

EVERLEDGER Diamonds

Developed a real-world Blockchain use case for Everledger to verify the authenticity, provenance, and custody of diamonds across the supply chain



Challenges

Diamond supply chains are extremely complex, discrete, and fragmented, which results in lack of transparency and trust among shareholders. Tracking the entire gamut of a diamond's lifecycle from extraction to polishing to retail is enormously difficult.

To make the whole process a breeze, Everledger needed a consistent, reliable and cost-effective solution which would aid diamond businesses to effectively identify and track the entire history of diamonds as they pass through the value supply chain.

Considering our comprehensive knowledge and a proven track record of pursuing ambitious Blockchain projects, Everledger approached Debut Infotech for a robust, cost-effective supply chain use case for those immersed in the Diamond industry.



Our Approach

Established an ecosystem of trust through digital provenance tracking & certification

By harnessing our enterprise-grade knowledge and hands-on experience in Blockchain technology, Everledger was able to successfully build a supply chain Blockchain use case which helped them track & trace the provenance of diamonds, ensuring transparency at every stage of a diamond's journey from mine to counter.



Our Key Offerings Included:

- ✓ **A Future-proof, Hyperledger Based Solution** for tracking diamonds supply chain
- ✓ **A Digitized, Tamper-Proof Database** that eliminates opportunities for error or fraud
- ✓ **Smart Contracts** for secure data provenance management
- ✓ **IoT sensors** for monitoring and tracking the movement of diamonds through the supply chain
- ✓ **Privacy Controls** that restrict access to sensitive data, while maintaining traceability

Results



Improved Track & Trace Capabilities

The use case provided provenance tracking and record keeping which made information tracking enormously easy.



Increased Scalability

With our Blockchain based supply chain solution, large databases could be accessed from multiple locations around the world.



Enabled Real-Time Visibility & Inventory Optimization

The solution provided continuous, real-time access to a chain of events that could be optimized iteratively.

Technology Stack



Docker Swarm



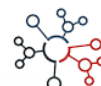
Kafka



Hyperledger Fabric



Public Key Infrastructure



Private & public IPFS Cluster



Kubernetes