Success Story

China Telecom builds a new IT landscape with mySAP™ ERP and SAP NetWeaver™ based on an HP infrastructure

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中国电信 CHINA TELECOM

China Telecom Corporation, the world's largest fixed-line operator, has a vision: to turn the company into a world-class telecom powerhouse within five years. To turn that vision into reality, China Telecom teamed up with SAP and HP to build a state-of-the-art IT landscape. As a result, the company has taken a huge leap forward in business insight, organizational efficiency and increased productivity.

Turning challenge into opportunity

China Telecom was formed as part of the reorganization of the former China Telecommunications Corporation, a state-owned enterprise. Today, China Telecom has over 350,000 employees across China; operates domestic and international fixed-line networks; provides fixed-line voice, data, and information services; and is engaged in international telecom accounts settlement.

Despite the worldwide slowdown in the telecom industry, China Telecom has maintained sustained growth over the last two years, with $17.6 billion in sales and an eight percent increase in 2003. In 2002, China Telecom successfully launched its IPO at the New York Stock Exchange to become the third Chinese telecom company listed on an overseas stock market.

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China Telecom has undertaken challenging reforms to transform itself from a traditional state enterprise into a customer-focused, profit-driven modern enterprise. This process has posed an enormous challenge to IT within the company. And as a public traded company, China Telecom must comply with international reporting rules.

Taking these challenges as an opportunity, China Telecom decided to build a new IT platform with cutting-edge technology and based on best practices.

Strategic tie with SAP and HP

China Telecom set an ultimate goal for this initiative: create an environment that would increase organisational efficiency, achieve transparency and real-time management, tighten internal control, and enhance collaboration between departments. The software had to integrate within and beyond its functions, and meet the industry-specific business requirements of a telecom operator.

After careful evaluation of several global ERP vendors, the company decided on mySAP ERP as the backbone system. "We chose SAP because of its broader range of functionalities and integration capabilities. It is best equipped to deliver solutions for a large enterprise and provides much-needed industry expertise for a telecom business," says Shiping Liang, Director of the Application Division at China Telecom.

mySAP ERP supports several core business processes, including finance, controlling, human resource management, procurement, and engineering project management. To build an enterprise-class data-integration platform, China Telecom also chose to leverage the SAP Business Intelligence (SAP BI) and SAP Enterprise Portal (SAP EP) components of SAP NetWeaver.

To ensure a maximum return on investment (ROI), China Telecom required an infrastructure platform with exceptional reliability, performance, availability, and scalability to power mySAP ERP. Equally important, it needed a flexible solution to allow IT to keep pace with changes while offering a low total cost of ownership. The vendor needed to be able to assemble a broad range of products and services to cover all of China Telecom's requirements: from PCs to powerful servers, from network storage to customer support.

In intense competition among global IT vendors, HP stood out as the best choice for the IT infrastructure. "HP outperformed other alternatives in terms of price-performance ratio. It is a scalable, flexible, and adaptive solution that meets our entire technical requirements in supporting SAP now and for the future, while still offering a competitive total cost of ownership," says Liang.

The company selected the HP 9000 server family to support the mission-critical SAP applications. For the network storage infrastructure, China Telecom chose HP StorageWorks Disk Array XP128, a state-of-the-art storage solution that delivers outstanding scalability, availability, reliability and the highest performance in its class.

With mySAP ERP and its new HP infrastructure, China Telecom is equipped with one common solution that provides flexibility to respond to changing and growing business needs. This flexible and adaptive platform plays a critical role in enabling the enterprise to achieve maximum business agility and further enhance its competitiveness.

The big move

China Telcom will roll out the complete SAP solution over two years at 20-plus subsidaries. Eventually, the system will have 30,000 users across China. The project is the first large-scale SAP deployment in the telecom industry in China, according to Chris Zhao, Senior Account Manager for SAP China.

The country-wide kick off of the SAP project started in parallel in the Beijing, Guangzhou and Shanghai offices. The solution successfully went live seven months later in all three locations with a total of 1,000 users.

The SAP landscape has been designed to cater to the business needs of each office. At its Beijing headquarters, China Telecom implemented the human capital management functions of mySAP ERP and SAP BI to support centralised human resources




management and to provide consolidated information to group management. The Guangzhou and Shanghai subsidiaries, which generate most of the company's business, use the financial, operations, human resource management, and analytics capabilities of mySAP ERP, plus SAP EP and SAP BI.

For maximum computing power and uptime, the application landscape was designed as separate segments supporting mySAP ERP, SAP BI, and SAP EP individually. Each segment is composed of a development system, a test system, and a productive system. All have been equipped with HP 9000 rp5470 servers for the test and development systems and HP 9000 rp8400 servers for the productive system. All servers are linked into a new storage area network under HP StorageWorks Disk Array XP128 and are supported by a Veritas backup system. The landscape is identical in all three locations, and the company will use this configuration in future implementations.

The implementation is considered a huge success at China Telecom. According to Liang, strong and consistent support from top management, excellent project planning and teamwork contributed to the success. China Telecom also took advantage of the scalability and flexibility of mySAP ERP and the underlying HP infrastructure so it could make tough decisions and focus on essential business needs while maintaining full adaptability to grow the installation and respond to changing requirements. According to Liang, this was crucial to effectively managing the implementation and achieving a faster ROI.

mySAP ERP building momentum

China Telecom has three building blocks for its corporate information strategy: the management supporting system (MSS) to support back-office activities, the business supporting system (BSS) to manage customer relationships, and the operational supporting system (OSS) to take care of its supply chain. The first phase of the SAP implementation focused on enhancing MSS to optimise internal processes. With the introduction of mySAP ERP, SAP BI, and SAP EP – and complemented by office software – China Telecom's MSS became a powerful platform delivering a wealth of benefits.

The major advantage for China Telecom is the visibility of information due to seamless data integration between different functions and data sources, which allows for comprehensive business analysis. Under the new environment in which SAP BI is an integral part of mySAP ERP, the accounting, procurement, and engineering management functions, which used to be isolated, are now fully integrated. This integration accelerates the flow of information and encourages active internal collaboration. "We have more information and a much quicker exchange of information, and that is the decisive advantage for us," says Liang.

In addition, data integration between accounting and human resource allows easy analysis of personnel costs and performance-based payment plans. In the past, this used to be an extremely time-consuming process.

Another advantage is the ease and speed of accessing information. SAP EP unified data and applications with a central, secure and role-based access to all mySAP ERP systems. Users have personalized access from a Web browser, and single sign-on has resulted in significant time savings and productivity gains because users only have to log on once.

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The success of the MSS implementation has built momentum to extend the use of SAP within China Telecom. To paint a complete view of all operations, as well as internal and external processes, the company plans to extend the use of SAP BI to the BSS and the OSS functions.

HP secures mission-critical applications

At China Telecom, handling large volumes of data between SAP BI and mySAP ERP posed a challenging test for the speed and processing capabilities of the server platform. Making critical data available 24x7 put unprecedented demands on the network storage and backup solutions. "High availability, scalability

Challenge

- China Telecom, China's leading telecom enterprise, needed to build a state-of-the-art technology landscape to support the transformation of the enterprise and turn its vision of becoming a world-class telecom powerhouse into reality.
- Comply with international reporting rules to secure its presence in global financial markets (e.g., NYSE).
- Gain business insight, achieve organisational efficiency and increase productivity.
- Build a powerful, flexible and adaptive IT infrastructure to run the mission critical mySAP ERP applications while maintaining a low total cost of ownership.

Solution

- Implemented mySAP ERP plus SAP Business Information and SAP Enterprise Portal – two major SAP NetWeaver components.
- Design a completely new IT infrastructure with multiple HP 9000 UNIX servers in several locations: HP rp5470 servers supporting the SAP test and development systems and HP rp8400 servers for the SAP productive systems.
- Initially roll out the application and infrastructure in three regional offices supporting 1,000 users. Master plan from this will be followed in the country-wide implementation which will cover 20 provincial offices and support 30,000 users within a two-year time frame.
- Deployed a storage area network (SAN) solution under HP StorageWorks Disk Array XP128 and a backup system under Veritas.

Results

- Visibility of relevant business information due to seamless data integration between different functions and data sources. Allows for comprehensive business insight and analysis, thus supporting faster decision making and tighter operational control.
- Achieve faster information flow, enhance internal collaboration and increase employee productivity by providing fast and easy access to information.
- Scalability and flexibility of mySAP ERP solutions and HP infrastructure allows China Telecom to focus on essential business needs, while maintaining full adaptability to flexibly grow the installation and respond to changing business needs.
- Low TCO due to compelling price/performance of the HP infrastructure platform.

and high performance are key features critical to run our SAP applications," says Liang.

HP 9000 servers are built around super-fast PA-RISC processors and supported by the powerful 64-bit HP-UX 11i operating system, so they can handle demanding workloads. With HP 9000 rp8400s and rp5470s, China Telecom obtained the speed and computing power it needed to generate fast, timely and accurate reports and analyses.

"The computing performance of HP 9000 Unix servers is to our entire satisfaction. The system is also impressively stable, and we have not received any complaints in that respect," says Shiping. "And on top of that, we benefit a lot from HP's first-class customer support."

The new infrastructure platform gives China Telecom an excellent price-performance ratio. In addition China Telekom has the flexibility and scalability to dynamically respond to future changes in business needs and the expected growth in system demands.

Looking to the future

As planned, China Telecom will continue the roll-out of mySAP ERP into its other locations in China. In parallel, the company will continue to make enhancements and to further maximize the benefits.

The ultimate goal is to integrate the company's MSS, BSS and OSS on a single platform so the company can gain a complete view of all of its processes with customers, partners and employees. China Telecom has achieved an important first step towards that goal by linking MSS with the billing system in the BSS using SAP BI. The next challenge is to apply SAP BI to integrate disparate data from heterogeneous sources in BSS and OSS, which have legacy systems and third-party applications in place. "With the SAP and HP technology on our side, we will make it," says Liang.

When the project is complete, China Telecom will have a management cockpit with key performance indicators across all internal and external processes. This will further improve its business efficiency and competitiveness.

Find out more about the alliance between HP and SAP, visit www.hp.com/go/sap

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