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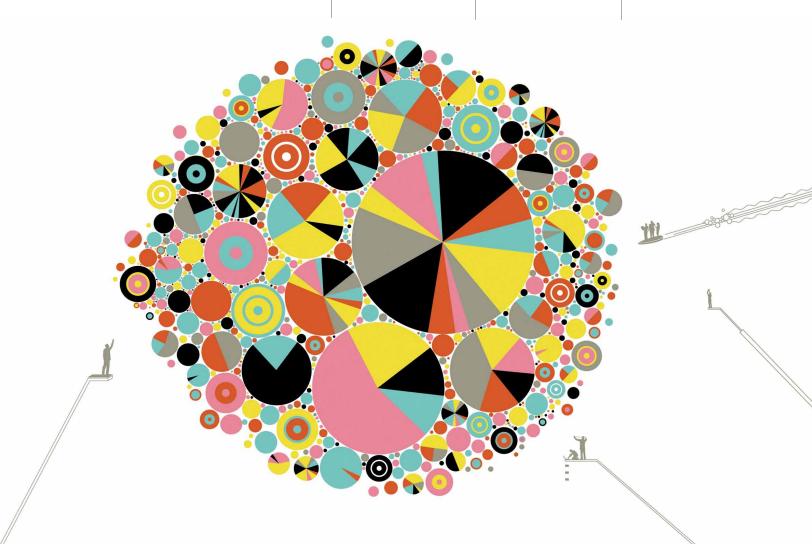
Neil Webb

The IT factor in a global business transformation:
An interview with Lenovo's CIO

In a global operating model, IT must deliver the efficiencies of standardization but respect local business needs.

Lenovo's 2005 acquisition of IBM's PC operation set up a far-reaching business challenge—how to create a new global operating model that would meet two critical goals. The first was effectively managing the company's business diversity: a range of customers in more than 160 countries, two distinct product brands, and multiple marketing models. The second was how to meet senior management's desire for greater standardization and efficiency by consolidating supply chains and financial management and coordinating product sales more tightly.

For Lenovo's IT organization, charting how to support the new operating model was daunting. Inherited legacy IT systems had to be replaced by an enterprise-resource-planning (ERP) system that could foster standardized processes yet remain flexible enough to handle important variations in local markets. Rolling out a global IT system is an enormous challenge that many CIOs have taken on but few have managed to pull off. Xiaoyan Wang became Lenovo's CIO in 2009 to lead the company's global transformation. She understood that to introduce it on time and on budget, she would have to prioritize tasks and wouldn't be able to accommodate every business demand. Her slogans became "Schedule is king" and "100 percent IT solutions aren't possible."

McKinsey's Kevin Wei Wang, a principal in Shanghai, sat down with Xiaoyan Wang at Lenovo's head-

quarters in Beijing and discussed what it takes for a CIO to lead this type of transformation and Lenovo's progress to date.

McKinsey on Business Technology: *What were Lenovo's strategic goals in launching this transformation?*

Xiaoyan Wang: First of all, we needed to migrate from multiple sets of legacy IT systems onto one strategic platform using SAP. In the meantime, we wanted to provide the IT solutions to enable the company's global operating model, which offered new business capabilities, such as management of global accounts and electronic transactions with our channel partners.

McKinsey on Business Technology: *What were the key challenges Lenovo faced during this ambitious transformation?*

Xiaoyan Wang: It was challenging in a number of ways. The legacy IT systems we inherited had high maintenance costs and could no longer support new business capabilities after running for more than 20 years. So there was an urgency to migrate from them. At the same time, we had no system ready that could support the new operating model. Our SAP system in China was a good base, but it needed to be enhanced so it could support our diversified customer base and our global back-end operations. The PC market, of course, is very dynamic, with razor-thin profits. So we have to link our IT transformation road map closely with business priorities and adjust when necessary. Finally, our people were from different cultures and were just learning to work with each other, while most of us were new to a transformation on this global scale.

McKinsey on Business Technology: *One of the big stumbling blocks to implementing ERP systems globally is that they are either too centralized, and thus diluted in terms of local impact, or too local, and thus very complex. How have you approached this problem?*

Xiaoyan Wang: The key has been balancing the demands of operations such as finance and the supply chain that can be globally standardized with those of areas such as sales and marketing, which have specific local requirements. For example, the PC industry is global, with commoditization of products and pressure on margins. So you need to leverage the global scale of manufacturing and supply chains. Similarly, sourcing components and manufacturing in Asia while delivering to customers in the US means centralizing information systems to get accurate product cost and supply chain information when executing global order transactions.

At the same time, we need to acknowledge that there are still regional differences in our markets, involving requirements for customer interactions, go-to-market structures, and pricing practices. For instance, we have well-established business practices for working with channels in China, while in the US our business relies mainly on direct sales to business customers, which have very specific requirements on how they want to make PC purchases. So our IT systems need to have the flexibility to deal with local requirements, such as opportunity management and pricing approvals. To do this, we chose to deploy one instance of SAP to support the global operating model while allowing some justified differentiation that is needed to operate in different geographies.

McKinsey on Business Technology:
How did the IT leadership decide on the road map and timetable?

Xiaoyan Wang: When we defined our road map, we found there really wasn't a highly relevant industry case for us to follow. We learned that it normally takes five to seven years to replace a global IT system of a similar scale, even without the complexity of postmerger business integration that we have faced. But we chose that time frame as a target.

The path we chose started with an upgrade of our China IT platform to make it a solid foundation to support the overall global operating model. We piloted the system template for factories with our Shanghai plant and used a pilot in Canada to create the templates for sales. Then we moved on to areas that required global standardized oper-

ations, such as the supply chain and finance, separating them from their legacy systems. For sales and marketing areas where local differentiation was important, we prioritized emerging-market countries, where requirements were lower and there was a business need to move urgently. Our next push will be in mature markets, where complexity is higher and there's a demand for IT capabilities that support more sophisticated types of sales interactions.

We agreed to do all of this within the boundaries of IT funding constraints, knowing we would have to deal with the tough cycles of the PC market. So we had to slow down for three quarters during the 2008–09 recession.

McKinsey on Business Technology:
Was there pushback from businesses as you rolled out the program? How did you manage to control the scope?

Xiaoyan Wang

Vital Statistics
Born 1962, in Rongcheng, Shandong, China

Education
Graduated with an MA in mechanical technology and automation in 1988 from Beijing Institute of Technology

Earned an executive MBA in 2004 from China Europe International Business School (CEIBS)

Career highlights
Lenovo (1994–present)
- Senior vice president and CIO (2009–present)

- Various roles, including chief administrative officer for a range of corporate functions and technical-service organizations (1994–2009)

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Prior to Lenovo, Ms. Wang worked in various areas, including R&D engineering, technical services, and project management

Fast facts
Honored by the Chinese Academy of Science as one of its outstanding women in 1999

Trustee of the CEIBS Education Charity organization, which supports education for underprivileged children

"CIOs need to have a clear understanding of the business model, as well as a deep understanding of the legacy systems they are phasing out and the multitude of IT cost drivers that come into play."

Xiaoyan Wang: It's true that scope control is essential. As a result, I have established some key principles for achieving business–IT alignment. The first is that we are not providing a 100 percent solution—we only target delivery of the critical capabilities for running the business. Enhancements can be done later.

"Schedule is king" is another principle. We have to do whatever we can to keep our schedule commitments. Everyone in the business has built their plans around our release dates for the new IT systems. If we change schedule commitments for one business, that will cause disruptions with significant consequences.

It's easy to get bogged down by complexities in transformations of this scale. So you need to have a top-down view of how the business actually runs in order to navigate all the complexities and to make fact-based decisions on trade-offs affecting businesses and IT implementation. CIOs need to have a clear understanding of the business model, as well as a deep understanding of the legacy systems they are phasing out and the multitude of IT cost drivers that come into play. And of course, on top of this, you have to earn the trust of business executives to push the transformation forward.

McKinsey on Business Technology: Tell us more about how you influenced the appetite for change among Lenovo's business leaders.

Xiaoyan Wang: You need to create a top-down alignment on the necessity of the changes. Senior business executives must acknowledge the urgency of the changes and act as the sponsors to drive them through their organizations. For example, in our transformation journey, our finance–CFO function was a strong sponsor of consolidation of the financial operating model and worked with IT on two rounds of dry runs when we changed our ledger systems.

You also need to plan and drive the business change-management effort well before you start implementing any new IT. Customer migration and user behavior changes—things like placing an order on our new online e-commerce tool—require a long lead time. So IT needs to articulate, in advance, the major things that will change and to plan backward to be sure businesses can execute their change-management activities and stay on the agreed-to path.

McKinsey on Business Technology: How much of the culture did you need to change to accomplish all of this?

Xiaoyan Wang: Before the acquisition, our leadership and management teams were predominantly Chinese. We had an almost military-style, very efficient execution. However, we realized that would not work after globalizing. In running a global business, we needed to build a leadership team with various cultural backgrounds and different prior experiences. The result was that we learned to be more patient in order to build buy-in for decisions and to be more open-minded in adopting a different leadership and communication style.

McKinsey on Business Technology: Since your base was legacy systems, did you have the right people with the right skill levels for the new environment?

Xiaoyan Wang: As far as capability building goes, we clearly have the advantage of being based in China, where we have a good-quality and great supply of IT talent. However, our local team lacked the experience of managing a large global transformation program and of supporting IT systems for a global base of users.

So our people strategy has been to gradually build the internal IT team. At the beginning, we needed external IT professionals to augment capabilities in areas like architecture, design, and testing. In the meantime, our internal teams got on-the-job training during the projects. As we have moved into the later stages, our internal team scaled up to take more "ownership" in the projects and became skilled in managing programs on a global scale. Our development costs went down accordingly.

McKinsey on Business Technology: Have you seen any payoff or benefits yet?

Xiaoyan Wang: Since 2009, we have had three major releases of the new system, and they have been on schedule and on budget. We have launched standardized global operations for finance and the supply chain and successfully migrated all emerging markets onto the strategic platforms, leaving the US and Western Europe as the last two regions to be migrated, within the next 24 months.

Despite the ongoing transformation programs and the spending they require, overall IT spending at

the company as a percentage of revenue has dropped from 2.8 percent in 2008 to 1.3 to 1.4 percent in 2010, lower than the PC industry average of 1.5 to 2 percent.

McKinsey on Business Technology: *Can every CIO do this? What are some lessons from your playbook?*

Xiaoyan Wang: To do a major transformation, you need a deep understanding of your industry characteristics, your company's strategic priorities, and the business operating model. You also need to have an understanding of the capabilities and constraints of the legacy systems you currently have and the new systems you are targeting. Finally, you need to be decisive. As CIO, you are the architect and executive of the transformation. But remember that you'll need a lot of support from other business executives. o