



Visualization with xfy Dramatically Improves Nippon Chemi-Con's Operational Efficiency

Company Name:

Nippon Chemi-Con Corporation

Established:

August 1931

Revenue:

120,900 million Yen (Approx. US \$1billion)
(Total Group Sales in FY 2005)

Number of Employees:

Over 6,500 (FY 2005)

Business:

Manufacturing of aluminum electrolytic and other capacitors, precision mechanical parts and electronics equipment



Noritaka Suzuki

Project Manager
Information Systems (Group 1)
Nippon Chemi-Con Corporation



Since its founding in 1931, electronics components manufacturer Nippon Chemi-Con Corporation (Nippon Chemi-Con) has stood steadfast through massive change. As a global leader in aluminum electrolytic foil technology, recent growth of the digital appliances market has boosted demand for its flagship product, the aluminum electrolytic capacitor, and the company has been growing its revenues steadily. With fourteen overseas and thirteen domestic (Japan) sales offices, plus seven overseas and four domestic factories, its successful global expansion has resulted in overseas sales being consistently over sixty-percent of its total revenue.

Streamlining Information for Global Management

Until recently, Nippon Chemi-Con had expanded its business by optimizing manufacturing and sales systems in each location to achieve regional profitability. To realize these goals, local offices were granted wide discretionary powers while the headquarters controlled quality. Because of this approach, each location chose its own information system. This freedom granted to each location had positive effects—until the limited enterprise-wide visibility into fulfillment became a hindrance, and silos of tactical data made it impossible to coordinate efforts or track performance at the corporate level.

Because of the aging deterioration of materials used in production, a lot of materials had to be discarded if not used within a certain number of days. Because each factory used a different production management system, it was impossible to share or visualize information to balance inventory between locations. The resulting cost of supply and inventory mismanagement became an issue and executives realized that it needed a global management view.

Adopting xfy – Giving Up on ERP and BI

Because the company's revenues were strong and stable growth was predicted for several years into the future, Nippon Chemi-Con wanted to leverage this state and resolve their inventory challenges by investing in its information systems.

In April 2006, the president of Nippon Chemi-Con himself kicked off a cross-departmental project, assigning an executive managing director accountability for the project. With the losses that the company was currently experiencing, the stakes were high, but the executive commitment to solve this issue was strong. The goal was to substantially cut the company's losses from materials disposal, plus significantly reduce the inventory holding period in order to improve product quality with fresher materials. With a sense of urgency, the implementation date was set for October and Noritaka Suzuki, an experienced project manager in Nippon Chemi-con's Information System Department, took the helm.



“After the challenges that we faced with the ERP and BI prototype, the flexibility and visualization capabilities of xfy seemed to be the best solution to meet our needs.”

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After an initial analysis of business requirements, the team first rolled out a prototype new Enterprise Resource Planning (ERP) system complemented by a business intelligence (BI) tool featuring visualization and drill-down capabilities. When they rolled out this pilot in May, the feedback from the field was not good: some users complained that it was too difficult to operate and others said they could not access the information they needed. When tested in their real world scenario, they also encountered a mechanical limitation. With the ERP system, it was impossible to handle its high volumes of daily orders. With 180,000 daily orders, outstanding unplaced orders of approximately 20,000 daily and 50,000 different items in stock—these sheer volumes augmented the situation. Simply trying to process this volume of data on a daily basis took almost half a day even with investments in the latest and fastest hardware. Moreover, the BI tool could not handle the number of data queries, nor could the end-users perform searches and drill-downs due to complex screens. With this initial pilot, the IS Department realized that their goal of real-time visibility for inventory management was not going to be achieved with this ERP and BI solution.

Therefore, the project team went back to the drawing board in June to research new, innovative ways to integrate data and visualize information, while maintaining the power to process high volumes of data. In July, this research brought Mr. Suzuki to xfy Enterprise through a trusted systems integrator. xfy would allow them to collect information from each factory’s manufacturing management system without changing each location’s optimization. Furthermore, each location would be able to assess the manufacturing capacity situation through the simplified visual dashboard like user interface, which would help them achieve enterprise-wide inventory optimization.

“We needed to assign orders to any one of our eleven global factories with ease by simply visualizing production capacity and inventory information between all the plants. xfy seemed to be the best solution to meet our needs,” Mr. Suzuki stated.

Rapid Deployment Follows Unprecedented User Acceptance

Since end-user buy-in was of utmost importance for the success of any new solution, Mr. Suzuki’s team created another prototype with xfy, using a pre-commercial version of the software. When tested again with the same field teams who were dissatisfied with the ERP and BI prototypes, there was a resounding cheer for xfy. Mr. Suzuki’s team knew they had found a winner and moved forward with plans for an enterprise-wide roll-out.

They used the xfy XML-based composite application framework to create a production dashboard that would determine which production site could accommodate each order in the most time and cost-efficient manner. They configured xfy to seamlessly analyze the data returned from their IBM DB2 9 database, automatically displaying it in highly readable, customized views. The dashboard was designed so users could easily visualize the production capacity for each site, and optimize inventory to ensure the right balance of product availability, shelf life and demand fluctuations. It would balance the loads of production sites to reduce inventory losses and holding times. In one solution, Nippon Chemi-Con would be able to meet all its functionality requirements, leverage existing technology investments and—most important—effectively hide unnecessary complexity from end-users to encourage productivity.



“We chose xfy because it satisfied the needs of our users and our business. After having developed these custom applications with xfy and XML, we realized that the flexibility of these technologies can mean power and rapid development for our IS teams.”

Noritaka Suzuki
Project Manager
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After only a month and half, xfy was in operation for three factories in Japan. Deployment of this new solution instantly changed the way staff operated in the field. With this new paradigm of real-time data visualization, some users started using it in ways that the project members hadn't even thought of. When staff started sending data shown in xfy as an attachment in an e-mail message to discuss issues with others who could not view the data in the same way, the IS project team started receiving more and more inquiries from other factories. The positive comments on xfy were a testament to the fact that this was the tool that the field had been longing for.

After the initial deployment, the company kept improving the system by collecting feedback from the field. Updates are distributed approximately every two weeks.

“We customize the user interface to make it easy to understand because we know that the flexible and playful interface is a driving factor in making our field staff use the system. Even simple things like customizing the color to depict how old or fresh the data is, helps staff see at a glance what is going on with different factories, and make decisions quickly to optimize inventory. This type of field empowerment to drive global efficiency, is what we were looking for to improve our business,” Mr. Suzuki continues.

With xfy, when users view a piece of information, they can save the information with all the data as a file on their local drive. This customization changes the background color of this type of file when opened after a certain amount of time. This makes users instantly aware that it is old data.

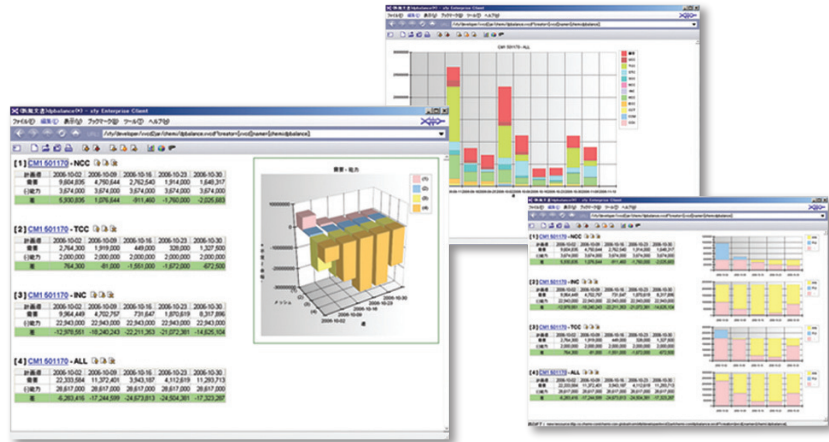
While continuously improving the system, the company expanded its implementation, first to the Malaysia factory in December 2006, then to Shanghai, China, in January 2007. As a result, each factory has improved information exchange and inventory management with other factories.

Visualization with xfy Dramatically Improves Operational Efficiency

Thanks to the data visualization capabilities of xfy, the company's operational efficiency has been dramatically improved: they have reduced their losses from disposal and are now able to estimate lead-time more accurately. After successful deployment in its Japanese and first few overseas locations, Nippon Chemi-Con will accelerate the deployment to the rest of the overseas factories.

The fact that xfy needs little time to provide significant results helped the company quickly implement the system globally. A clear advantage of xfy over traditional systems, it can handle all the data as XML to process information more freely, recycling XML objects to improve development standardization and effectiveness. Users can process information, and input from the field can be easily used for company-wide system improvement. For example, by sharing a visualization model created by a user, or providing feedback to the Information System department.

“We chose xfy because it satisfied the needs of our users and our business. After having developed these custom applications with xfy using XML, we realized that the flexibility of these technologies mean power and rapid development for our IS teams. We are now looking at other areas of our business that may benefit from it,” says Mr. Suzuki.



Advantages of xfy for Nippon Chemi-Con

- Rapid deployment through phased implementation
- Higher user acceptance with a visual and flexible interface
- Greater development productivity with the ability to leverage user input quickly

About JustSystems, Inc.

JustSystems is a leading global software provider with a 27-year history of successful innovation in office productivity, information management, and consumer and enterprise software. With over 2,500 customers worldwide and annual revenues over \$110M, the company is continuing a global expansion strategy that includes the launch of its new enterprise software offering called xfy (pronounced 'x-fie'), and XMetal content lifecycle solutions. JustSystems has worldwide office locations including headquarters in Tokyo, Japan; regional sales and marketing offices in New York, NY; and London, UK; and a technology center in Vancouver, Canada. The company currently employs over 1,000 people. Major strategic partnerships include IBM, Oracle and EMC.