A consultative approach to network design aids business growth and process transformation for electronics giant

BT networked IT services form the core infrastructure that underpins the collaborative business processes of Panasonic Electric Works Europe AG and helps support the company’s “quality first” ethos.

Executive Summary

Panasonic Electric Works Europe AG (PEW) has focused considerable effort on enhancing the effectiveness of its business processes, especially within its supply chain, to enable more efficient collaboration, reduce cost, eliminate waste, ensure order accuracy, and provide differentiation in a very competitive marketplace. The data-intensive, enterprise-wide business processes and supporting software applications adopted by PEW place significant demands on its communications infrastructure.

BT adopted a consultative approach using a decomposition methodology to help determine the networked IT services infrastructure necessary to support the company’s operations. Business requirements demanded that the network be aligned to support several highly specialised business and technical requirements, with inbuilt flexibility to accommodate future change. The BT-managed service embraces the wide area network, security and hosting services, internet access, and remote access as well as voice services between more than 50 sites across three continents.

Since implementing its new business processes and applications and the supporting BT-managed infrastructure, PEW has achieved record sales growth and profitability. Critical business metrics have shown significant improvement. Additionally, during the same period, the company has successfully completed its internal and external Sarbanes-Oxley compliance audits.

“BT has invested an enormous amount of time and effort to really understand our business and the communications infrastructure that is so essential to our operations – not just between Panasonic sites, but with our customers and business partners around the globe.”

Peter Ehrl
Director of Information Systems
Panasonic Electric Works Europe AG
Case study
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**Marketplace**

Panasonic Electric Works Europe AG (PEW) is the European headquarters and sales channel for the products of Matsushita Electric Works, its parent company in Japan. PEW operates in the six business sectors of lighting, information equipment and wiring products, home appliances, building products, electronic and plastic materials, and automation control devices.

With offices in most European countries, PEW is responsible for planning, development, technical services, central marketing, material management, IT, and worldwide co-ordination. It also manages the company’s central European warehouse and production facilities. Including recently acquired companies PEW employs around 2,500 people and in 2006/7 had sales of 610 million Euros.

**Business opportunity**

The Panasonic group of companies has an enviable reputation for innovation and customer service. At PEW, therefore, customer satisfaction is of primary importance, as evidenced by its “Panasonic Quality First” ethos. In support of this, PEW has focused considerable effort on enhancing the effectiveness of its business processes, especially within its supply chain, to reduce cost, eliminate waste, ensure order accuracy, and provide differentiation in a very competitive marketplace.

This focus on process excellence has involved extending its use of Oracle’s eBusiness suite to embrace manufacturing, materials management, sales, and finance modules. The applications also provide PEW with automated support for enterprise-wide business processes and controls for regulatory compliance; specifically that required by Section 404 of Sarbanes-Oxley.

Peter Ehrl, Director of Information Systems at Panasonic Electric Works Europe AG, comments: “A great deal of time has been spent developing standardised business processes that were ultimately implemented through use of the Oracle eBusiness suite. The underlying communications infrastructure was equally important, as it had to meet very demanding requirements for availability, security, and performance.”

**BT solution**

BT has enjoyed a long association with PEW and, in response to the company’s business challenges, it has worked closely with PEW over the years to design and implement a network environment that meets the company’s stringent requirements, with inbuilt flexibility to accommodate future change.

The data-intensive, enterprise-wide business processes and supporting software applications adopted by PEW place significant demands on its communications infrastructure. PEW has also chosen to implement a single global instance of the Oracle environment at its data centre in Munich, further amplifying its dependency on network availability and performance.

PEW has designed its business processes and applications infrastructure to optimise business performance and enforce procedural controls, while preserving organisational flexibility across a user base that includes a combination of internal and external users. As a result, BT has taken a holistic approach to the design of the network infrastructure required to address such a highly interdependent set of client-specific requirements.
This approach was based upon first gaining an understanding of PEW's business objectives and related performance metrics, and then assessing how the business processes, applications, and information flows would influence the network design and management. This process of decomposing business goals down to the communications infrastructure ensured that the network design could be harmonised with PEW's business objectives.

Peter Ehrl comments: "BT has invested an enormous amount of time and effort to really understand our business and the communications infrastructure that is so essential to our operations – not just between Panasonic sites, but with our customers and business partners around the globe."

BT provides PEW with a fully managed service embracing the wide area network, security and hosting services, internet access, and remote access as well as voice services between more than 50 sites across three continents.

Peter Ehrl continues: “BT has adopted a very consultative approach and we have grown to trust BT’s judgement in helping us to evolve and manage our network.” Service level agreements have been established that reflect the business demands and minimise associated risks, managed through a single BT point of contact.

Currently, the BT managed service includes:
- An MPLS-based IP virtual private network providing any-to-any connectivity, with class of service enabling the prioritisation of time-critical traffic
- 34Mbps LAN Extension Services linking the PEW Munich data centre with its Holzkirchen headquarters facility
- BT-hosted network security devices and concentrator at Munich
- BT-hosted Message Management Platform (MMP)
- VPN remote access
- BT Business Voice – enabling cost-effective communications between dispersed sites
- Firewall, Antivirus, and Spam Filter – dealing with approximately 100,000 emails per day and as much as 80 per cent junk mail
- Internet Access
- Remote Dial-in – via an IP VPN
- Websver Hosting
- Email platform
- MobileXpress and Voice over IP (planned for mid-2007)

Results

With its process-led approach PEW has established a cost-effective, demand-driven supply chain with an absolute focus on customer service excellence. This has helped it to attain industry-leader status in its use of IT as an enabler for business improvement, whilst simultaneously controlling costs.

Since implementing its new business processes and applications and the supporting BT-managed infrastructure, PEW has achieved record sales growth and profitability. Additionally, during the same period, the company has successfully completed its internal and external Sarbanes-Oxley compliance audits.

In late 2007, PEW will bring online an eight-storey, state-of-the-art centralised warehousing operation that will allow the organisation to achieve greater supply chain and customer service efficiencies. This new facility will make extensive use of automation and robotics and will place further demands upon the systems and communications infrastructure – demands that the BT solution is well placed to meet.

Peter Ehrl concludes: "The network is absolutely critical to our business model. In BT we have a networked IT services partner that we trust, with a proven track record of performance."

Why BT?

- BT’s network design capability and consultative approach
- BT’s willingness to invest time and effort to really understand the Panasonic Electric Works Europe AG business model
- BT’s global reach and managed service capability
- The resilience, availability, security, and performance of BT’s network
Case study
Panasonic Electric Works Europe AG

Consultancy blueprint

BT adopted a consultative approach involving the decomposition of business objectives down through the processes, applications and ultimately the network infrastructure that supports and enables them. PEW’s business requirements demanded that the network be aligned to support several highly specialised commercial and technical requirements:

- Highly collaborative VMI (Vendor Managed Inventory) replenishment agreements with key customers – representing a major portion of the enterprise’s revenue stream – require the secure, timely and efficient flow of critical information between PEW and its customers.
- PEW makes extensive use of FOB (Free-on-Board) shipping strategies to meet its delivery commitments to customers. These strategies are fully dependent on Oracle and other applications for the generation of critical shipping and safety documentation demanded by port and other regional authorities, customs services and the customers themselves.
- The growing importance of China in PEW’s sourcing strategy was put at risk by the latency-sensitivity of core applications and the need to use the bandwidth-heavy Unicode character set in transactions with suppliers in that country. Parts of the organisation chose to eliminate this risk by using Citrix Presentation Server which significantly reduces the sizes of transactions in real-time applications that the network is required to support.
- Lowest-cost shipping strategies require that carriers have reliable, just-in-time access to shipping documents so that cost reduction opportunities – such as shipping in combined loads – can be assessed. By assigning appropriate class-of-service and robust network access PEW ensures that it can meet its aggressive on-time delivery targets whilst minimising logistics costs.
- Configuration of the infrastructure to deliver expected end-to-end response times demanded an understanding of the bandwidth and latency characteristics of the unique combination of transaction formats employed by PEW including EDI, XML, AS/2, and others.
- The complex applications environment that includes Oracle 11i, Siebel 7.8, MS Exchange Server and many others competing around the clock for available IT infrastructure resources on a global basis required CoS (Class of Service) to achieve desired system throughput and end-to-end response time.
- Compliance with Sarbanes-Oxley Section 404 requirements related to the IT control environment in terms of monitoring, access controls, management, and resilience demanded that the network design conform to COBIT (Control Objectives for Information and Related Technology) and ITIL (IT Infrastructure Library) standards.

Main BT products and services

- BT network and solution design consultancy
- BT MPLS and LAN Extension Services
- BT Security Services
- BT Hosting Services
- BT Internet Access and Remote Dial-in (VPN) Services
- BT Business Voice (BT Voice Port)