Fujitsu General’s requirements included:
- Fast access to, and mass handling of, large volumes of data in a 24-hour web environment.
- System expansion capability.
- Comprehensive cost and business efficiency improvements.
- Plus the latest database technology, enabling introduction of a Product Data Management (PDM) platform.

Build an effective platform for information sharing, to ensure efficient and productive use of intellectual property

Fujitsu General Limited has committed to, and is adopting this approach in the development of production systems for its air conditioning, image, communications and electronic devices. They see this will enable a direct connection between intellectual productivity and strong and flexible product development.

In more detail, this means that without users needing to be “aware” of the systems operation, they can achieve improvements in development information and seamless business integration. The result will create a system containing a solid core of information, which is their intellectual property, that is also capable of being utilized for all new designs. The proof of this ability being manifest in improved development process information and resulting manufacturing technology.

Open systems environment surpasses the mainframe to build Information Cooperation into Business Power.

A consequence of an integrated technical information system (from planning, Computer Aided Design (CAD) through to the production stage) is the very large data storage requirement. Information on structural systems, circuit diagrams, plans, and 100’s of thousands of parts must be included.

Plus with many more employees involved at each stage of the product development, easy access to such large volumes of data must be guaranteed at all times. Fujitsu General’s mainframe systems had restrictions under such conditions, plus they lacked flexibility in their ability to easily extend existing systems for improved inter-business cooperation.

“The company’s office systems were steadily being converted to PCs, as was CAD data. But essential technical information remained on the mainframe. With the breadth of the business this made further development impossible. The efficiency of each individual unit also limited information cooperation and re-application. Escaping from the clutches of the mainframe and using open systems enabled PDM introduction,” said Mr. Tsurumi, System Manager Technical Support.

Work started with the 2D CAD systems and the inter-linking of their drawing management. Next came Web integration of the technical document management systems. This solved problems with the mainframe system, as now information and know-how could be shared during product development. Further, the overall planning and design processes could then feed directly into the Bill of Materials system. This Web integration process, not only overcame the data processing limitations of the mainframe but also achieved data processing integration and broad intellectual support.
An Open Development System based on Oracle9i Database/Oracle9iAS & Fujitsu’s PRIMEPOWER servers.

Key requirements of the PDM system included strong transaction control, powerful data access and retrieval in a true Internet environment, and WEB/XML conformance. Fujitsu’s PRIMEPOWER UNIX® servers running Oracle9i Database and Oracle 9iAS were evaluated not only on their cost/performance ratio but also for operability, and met all the requirements.

For example, instead of having to issue hundreds of coding steps, only a few lines of SQL enabled the logical searching of all data, resulting in significant time and cost savings. Further, the system now supported the automatic production of Bills of Material, (Fujitsu General’s business initiation point), as well as design work, purchasing and inventory control. Now information and knowledge previously held separately was shareable throughout the planning, design and product production processes. This significantly strengthened the business power of the enterprise.

Future plans are to take the system beyond the development section and include links to the production line and quality assurance information. The goal being; the foundation of a genuinely dynamic business environment from development to shipping and beyond.

This is an environment that Fujitsu’s consulting power and Oracle’s true E-business platform Oracle9i are continuing to support.