The Secret to Unlocking a Sustainable Retail Future Through Blockchain

Through the lens of Coresight Research’s EnCORE framework for sustainability in retail, we discuss how blockchain technology can facilitate and accelerate the adoption of sustainable business practices.

- Tracking, tracing, transparency and provenance are key features of blockchain that support corporate sustainability strategies and enhance the go-to-market propositions of consumer-facing industries where authenticity and trust are paramount. The single source of truth offered by a distributed ledger automatically offers all relevant parties access to its verified records. Data immutability and the distributed visibility of blockchain ledgers can create synergies among value-chain partners and drive new, transformative business models that are more sustainable and profitable.

- Blockchain supports companies’ sustainability initiatives across every aspect of the EnCORE framework:
  - Environmental awareness: Enabling data sharing for internal and external auditing.
  - Circular models: Reducing waste through circularity.
  - Optimized operations: Identifying opportunities for energy efficiency in operations.
  - Responsible supply chains: Driving transparency in the supply chain.
  - Excellence in reporting and communicating: Building consumer trust through improved ESG (environmental, social and corporate governance) reporting.

What We Think: The environmental sustainability and ethical business practices of consumer-facing industries have material implications on a firm’s value, its opportunities and its relationships with consumers. Blockchain provides retailers and brands greater visibility into their supply chains, offering data accuracy and immutability. Blockchain unlocks value and reduces costs, as information can be shared, aggregated and filtered across multiple organizations. This powerful network effect through shared infrastructure enables collaboration and drives insights and innovation, increasing operational efficiency.
Introduction

What’s the Story?

Coresight Research has identified sustainability as a key trend to watch in retail. Our EnCORE framework for sustainability in retail provides a model through which retailers can begin to internalize a sustainability strategy. We introduced the EnCORE framework in Coresight Research and IBM’s report, The Time for Sustainability Is Now.

In this report, sponsored by IBM, we focus on the benefits and opportunities that blockchain presents for the future of retail, exploring how this technology can facilitate and accelerate the adoption of sustainable business practices across the five elements of EnCORE.

Why It Matters

The importance of sustainability is growing among multiple stakeholders: consumers are increasingly demanding that the brands and retailers they buy from improve sustainability and transparency; employees want to work for sustainable companies; and investors screen for ESG (environmental, social and corporate governance) to limit exposure to risks related to unsustainable businesses.

To meet stakeholders’ expectations around sustainability, retailers can turn to technology such as blockchain to support their sustainability initiatives as well as to realize further benefits in reducing risk and improving efficiency in the supply chain.

The Secret to Unlocking a Sustainable Retail Future Through Blockchain: Coresight Research x IBM Analysis

What Is Blockchain?

As defined by IBM, blockchain is a shared, immutable, digital ledger that facilitates the process of recording transactions and tracking assets in an online business network. Blockchain enables multi-party integration where each participant can connect, share data and increase transparency across their supply chain ecosystem. Each participant controls what data they share and whom they share it with.

Due to the immutability and distributed visibility of the blockchain ledger data, blockchain works to increase trust between organizations and allows for more informed and timely decisions—leading directly to improved efficiency, reduced costs and reduced risk. Ultimately, by creating synergies among value-chain partners, blockchain enables the creation of entirely new, transformative, sustainable and profitable business models.

Blockchain is employed across multiple industries today. For example, consumers want to know that the food they eat is safe and sustainably produced: blockchain provides traceability and provenance in the grocery industry, where strict refrigeration protocols must be followed across dozens of different parties to assure product integrity through the supply chain.

Another prevalent use of the technology is smart contracts (digital contracts stored on a blockchain). In addition to providing a permanent record of a contract’s iteration, smart contracts are automatically executed based on certain terms (along the lines of “if/when X occurs, then Y is triggered”).

While many common retail supply chain issues are hard to trace, blockchain technology can increase transparency around ethical issues like child labor abuses and human rights. Blockchain provides retailers with the visibility consumers desire, proving their goods are sustainably and responsibly sourced and produced, and ensuring ethical business practices.

For brands and retailers with sustainability goals, blockchain provides visibility across the supply chain. By enabling trusted data capture and exchange across supply chains, blockchain offers companies the tools needed to measure how sustainable their products and supplies are.