Managing IT to support rapid growth: An interview with the CIO of NetApp

Roger Roberts and Tom Stephenson

To keep pace with a rapidly growing company, CIO Marina Levinson must choose her priorities carefully.

When Marina Levinson joined NetApp as chief information officer, in 2005, the data storage business "had a very good IT operation for a $500 million company," according to her. In reality, however, the company was already four times that large—and growing by 25 percent a year. Her primary task has been to build an IT organization that can help, rather than hinder, NetApp's continuing fast-paced growth. As Levinson says, "You never want IT to show up in a quarterly report as the reason the company didn't meet its revenue numbers."

Soon after joining NetApp, Levinson assessed the IT organization's capabilities and identified dozens of processes and activities in need of improvement. Launching a broad organizational transformation of the function was out of the question, given the need to scale it up quickly to remain in step with the growth of the business. Instead, she identified and then tackled concrete sets of high-value improvements. To ensure that they aligned with the company's strategic direction, she adopted a governance model placing positions for key IT decision makers within the business units and appointed people who could help her ascertain whether IT resources were invested in the right projects.

The implementation of these change initiatives hasn't always been smooth: business leaders (and IT managers) who had grown used to an IT department that merely took and fulfilled orders had to get comfortable with IT leaders who challenged them and kept an eye on the IT strategy of the broader enterprise. But the changes were necessary—and, despite the bumps, ultimately successful.

Working to change the profile of IT requires close collaboration with the business and—even in tech-friendly Silicon Valley—the ability to show colleagues inside and outside the IT department why change is necessary and possible. To understand how high-tech CIOs manage this type of transformation, McKinsey's Roger Roberts and Tom Stephenson talked with Levinson at NetApp's office in Sunnyvale, California.

Marina Levinson

Education
Graduated with BS in computer science in 1979 from St. Petersburg Institute of Precision Mechanics and Optics, Russia

Career highlights

NetApp

- Senior vice president and chief information officer (2005–present)

Palm

- Vice president and chief information officer (1999–2005)

3Com

- Senior IT leadership positions (1987–99)

Fast Facts

- Winner of *CIO Magazine's* CIO 100 Award for innovation (2001) and agility (2004)
- Honored as Premier 100 IT Leader by IDG's *Computerworld* (2004)
- Member of SpikeSource CIO Council
- Hobbies include reading, travel, gourmet cooking for family and friends, and wine tasting

The Quarterly: When you came in, how did you identify what had to be fixed?

Marina Levinson: To figure that out, we conducted high-level interviews with executives and a series of work sessions to identify the biggest problems we faced, as well as the top five or six things that we needed to focus on in the next 18 months to be successful.

NetApp has always been strong in product innovation, which has helped us gain new customers. But in recent years, closeness to customers has become a much more important component of our company's strategy, as we've deepened our ongoing service relationships with them. When you sell to CIOs and other senior IT execs who understand IT operations, the expectations around IT customer support and professional services are very high. I think that we've done a marvelous job in the last four or five years and truly developed excellent capabilities in this area—for example, with systems that can remotely diagnose trouble in our products and signal it to us, sometimes even before the customer becomes aware that there may be a problem.

The Quarterly: How did you decide on your transformational priorities?

Marina Levinson: Because of the company's rapid growth, we had never really focused on improving business processes, but we knew we would have to as part of our long-term growth strategy. In a normal business process transformation, you would focus primarily on making improvements on the process side. But 90 percent of our critical processes have IT implications, so we have to deal with business processes together with the IT that supports them. Our systems and processes are very tightly linked.

Our assessment revealed that we had something like 200 capability gaps between where we were and where we needed to be. We believed that embracing something like Six Sigma would mean death to the company and to the change program because Six Sigma is a change methodology that does not enable you to move quickly enough to get from here to there.

Instead, we found that a more effective approach was to identify the five top critical process capability gaps that could prevent us from scaling up our business and then to attack those gaps with gusto. This allowed us to continue to build quickly while also looking at least two or three years ahead to make sure that we had a road map of where we wanted our business and our technology to go. We revisit the road map every year because our business is pretty dynamic. Our problem areas will change, and we need to be nimble enough to address changes in the strategy.

For example, we identified our order-to-cash process as something we needed to improve in order to be able to scale up our business. When I started, a large percentage of our sales orders had to be manually touched by someone on the order-management team. Since so much of our business comes at the end of a quarter, that really threatened our ability to scale. So about a year ago, we started attacking that from the business process and systems perspectives and we've managed to reduce orders requiring a manual touch by 75 percent.

It's somewhat challenging in this environment because NetApp is so driven by results, and there's a need to deliver tangible business value in 90-day increments. When the company doesn't see the results fast enough, questions start to pop up. So communication and change management are paramount because you want to show clearly not only the road map but also the results that we're generating by working on this transformation.

The Quarterly: What are your longer-term transformational priorities and what kind of oversight model do you use to manage them?

Marina Levinson: Any system that allows us to be closer to our customers and partners is something that we want to invest in as part of our strategy, especially when it differentiates us from the competition—something such as the diagnostic tools I mentioned.

As for oversight, we have a team of senior people who report to, and are evaluated by, the business. Rather than match these people up with functions, we identified cross-functional processes, like the order-to-cash one, and each cross-functional process has a sponsor at the senior or executive vice president level.

For each area targeted for improvement, we have an operational leader whose responsibility includes that business process. We found that when people have process design and operational responsibilities, they're more successful in delivering business process improvements.

We also have a one-to-one relationship between the business process leader and an enterprise applications leader—for example, between the order-to-cash process person on my staff and the order-to-cash applications person. This relationship creates synergies between the IT side and the business process side of the organization.

And we're also moving toward a model of portfolio management where each process group has an account manager—basically, like demand managers—who handle the application priorities for that part of the business. I am a firm believer in the account-management structure, because we don't want our business partners worrying about how we're organized internally within IT. We want to have a streamlined way of prioritizing demand for the company. Before we did that, whoever screamed louder would get the IT resources.

The Quarterly: What sort of governance do you have in place to make sure IT's priorities match those of the business?

Marina Levinson: We have a scalability steering committee—consisting of top functional executives and cochaired by the CIO, corporate controller, and senior vice president of field operations—to make sure that our investments in IT and business processes are focused on the most important priorities for the company. We usually have businesspeople and IT presenting these investments as a partnership.

Before investments get to this level, they are prioritized at the functional level. We also monitor our large initiatives, on the process side and the IT side, to make sure that we're delivering on our commitments. We built a pain factor into this by asking the business to justify its IT investments and to present a tangible return on investment for all projects. While folks in lower levels of the organization occasionally criticize the process as painful and time consuming, folks at the leadership level see the benefits of what we're doing, because we clearly have a pretty good handle on how we spend our money on IT projects.

The Quarterly: What's greater—your challenge inside IT or with the rest of the company?

Marina Levinson: Within IT, a big challenge is getting people out of the "order taker" mode. We shouldn't be saying to our business partners, "Tell us what to do." We should instead be saying, "Tell us what your business challenges are, and don't worry about how we're going to get there. Let's work together, and we'll come back to you with a proposal for how we can change both the business process and the systems supporting it to get you to where you're trying to go." Our IT leaders have to feel comfortable and empowered to work as equal partners with the rest of the business, and, frankly, we've had to make some changes in leadership to make that happen.

But this is probably less challenging than changing how the business works with IT. When we first began this transformation—from being an order taker to a business partner—some business managers were irritated: "Why are you asking me all these questions? I know exactly what I want. I want two servers with this package installed on them. That's all you need to know. You don't need to know about my business."

This obviously was not the right answer. We had to demonstrate that unless the company took a different approach, the business environment could become unstable. We had to make sure that the executive team understood that if our approach to IT didn't change, our IT systems and processes would actually cause us to fail as a business. So there was some fear factor at work there helping to give me the authority to take that risk off the table.

I also spent a lot of time building relationships at the executive level. I explained to my peers that I measure my success by their success. And then I had to walk the talk.

The Quarterly: How do you think about standard versus innovative new technologies in the NetApp environment?

Marina Levinson: I have a very simple rule of thumb. For standard functions, like finance and HR—anything that is an important operational component but not strategic—we need to use standard technologies. We buy rather than build.

For areas where we can gain competitive differentiation, I believe in custom solutions and innovative new technologies that get us to market faster than our competition—for example, the self-diagnosing systems I mentioned earlier or our customer service portal, NOW (NetApp on the Web), where our customers can acquire an array of content and self-service tools designed to help them manage their storage solutions. Those are technologies that let us gain a competitive edge in the marketplace.

The Quarterly: How are you experimenting with new technologies within your own organization?

Marina Levinson: We have an architecture team looking at a service-oriented architecture (SOA) framework, and we're implementing the SOA foundation using packaged technology. But we will go pretty slow because it's still very new. Also under the umbrella of this enterprise architecture, we have a team that's focused on collaborative technologies for improving the productivity of employees, as well as collaboration with our customers, partners, and suppliers.

The Quarterly: In the last decade, companies made major investments in automating structured processes and routine tasks. More recently, investment has supported knowledge

workers who base decisions on a combination of structured and unstructured input and dialogue. How do you see this shift?

Marina Levinson: There isn't much innovation left in the structured world. If you want to innovate, you really need to look at collaboration and the creation of communities. Businesses are not as advanced as consumers in creating these communities, but I think there are a lot of opportunities for very interesting innovation that we haven't seen yet.

We have some of this activity happening at the grassroots level in our company, such as deploying wikis for the engineering staff. But it will become necessary to develop a Web 2.0 strategy that benefits the entire company. You have to allow some chaos at first to get people to experiment. But at some point, you have to create a framework, some kind of order. And, of course, it's impossible to quantify the benefits right now—you just need to believe that collaborative technologies help to improve employee productivity.

The Quarterly: How has the role of the CIO changed during your time in the technology sector?

Marina Levinson: In the past, it was much more important for a CIO to be a technologist who optimized how technology was used in a corporation. These days, in companies where IT can bring competitive advantage, CIOs should have significant business experience or have worked with the business, so they can clearly and easily understand the business strategy and translate that into IT strategy. You can always hire a chief technology officer or buy technology knowledge from third parties. That's not as important as having a sense of the business strategy. And I'm a firm believer that anything that we do in IT has to be driven by business strategy. I don't believe in technology projects for technology's sake.

In our business and in other high-tech companies, the CIO's role also includes deploying the company's own technology and then showcasing it to external customers. That is a strategic component of our IT strategy, but one that's unique to high-tech companies. The strategic value we add is our ability to help our business managers understand what sells to customers, what doesn't sell, and why. I tell our salespeople that I'm the customer. If you can sell to me, you can sell to my peers. It is quite valuable to have a friendly face listening to your sales pitch and helping you understand the value proposition of your products from the end-customer perspective.

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