

BY HUIGANG LIANG, YAJIONG XUE,
WILLIAM R. BOULTON, AND TERRY ANTHONY BYRD

WHY WESTERN VENDORS DON'T DOMINATE CHINA'S ERP MARKET

Examining cases of failed ERP system implementation
in China and explaining the unique circumstances.

Many question the applicability of enterprise resource planning systems in China since ERP is designed for rule-based, mature economies rather than relation-based governance systems like China [5]. Although business transactions in China have been based on personal and implicit agreements, ERP systems require verifiable transactions or well-defined procedures that allow third-party verification. While this contradiction exists, China's leadership continues its effort to transform the centrally controlled economy into a market-driven economy by applying modern management technologies. Indeed, Chinese companies are rapidly adopting rule-based governance and successfully implementing advanced ERP systems under the government's 863 program for manufacturing systems automation in such industries as aircraft, machine tools, textiles, air conditioning, and electrical equipment

production. The Dongeejiao Group, a leading Chinese herbal medicine manufacturer, effectively implemented an ERP system from HJSoft, one of the leading Chinese ERP vendors, and increased revenue by 66.73% in the year after implementation. According to Chen Jia, Dongeejiao's president and CEO, "Some thought the probability of successfully implementing ERP in China was zero. This statement is inaccurate. The case of Dongeejiao can serve as proof."

A few giant companies dominate the global ERP market, with approximately 68% of the market. The German flagship company, SAP, holds a 32% global market share while Oracle is second with a 14.5% share. PeopleSoft, JD Edwards, and Baan round out the top five global players, with 9%, 5%, and 2.7%, respectively [3]. After the acquisition of JD Edwards by PeopleSoft in August 2003, Oracle dropped to third place [4].

Since the inception of China's ERP market in the 1980s, business managers have realized the importance of automating their back-office operations. According to International

Data Corporation (IDC) [2], the ERP market in China grew from \$78.4 million in 1997 to \$243 million in 2002. From 2002 to 2005, China's ERP market is expected to grow annually by 25%. Attracted by such growth potential, global vendors such as SAP, Oracle, and PeopleSoft have also subsequently entered the market. Given their success in other markets around the world, there was little reason to assume they would not also dominate the Chinese market.

Despite their global reputations, only two foreign ERP vendors, SAP and Oracle, ranked in the top eight ERP vendors in China, holding only 24.4% of the Chinese market as compared to their world market share of almost 70%. In contrast, six domestic ERP companies hold a 51.6% share of the market, according to a 2002 China Center for Information Industry Development Consulting report [1], more than double that of their foreign competitors.

In the competition to sell ERP systems in China, the foreign vendors have been unable to capitalize on their financial strengths, expertise, advanced technology, and experience. After examining some of the failures that have plagued the foreign ERP vendors' Chinese implementations, we reveal some of the barriers facing foreign software vendors in implementing their massive ERP systems in China.

Case Studies

The authors conducted telephone interviews with vice presidents and chief information officers of five companies from different industries and regions across China. Company A is one of the top five cosmetic companies in China, located in Beijing. Company B is a large-scale pharmaceutical enterprise in northern China. Company C is a large electric equipment company in central China. Company D is one of China's largest office furniture suppliers located in southeast China. Company E is one of China's biggest all-around mining enterprises in southern China. All five companies attempted to implement foreign ERP systems with unsuccessful results. From our analyses of these implementations, seven types of problems were identified, namely, language problems, report format and content problems, cost control module problems, price problems, business process redesign problems, customer support problems, and consulting partner problems. Inability of foreign ERP vendors to overcome these problems explains why the world's leading ERP vendors struggle in the Chinese market.

Language. Language proved to have a significant impact on system implementation. The Chinese language uses pictographic symbols instead of an alphabet. Each symbol, or character, represents an object or

concept. It is extremely difficult to translate an enterprise system from English to Chinese accurately and thoroughly. Company A and Company E experienced language translation difficulties because a mixture of English and Chinese interfaces in the imported ERP systems they purchased confused the Chinese users. Large amounts of information were poorly translated. Accounting reports contained inappropriate English words. Even worse, user help files were completely in English, which few employees could understand. Employees became frustrated because they had to ask for help for even a minor problem.

Reporting Format and Content. Company A and Company E found their foreign ERP systems did not meet the requirements of China's generally accepted accounting and financial standards. China's accounting standards differ from the international accounting standards incorporated into foreign ERP systems. Reporting discrepancies required ERP vendors to modify their financial accounting modules to generate the correct formats to meet government and enterprise requirements. Since such major modifications require additional time and resources, Company A and Company E chose to discard their foreign ERP systems and acquired more suitable Chinese-made systems that met local reporting requirements. In addition, Company C found the tables created by its foreign ERP system had only horizontal lines. Its employees could not get used to them since standard Chinese accounting and financial tables include both horizontal and vertical lines. Company C was so dissatisfied with the financial modules of its ERP system that the company had to develop its own financial reporting module. While Chinese enterprise software doesn't yet meet foreign standards of quality, Dorothy Yang of IDC, the U.S.-based market-research company, says local financial software developed specifically for China's unique accounting and financial systems outsells imports.

Cost Control Module. In Western countries, purchasing plans are normally made monthly or yearly and the price of raw materials remains fairly stable, resulting in relatively consistent product costs. In China, companies' purchasing plans change quite frequently, requiring constant updates in raw materials costs to reflect current market prices. Such price changes typically take place weekly or even daily. Foreign ERP vendors' cost control modules usually lacked the flexibility to easily handle such frequently changing prices. Both Company D and Company E fought with foreign ERP systems that lacked appropriate cost control modules.

Price. The ERP systems of global vendors were significantly more expensive than those of domestic ven-

THE CASES OF FAILED IMPLEMENTATION SUGGEST GLOBAL ERP VENDORS REQUIRE MORE THAN SUPERIOR TECHNOLOGY AND EXPERIENCE.

dors. A SAP or an Oracle application usually costs more than five million RMB yuan, while domestic ERP systems cost as little as 700,000 RMB yuan. Even with their “high-quality” images in China, foreign vendors found it difficult to compete against domestic vendors, especially in the market for small- and medium-size companies. Company C evaluated more than 10 ERP vendors and decided on a smaller, low-cost ERP vendor, even though the company’s IT manager preferred SAP or Oracle systems. UFSOFT’s success comes from targeting smaller companies that cannot afford the Oracle or SAP brand, but want a similar product.

Business Process Redesign. With China’s economic reforms forcing state-owned enterprises to become market-driven enterprises, rapid and abrupt regulatory changes force continuous change in business processes. Companies A, B, and C all conceded that changing regulatory requirements often conflicted with implemented ERP models. Foreign ERP vendors did not understand the changing needs of their Chinese clients for flexible ERP solutions that respond to frequent business process redesign. Company C, in order to survive China’s economic reforms, had restructured itself annually since 1998.

Customer Support. Foreign vendors often fail to provide adequate customer support due to the shortage of qualified technical personnel. In their haste to gain market share, foreign vendors are unable to provide software support personnel. SSA, a leading foreign ERP vendor in China in the 1990s, expanded too quickly to keep up with customer support. Consequently, many implementation failures resulted. “While looking at the fast expansion of SAP and Oracle in China,” Franky Leung, general manager of SSA in China, cautioned, “I’m afraid that they will make the same mistake as we made in the past.” This weakness places more pressure on local consulting firms to fulfill customer support requirements.

Consulting Companies. Local Chinese consulting companies generally lack familiarity with foreign vendors’ ERP products. This problem is accentuated due to the lack of vendor customer support. Companies A,

B, and E had unpleasant experiences with their local consulting companies because of their inability to provide adequate technical support. Companies A and E filed lawsuits against their consulting companies, two highly publicized events in China’s IT world. Both companies A and E switched to domestic ERP systems, while company B is still struggling with its foreign ERP system implementation.

Lessons Learned

These five foreign ERP implementation failures emphasize the need to localize strategies, even for the global ERP leaders. The general manager of a foreign ERP vendor explained, “You should understand China’s history and its culture before you start doing business with Chinese companies.”

Foreign ERP implementation plans for China must address these seven hurdles. The cases of failed implementation suggest global ERP vendors require more than superior technology and experience. Their ERP strategies must also address the cultural differences affecting ERP implementations. Strategies need to overcome problems relating to language, reporting formats and content, cost control capabilities, frequent business process redesigns, effective customer support, and capable consulting partners.

More specifically, foreign vendors should ensure that all ERP modules are thoroughly and correctly translated into Chinese, including user interfaces, reports, and user help files. Foreign vendors must have access to technology and platforms that support development of applications using simplified Chinese characters. They also need their systems to be flexible enough to easily adapt to changing business practices. Major events, such as China’s entry into the World Trade Organization, have caused firms to frequently reorganize their core business processes and supply chains. If ERP systems cannot adapt to rapid changes, foreign ERP implementations will continue to struggle. Weak accounting and financial reporting modules must be able to rapidly recalculate changing costs and to generate tables or reports that meet China’s reporting requirements. Modifications of foreign ERP systems to

fit local business needs may be costly and time consuming but are essential to a firm's brand reputation and market penetration.

Product training and customer after-sale support are also important. Communication with local service providers and customers must fit within local cultural norms, values, and beliefs. Given the differences in cultural and business practices in China and the West, appointing a local service provider as the middleman may be an essential short-term strategy for international ERP vendors. However, this temporary solution creates its own paradox. On the one hand, local service vendors help ERP vendors transcend the Chinese business and cultural barriers. On the other hand, local service providers can become a bottleneck to ERP implementations when they lack adequate training and knowledge about the foreign ERP system. To improve their market share, foreign ERP vendors must build a good relationship with their local service provider, hire the best talent, and ensure adequate ERP training. In the long run, foreign ERP vendors must localize operations by hiring local talent and training them well enough to compete with domestic ERP vendors. **C**

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HUIGANG LIANG (hliang@fau.edu) is an assistant professor of MIS in the Department of Information Technology and Operations Management at Florida Atlantic University.

YAJIONG XUE (xueyaj5@auburn.edu) is a Ph.D. candidate of MIS in the Department of Management at Auburn University, Auburn, AL.

WILLIAM R. BOULTON (boulton@business.auburn.edu) is a C.G. Mills Professor of Strategic Management in the Department of Management at Auburn University, Auburn, AL.

TERRY ANTHONY BYRD (tbyrd@business.auburn.edu) is a professor of MIS in the Department of Management at Auburn University, Auburn, AL.

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