retraced increases scale and transparency with Autonomous JSON Database

“Having the infrastructure, database, and blockchain application running on one platform made it so much easier for us to expand our platform very quickly and at scale.”

— Peter Merkert, Cofounder and CTO, retraced
retraced increases scale and transparency with Autonomous JSON Database

retraced uses Autonomous JSON with Oracle Blockchain platform to increase sustainability in the apparel industry.
Business Challenge

Despite some fashion brands’ efforts to mandate safe and upstanding working conditions at the factories they buy from, there hasn’t been much visibility into the increasing volume of subcontracted work. The mission of retraced is to enable its manufacturing customers to provide that supply chain visibility, via a blockchain application that lets consumers know exactly who made their products, from which materials, and under what conditions. The key to that brand promise is the ability to reassure customers that they can trust that the data in the app is reliable and verified.

Results

With the help of Oracle’s technology and expertise, retraced managed to go from project start to launch within 12 months. The company’s early customers include CANO, a Mexico-based designer of ethically handcrafted leather-woven huaraches, and Jyoti - Fair Works, a German “fair fashion” label that uses retraced’s app to help it map, verify, and store its suppliers’ activities. Retraced stores and analyzes data in Oracle Autonomous JSON Database, Oracle Autonomous Data Warehouse, Oracle Analytics, which all run on Oracle Cloud Infrastructure. They store a variety of JSON documents connected with the application, including copies of orders placed by brands with suppliers and images associated with products, components, brands, factories, farms, and so on. “Having the infrastructure, database, and blockchain application running on one platform made it so much easier for us to expand our platform very quickly and at scale,” says retraced Cofounder and CTO Peter Merkert.

The application’s microservices architecture quickly pulls in fabric images, on-boards new suppliers, or adds orders to the blockchain. Its Oracle Container Engine for Kubernetes “lets us run multiple instances simultaneously, even when the application is getting hit with thousands of requests at once,” Merkert says. And with its Oracle Autonomous Transaction Processing Database, “it really doesn’t matter how many processes I’m running,” he says. “I can just click to get more storage, click again to get more CPU power, and boom, it’s there. With Oracle Cloud, networking and backup are highly automated so our small, lean development team are more focused on business solutions that add value to our customers.”
Why retraced chose Oracle

It made sense for retraced, a participant in Oracle for Startups, to turn to Oracle for the underlying infrastructure for blockchain and other database technologies it needed to build that trust. Oracle Autonomous Database and Oracle Blockchain Platform ensure that the data collected at every step of each customer’s supply chain is reliable. Also, the data can’t be altered or erased without the knowledge of all participants in the chain. “Whenever we had questions, we could go to the guys at Oracle, and the next day we had a call for an hour with an expert,” says retraced Cofounder Lukas Pünder.