

Global Leader in Materials Engineering Solutions Saves Over 10,000 Hours a Year using Kx



Overview

Organization: **Leader in Materials Engineering Solutions**
Geography: **Global**
Industry: **Semiconductors**
Employees: **22,000+**

This organization is the global leader in materials engineering solutions used to produce virtually every new chip and advanced display in the world. It's application is the most comprehensive control and productivity suite in manufacturing. It is powered by technologies that are widely proven and deeply mature in high volume factories worldwide.

“We’ve revised our database architecture to include a [Kx] database, a more performance based database to provide for that high speed data querying, as well as the data storage.”

Global Product Manager

Challenge

For years, the semiconductor and electronics industries has looked for solutions to solve complex manufacturing problems. A key challenge is the need for faster speed-to-data. A common customer complaint is that with the explosion of data, query speeds are too slow and want see improvements in speed to data and total cost of ownership. As an industry leader with a vast customer base, this organization proactively searched for a solution to meet these customer needs.

Why Kx

Over a year, 7 vendors were evaluated across 10 different objectives to enhance its application. This was an opportunity to look beyond the scope of traditional databases and found timeseries databases as a preferred solution that has had huge growth in adoption over the years. Kx proprietary database is built for real-time data use cases taking advantage of a timeseries architecture coupled with relational database technology, a programming language to enable real-time calculations in the database, and the ability to manage both streaming and historical data in the same database. Kx was selected for its superior performance results on ultra-fast speed to data, lower total cost of ownership, its ability to scale, and new user experience.

Benefits

With Kx improvements were made on several customer metrics, including speed-to-data. This facilitates improved Out of Compliance (OOC) response through reduced mean time to detect (MTTD) and faster completion of daily tasks (efficiency).

- **Replaced legacy system** at significant lower cost, including a 10x improvement in required hardware.
- **Improved query speeds by over 50x.**
- **Replaced legacy system at significant lower cost** due to high performance on a smaller hardware footprint.
- **Saved >10,000 hrs/yr** from immediate responses to OOC events
- **Cost savings through efficient licensing** from reduced footprint