



**Overview:** Blockchains are a digital database of continuous and verifiable transactions that records the exchange of data without an intermediary. They are inherently resistant to modification, as individual transactional “blocks” cannot be altered once entered into the “chain.” They can therefore be a permanent and trusted record of events, transactions, payments, etc.



## Retail Perspective

Blockchain was originally constructed to safely and securely track, record, and store currency transactions, such as Bitcoin. It has since emerged as a revolutionary technology with the potential to improve payment systems, reduce fraud, implement smart contracts, enable transparent and secure supply chains.

## Key Takeaways

- Digital transactions are automatically verified directly from the parties involved, thus eliminating the need for a third-party moderated system.
- Supply chain logistics will be enhanced with automatic tracking of product and chain-of-custody information such as temperature and quality of goods, shipment and delivery dates, and safety certifications.
- Asset protection capabilities will improve drastically as stolen or missing products will become easier to trace.
- The technology allows consumers to individually verify the origin and authenticity of the clothes they wear, the food they eat, and more.

## Retail Use Cases

**Payment Security:** Overstock.com was the first major retailer to accept Bitcoin payments in the U.S. in 2014, and has since embraced payments in this form of digital currency from consumers across the globe ([Wired](#)).

**Supply Chain Traceability:** Walmart and a coalition of food suppliers, including Unilever, Nestle, and Dole, have partnered with IBM to test the use of blockchain for addressing food safety. By implementing this technology, they hope to revamp their data management processes across a complex supply network that includes farmers, brokers, distributors, processors, retailers, regulators, and consumers ([Fortune](#)).

**Smart Contracts:** In October 2015, Visa announced its smart contract proof of concept for car leases and rentals, working with DocuSign to create a solution with the aim of reducing or altogether eliminating legal paperwork that customers have traditionally endured in the car rental process ([ACI Worldwide](#)).

**Trust in Transparency:** Retailers are dependent on the trust they build with their customers, and encoding brand values into a blockchain can provide brands with a customer-verifiable way to ensure that experiences are consistent and transparent ([SmartBrief](#)).



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