

CASE STUDY

GLOVIA G2 Delivers Streamlined Operations and Foundation for Efficient Global Business



KEIHIN

Who: Keihin Corporation, a \$1.8 billion principal manufacturer for Honda that produces fuel systems, electronic controls, and heating, ventilating and air conditioning products.
www.keihin.com

Location: Headquartered in Tokyo, Japan

Business Problem: Keihin's three North American facilities needed a single solution to replace their existing, individually procured applications and to support the increasing fluidity of customer schedules

Solution: Keihin chose Glovia's extended ERP solution, GLOVIA G2, to replace their standalone applications with one proven, robust solution and to streamline operations, synchronize cycle times, tighten inventory control, and increase operational responsiveness. Glovia is now installed at Keihin's three North American facilities.

Benefit: Keihin's North American businesses now have accurate companywide visibility into crucial operations, which enable the businesses to run a leaner operation that has eliminated overtime and allows Keihin to meet customer demands and look ahead to global expansion and efficiency.



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The automotive industry, probably more than any other, depends on a range of component suppliers. Together they constitute one of the biggest supply chains on the planet as they deliver millions of vehicles a year to purchasers across every continent.

One major component supplier is the Keihin Corporation, which has manufacturing facilities in Japan, North America, Canada and other countries. Keihin is a principal supplier to Honda, for whom it manufactures fuel systems and electronic controls as well as heating, ventilating and air conditioning products. Keihin is a long established Japanese company, with roots going back to 1950, but the corporation in its present form derives from a series of mergers in 1997.

In the United States alone, Keihin has annual revenue of around \$600 million and its global turnover runs into billions. This is big business—and information technology is one of the mainstays of that business.

“We operate in an intensely competitive industry,” says Mike Mitsch, vice president of operations at Keihin Aircon, North America. “We have to have information quickly and it must be accurate. Our customer schedules are very fluid—and they become more so by the week, month and year as the car makers continue to respond to increasing consumer demands.”

In 1995, one of Keihin’s pre-merger companies, Indiana Precision Technology (KIPT), realized they were wasting time and duplicating effort by using standalone PCs running a variety of individually procured applications. The rapid growth and associated disjointed applications—combined with more stringent and fluid customer schedules—made an imperative case to change business processes and implement an ERP system with the goal to streamline operations, increase operational responsiveness, and meet customers’ growing demands as effectively as possible.

Twelve Month Research Program

“We thought our operation was unique within the industry,” says Mitsch, “so we spent 12 months researching our processes and procedures. In parallel with that we began coding—based on an existing system in Japan that was to be converted for use in North America.”

This proved a bigger task than they had anticipated—the main challenge was to integrate a financial system with their manufacturing system. Initially the company began looking for accounting packages that would run on their Oracle database development platform.

“What we found was that most potential suppliers already had the type of modules that we were

trying to develop. So we then focused our research on modules such as MRP, MPS, inventory control, production control, purchasing, planning and so on. In the end we concluded that Fujitsu Glovia's ERP product, GLOVIA G2, met our needs. We procured and implemented the solution within two months, which ought to be some sort of record!"

A Common Software Platform

Keihin, having successfully implemented GLOVIA G2 in KIPT, used that experience to extend GLOVIA G2 to Keihin Aircon (KAC), its heating, ventilating and air conditioning subsidiary. Matt Snyder, IT manager for Keihin Aircon, was responsible for this project.

"The transition was very smooth and clean," Snyder says. "We imported some data from KIPT, then added our own financials and bills of materials. Glovia professional services helped us to get the different modules up and running." The Keihin Corporation has now implemented GLOVIA G2 in its three North American companies and the common software platform simplifies the incorporation of new factories into the manufacturing chain.

Matt Snyder has no doubt that GLOVIA G2 has simplified IT management. "Now we only have to support one package instead of several smaller,

independent modules, but the key operational benefit is the combination of the financials with the MRP modules: it's fast and convenient—and the multi-currency facility is going to be a major asset as we expand internationally," he says.

Mitsch adds, "If there was one attribute that influenced us in favor of Glovia, it was the multi-site, cross-company capability. This has made it easier and more economic for us to expand in North America." Another key factor was GLOVIA G2's ability to simulate different conditions, taking into account both supply and demand, and run different planning models.

Keihin now reaps the reward for the time the company spent on initial research. The IT team has acquired a wealth of Glovia expertise—they understand the architecture and can customize the various modules.

Going Lean

While lean manufacturing is growing in popularity, the concept of creating customer value, eliminating waste and continually improving processes has been around for nearly 50 years. Keihin's North American operations have become more efficient and responsive by revolving the company's operations around the needs and operations of their primary customer, Honda.

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The first critical step Keihin had to take to operate in this lean environment was to optimize their cycle times on the production line to match those of Honda so that their finished goods would come out at the same rate or cycle time and thus eliminate excesses and shortages.

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Glovia’s Factory Planning module enables Keihin to assimilate customer information and run simulations looking at their inventory, production schedules, finished goods, inventory, and more. In this way they can react within minutes or hours and have visibility into line loading and timelines for jobs, which makes it easy to see the status of their operations and identify problem areas quickly.

A synchronized production line also requires tight integration between Keihin and their suppliers so the right inventory—in the desired amount—arrives at the correct time. Keihin uses Glovia’s Supplier and Customer Releasing modules

to manage customer requirements and their subsequent distribution to their suppliers.

The Customer Releasing module allows Keihin to take in and assess customer requirements in order to know what needs to be accomplished. “Our customer orders go straight into customer releasing from EDI. This is very smooth and intuitive and has made a big difference in the way we operate,” says Snyder.

The requirements are then converted into the Supplier Releasing module and made available via the Internet. This quick and accurate communication speeds the coordination process between Keihin’s purchasing agents and their suppliers, as they are now looking at the same information—in real-time—as it arrives from the customer.

Inventory control also plays a crucial part in this streamlined flow process. Keihin employs what they call a “roaming warehouse,” meaning they do not use the typical vertical racking found in most manufacturing plants. Keihin instead uses floor storage, which is easier and faster to access but holds less quantity and thus increases the need for tighter inventory management. Their suppliers pack their trucks in such a way that when a truck



arrives, the parts are unloaded and used on the line immediately rather than being unloaded and stored until use.

Keihin, by adopting this methodology, is able to eliminate a great portion of time and space spent storing parts as well as virtually eliminate overtime for employees, who can now finally work a normal day.

Because the trucks are Keihin's warehouse, the tightest of inventory control is imperative for this method to work effectively since it is crucial to know exactly where the inventory is at any given moment.

Glovia's Inventory Control provides Keihin with full visibility of all material movement through an enterprise-wide system with integrated, interactive management of all inventories including physical stock room and in-transit.

"Prior to implementing GLOVIA G2, we kept roughly four days' worth of inventory in stock. Today, we have only half a day's inventory in stock," Mitsch says. "We do not have to build a larger building to store the inventory or hire more people to touch the inventory. This is hugely important as it allows us to do more with less."

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—Matt Synder, IT Manager at Keihin Aircon, North America

A Global Perspective

Downtime is a major issue for any manufacturing operation, and this has been minimal with GLOVIA G2. “We’ve been impressed with GLOVIA G2’s performance and reliability,” Snyder says. “We don’t have any problems with people waiting for long reports to print out or for processes and functions to finish.”

This view is echoed by Mike Mitsch who says that GLOVIA G2 gives them ample headroom as well as “more firepower than we need to win our industry battle.” The product is so rich in features that the company only utilizes those for which there is an immediate business need.

Mitsch believes that the future potential is enormous. “Within North America we’ve already used GLOVIA G2 amongst our three facilities. The next step is to take the systems that we have implemented and introduce them into the Asia Pacific market starting specifically with some of our plants in Japan. That is a target that we would like to hit soon and we are hoping to do it with the latest release of GLOVIA G2.”

One of Glovia’s strengths, according to Mitsch, is the language kernel. This allows Kanji to be displayed on the application screens—and the reporting modules support both Japanese and Chinese character sets. “As a company we need to use the same system globally.”

Mitch also views the partnership with Fujitsu as a major benefit and is now looking forward to the challenge of growing a global operation.

He concludes: “Modern business is very fluid. The rules change all the time but not the principles. The keys to success are know your inventories, know how much money you have, know how much you have to spend, and know how much you are going to make.

GLOVIA G2 covers a good eighty percent of our business needs and it gives us the information we want.”