multiple networks is a challenge in the Communications and IoT realm. Although blockchain is not innately a data integration tool, distributed ledgers are inherently designed to offer shared visibility of data. Thus, Devvio's blockchain technology provides for new levels of interoperability. Devvio enables seamless interoperability solutions, easily integrating existing traditional databases with our blockchain platform. Devvio's solution provides a backbone to support connection and cooperation across established technologies, with quick onboarding of traditional data and intuitive integration with existing processes using tools such as our RESTful API, all of which is critical for global enterprise asset management.