

### The high accuracy and precision of demand and delivery forecasting system Business critical Sony's Marketing strategy was constructed with Fujitsu's support

[This is a translated article from a success story posted in Japan in 27<sup>th</sup> July 2004.]

#### Solution

- Retail SCM (DCM)

#### Industry

- Distribution

#### Products

- GLOVIA/SCP, PRIMEPOWER, ETERNUS, INTERSTAGE

### Problems and effects

#### Ensure ongoing profit through shorter production lifecycles

Create high quality demand information from accurate demand forecasting

#### Streamline order system and maintain service levels

Provide a delivery forecast immediately on order and keep to delivery times. Aim at improving customer satisfaction through accurate delivery forecasts and delivery times

#### Construct a high performance system in a short time

Sony Marketing ordered the solution build from Fujitsu. As a total solution vender Fujitsu built the solution, consisting of two systems in just two years. The systems calculate delivery times and reply within 0.1 second, while processing one hundred thousand orders a day

Sony, a leading company in the rapidly growing digital appliance market (digital cameras, digital video cameras, thin-screen TVs) continues to open new markets. But rapid changes in market needs and technological innovations shorten Sony's product life cycles. Moreover, fluctuations in the price of devices make it difficult to stabilize profits. As a result, Sony Marketing constructed a new sales SCM system linked to many of its business processes, including manufacturing, distribution, and sales. They were the Demand Information Creation System and the Delivery Time Forecast System. By linkage to actual sales figures and related information from volume sales shops, high precision in demand prediction was achieved. Sony Marketing (Japan) therefore succeeded in preparing for a more mobile and flexible infrastructure. Importantly the systems provide exact delivery times on order, and combined with monitoring of these delivery times Sony Marketing (Japan) continues to improve its customer service levels.

### System introduction background

#### Requirement for a mobile and flexible platform for the digital appliance market

Sony is the leading company in digital appliances with Sony Marketing (Japan) Inc. responsible for the marketing and sales of its products in Japan. However, today's digital appliance market has a number of characteristics never previously

encountered by Japanese manufacturers..First there is fierce competition as new competitors can easily enter the market. In particular overseas companies and venture companies which excel at special technology or have new innovations are entering the market. Secondly the price of devices fluctuates from technological innovation and competitive change and creates swings in supply and demand. For instance, when HDD or liquid crystal panel prices rise, product profitability is put under pressure and cannot be guaranteed. Thirdly products quickly become obsolete and product life cycles become short.



# Sony Marketing (Japan) Inc.

## Customer Success

If products in large production runs become stale, the manufacturer may have to hold large volumes of dead inventory.

So far, the key to success for manufacturers was fast large volume production with a quick sales turn around. But in the digital appliance business, carelessly planned large volume production and bad inventory can endanger the life of the company. When a sales downturn is judged production must be stopped immediately with quick action required. Measures to be taken include production stop, transfer of device inventories to other production lines, and the planning of new products. For this to succeed exact demand prediction is essential. And on this basis, a mobile and flexible manufacturing organization is also a necessity.



[Mr. Shimada, the General Manager and project leader for business operations planning & management at Sony Marketing (Japan) Inc.]

Mr. Shimada, the General Manager and project leader for business operations planning & management at Sony Marketing (Japan) Inc. says, "Shorter production life cycles are a kind of destiny for the digital appliance business. We must also maintain our profits in this situation. To tackle this Sony (Japan) Marketing is building a new sales platform."

### System Introduction background

#### Fujitsu was selected for the requirement of building a high performance system in the shortest time

The project started in April 2001. For success, Sony Marketing (Japan) needed to work with other Sony group companies. Major groups involved included Sony EMC (EMCS), the division responsible for production and Sony Supply Chain Solutions (SSCS). But it was a big project where the whole Sony group became involved.

The strategic systems at the core of the new platform were the Demand Information Creation system and Delivery Time Forecast system. The Demand Information Creation system predicts sales volumes and adjusts production within EMCS. Now all processes are performed online. Previously account sales couldn't provide timely delivery times to their customers, so to improve service levels, a delivery time forecast system was built to answer delivery time questions immediately on order.

"These two systems embody special Sony unique and are the lifeline of the Device Chain Management's (DCM's). Sony initially planned to use an ERP package, but this was subsequently rejected. They decided to build their own special system based on ASCA instead" said Mr. Shimada. The ASCA, SCM system was built for sales of VAIO, Sony's PC and is excellent, being awarded 'Best Solution in Sony Group'. Fujitsu supported the building of this system and Fujitsu also took part in the systems integration.



[Mr. Matsushita, General Manager of the ISS department in Sony Marketing (Japan) Inc.]

"Fujitsu had the experience and the reliability to lead this big project. A high performance system had to be built in a very short time. To accomplish this Fujitsu, as a provider of total solutions from hardware, OS, middleware, to application software, was the best choice." Said Mr. Matsushita, General Manager of the ISS department in Sony Marketing (Japan) Inc., and also a system project leader on this project.

Sony Marketing (Japan) decided on Fujitsu in April 2002 and construction of the Demand Information Creation System commenced in May 2002 with the system going live in April 2003. The Delivery Time Forecast System followed this in Nov. 2002, which went live in May 2004.

### System Overview

#### Accurate delivery time forecasting with real-time link to orders system (ERP)

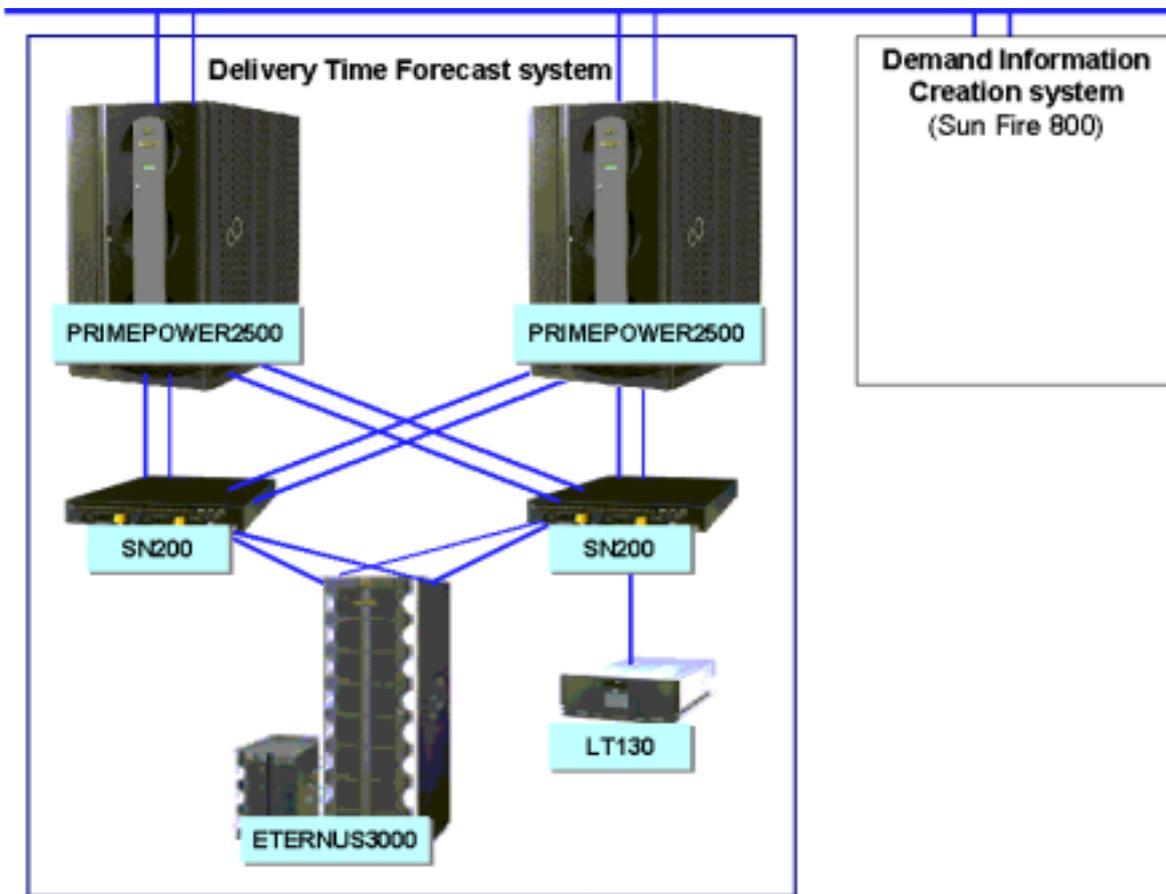
The Demand Information Creation System collects the actual sales data from Sony's volume resellers. By adding in the inventory and other related information the system predicts demand, for a period of 33 weeks ahead, for each product. These predictions are then transmitted to EMCS who are responsible for manufacture and production adjustments. The delivery time forecast system provides delivery time answers to order requests by collecting production plan and inventory information. If there is no inventory, it confirms the production finish dates by reference to the production plans in the factories. If there are no production plans, it searches for replacement products. When handling mixed orders, for instance PCs and Displays, whichever is the later product delivery time is the delivery time provided. The inventory database holds up to ten million entries and process one hundred thousand orders a day with the system calculating

**FUJITSU**

THE POSSIBILITIES ARE INFINITE

delivery times(including logistics lead times) within 0.1 of a second.

To ensure this level of performance, high performance UNIX servers were used. Each has 32 CPUs and 104 GBs of memory. The high performance however is not just a function of the hardware. Mr. Matsushita states “ In system design, we built a new business model with a total system architecture. Using this as the basis we create the applications. Importantly for future flexibility the application framework we created enables linear performance improvement in proportion to server hardware expansion. ”



### Future perspectives

#### The creation of a ubiquitous value chain to maximize synergy across all Sony services

Mr. Matsushita talking about future plans says. "This is a strategic system, so it will need to be improved to meet business environment changes. Evolution is our mandate, so we can't rest. We cannot underestimate the risk of a hundred thousand orders being stopped."

Mr. Shimada also says that their goal is a ubiquitous value chain - a grand dream. "This system deals with the hardware product supply chain, but Sony's products aren't just limited to hardware products. There are also movies, music and insurance. We will accomplish the basis for Sony's electrical business support by maximizing the synergistic effects on the whole of Sony's services. This will be our value chain."

The delivery time forecast system would be released as a packaged product of GLOVIA/SCP. Sony is pushing to create a new market with this. Fujitsu is supporting Sony with these IT perspectives.

### Profile

**Company:** Sony Marketing (Japan) Inc.  
**Location:** Takanawa 4-10-8, Minato-ku, Tokyo 108-0074  
**President:** Mr. Tsugie Miyashita  
**Incorporated:** April 1<sup>st</sup> 1997  
**Capital:** 8,000(million yen)  
**Number of employees:** approx. 3,600 (as of April 1<sup>st</sup>, 2004)  
**Business:** marketing and sales of Sony products in Japan

### Supplemental Information

#### **DCM**

Abbreviation of Demand Chain Management. A new business management method to meet fast changing market demand and optimize stock and orders at retail stores.

#### **Digital appliance**

An appliance that uses digital electronics rather than analog processes. Such products have as their main components, high density semi-conductors,. Their impact on the market is huge, In particular digital appliances such as thin-screen TVs,, DVD media and digital cameras drive the Japanese economy.

#### **SCM**

Abbreviation of Supply Chain Management. A management method and information system that achieves total optimization of business processes. It views the overall flow of the product supply chain, including purchase of materials, component manufacturing, logistics and sales as one single integrated chain.

#### **Service level**

The quality of service supplied to customers. Sometimes service level values are set as part of an agreement with the customer.

Published by  
**Fujitsu Limited**  
Business Strategy & Planning,  
Platform Products Group  
<http://www.fujitsu.com>

Specifications are subject to change without notice.  
For the latest detailed information, contact your local representative.  
All brand names and product names are trademarks and registered  
trademarks of their respective holders.  
Copyright © Fujitsu Limited 2005;

The Fujitsu logo consists of the word "FUJITSU" in a bold, red, sans-serif font. Above the letter "I" is a red infinity symbol (∞).

THE POSSIBILITIES ARE INFINITE