



B-EN-G Aids Manufacturing Productivity and Reliability in IoT Solutions



Toyo Business Engineering, also known as B-EN-G, is a business engineering company with a wealth of ERP experience. The company provides a vast array of manufacturing services: IT planning, business consulting of BPR implementation, IT implementation consulting, and System Integrations and Operations. In addition to operating in Japan, the company operates out of China, Thailand, Singapore, Indonesia, and the United States. One of the company's major strength is to provide expertise and support of IT solutions.

The company's "mcframe" is a package specializing in Supply Chain Management (SCM) that comprehensively solves Japan's Manufacturing challenges. "mcframe" is made up of three layers that enable flexible operations. The basic package layer consolidates over 600 implementation practices and provides functions for multi-language support, multi-currency overseas support, internal control, and various regulatory compliances. The solution framework layer provides multi-device support and integrates with other solutions. The third and final layer provides total customization by allowing developers to access source code and database definitions. Since its launch 20 years ago, the company has led the market in resource planning software. However, customers now want to connect to the new range of devices that make up the Internet of Things (IoT); thus, "mcframe" needed to change to meet the needs of its customers' emerging technologies.

Toshiyuki Irimajiri, the chief general manager of the product and service development division, was tasked with the new development project. His mission is to launch a new business with mcframe and its product portfolio. He notes:

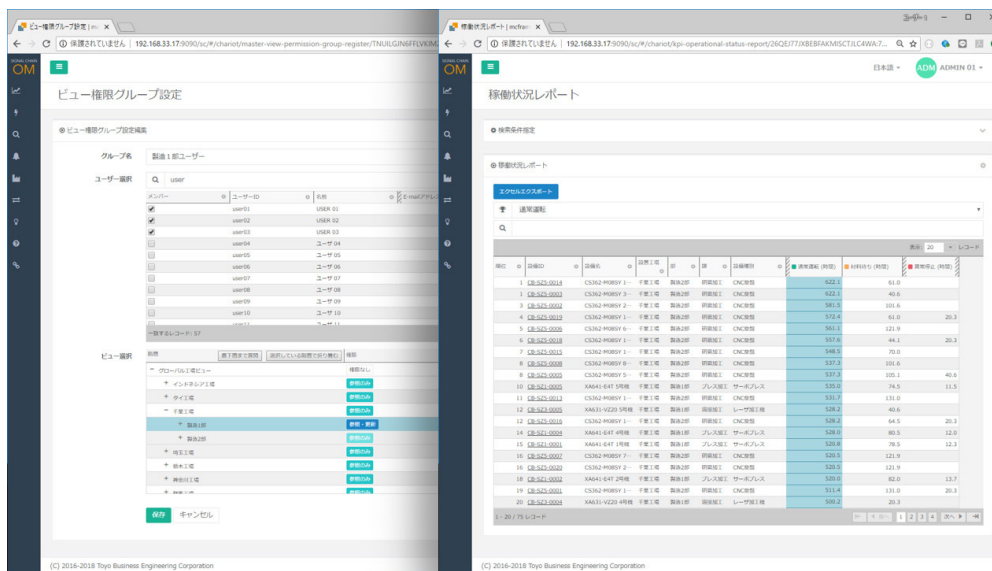
"With more than 600 corporate customers and over 2,000 customers from the IT industry, we are already Japan's provider of choice for manufacturing and logistics. SCM solutions in the manufacturing industry are notoriously difficult to sustain. We have been able to bring about 100% of both our introduction and continuations for our projects. I am proud of this achievement."

Historically, the manufacturing industry has had telemetry data for machines, but the information was not connected to solutions. Since the data acquisition was costly and not aggregated, only certain major companies were able to use it effectively. The team not only wanted to bring the data together to make it usable on tablets, but they also wanted to keep a substantial focus on the UI to provide a “WOW” factor.

Adding the “WOW” Factor: Speed and Efficiency

“We want our customers to use our product and say that it’s really cool; however, we were tasked to release “mcframe” SIGNAL CHAIN in a short time. We decided to use what we had as a base to build upon and use whatever we could take advantage of,” said Irimajiri.

With this decision, B-EN-G started evaluations for various UI component vendors. They chose to use Infragistics’ Ignite UI for JavaScript and its Angular Wrappers.



Hiroshi Kubo, a principal software architect with 15 years of experience at B-EN-G, was a lead developer on the project. He noted, “We had requests for grid functions in other products of mcframe series such as filtering, column moving, text wrapping in cells. To accomplish these needs, engineers had to extend in-box Table components in Java or use one of OSS libraries, but developing components by ourselves brought performance issues and longer development time. We determined a need for integrating robust and high-quality 3rd party components made for LOB apps.”

“We needed to code the Gantt chart that we use for project management, and this proved to be quite a challenge. During the evaluation period, we asked several component vendors to provide solutions. A lot of companies just replied with yes/no answers, but an Infragistics’ Solutions consultant quickly provided 2 types of sample implementations before purchase. He also noted the pros and cons of each implementation. This experience gave us the impression that Infragistics provides not only product features but also high-quality support and those were major factors in choosing Infragistics.”

Ignite UI for JavaScript is a complete library of JavaScript and HTML controls with tools that enable developers to code responsive and modern web applications with ease. The apps also work across multiple platforms (from desktops to tablets and phones).

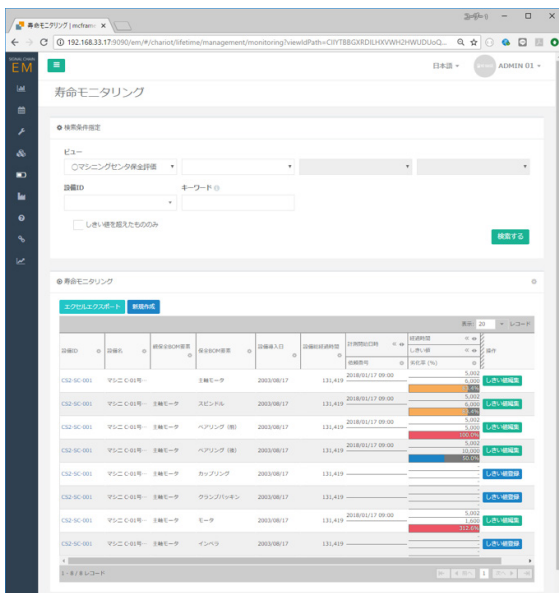
Components from Ignite UI for JavaScript are used in nearly 80% of mcframe SIGNAL CHAIN. The igGrid, in particular, is used in many screens and offers heavily used features, such as paging, column moving, Excel exporting, and Store column orders for each user.

“The coding for Excel exporting required only around ten lines. Ignite UI’s strength in Excel is truly top-notch,” said Kubo. “Also, we initially thought it would be hard to achieve a feature that stores column orders for each user, but when we had a chance to talk with Infragistics Technical Engineers, they provided a solution right away. Having features ready for LOB apps and high-quality technical support helped our development.” Irimajiri noted that the pre and post-purchase services from Infragistics aligned with B-EN-G’s own corporate culture: “We go all out to assist our customers and have an intuitive understanding of customers’ needs. As a result, we have completed nearly all of our implementation projects and the continuation rate has been close to 100%,” said Irimajiri. “It was nice to get this same level of care from Infragistics.”

“ In order to achieve requirements for Data Grids, it would have taken twice the cost if we hadn’t integrated Infragistics’ Ignite UI for JavaScript. ”

Hiroshi Kubo - Principal Software Architect for B-EN-G

IT and IoT Solutions to Boost Growth



In addition to making the interface intuitive and functional, “mcframe” SIGNAL CHAIN now handles more data and facilitates more efficient and lasting manufacturing chains. This enables “mcframe” to process various forms of data, such as maintenance, a schedule for support, and evaluation results.

“This feature both helps machines last longer and makes for more accurate stock keeping data,” said Irimajiri.

“Feedback from our customers regarding the new version has been very positive. We wanted to make SIGNAL CHAIN micro service a manual-less system (like adopting globalization). Our customers tell us it is easy to use and understand, even without

referring to a manual. Product management is a very complex field, but our long history in the industry gives us the experience to handle their needs," said Irimajiri.

Since the new mcframe SIGNAL CHAIN launched, approximately two new customer systems have been implemented each month in FY 2017, and B-EN-G foresees around 100 more in FY 2018.

"Moving forward, we foresee even more application of IoT, and we will need to figure out how to differentiate our services and add more value. With our fast, affordable, and effective IT solutions, we hope to give small and medium enterprises an edge; this way, they can compensate for a lacking workforce with digitalization," he added.

Start Your Own Success Story

To get your company's success story started, check out these demos to learn more about how Ignite UI enables developers to build high-performing modern web applications quickly and easily across devices. Then, try [Ignite UI](#), along with the full suite of Infragistics developer products, for a [free 30-day trial](#) to see the difference it can make for your business.

About Infragistics

Infragistics is a worldwide leader in providing tools and solutions to accelerate application design and development, provide insights, and foster collaboration within organizations. More than two million developers use Infragistics enterprise-ready UX and UI toolkits to rapidly prototype and build high-performing applications for the Cloud, Web, Windows, iOS and Android devices. Infragistics Enterprise Mobility solutions – ReportPlus and SharePlus – give business users the latest advancements in self-service business intelligence and collaboration software.