



The Role of IT in Innovation: Friend or Foe?

A lack of IT agility can stop growth dead in its tracks, but so can a business that fails to see IT as a strategic partner. To innovate and stay competitive, companies must partner with IT, and IT must stay in step with where the business is headed.

By Diann Daniel, August 17, 2007

Here's IT as an innovation enabler: An innovative IT team moves forward in step with the changing demands of the business—sometimes a little behind, sometimes in front, but for the most part, keeping in sync. That's how Stephen Agnoli, CIO at global law firm K&L Gates, sees it. This year K&L was honored with a CIO 100 award, which is given to 100 companies whose IT innovations have transformed their businesses.

Innovative IT. Transformative IT. IT that drives the business forward. While that might sound lofty—genius IT folks locked away in a creativity closet—companies such as CIO 100 honorees and other leading companies are marked by IT that works in true partnership with the business. That partnership can provide new areas for growth and set a company apart from its competition.

Agnoli says that the company's CEO, Peter Kalis, sees IT as a key business driver and considers Agnoli crucial to conversations of strategy and innovation. Agnoli, for his part, says he is working to lead an IT department that is business-oriented (he forbids the use of tech acronyms in the presence of business colleagues), well-oiled ("It's hard to find time to innovate if your foundation's not strong") and agile ("If [the business] keeps looking backward and IT is still in the same place, that's a problem").

At K&L, the IT-business partnership resulted in its Legal Information System—an information-sharing application that gives lawyers and staff the ability to share data about legal cases, state and federal statutes, and legal commentary and analysis with its clients. K&L cites the system, which now has 700 users, as a market differentiator that has allowed the law firm to triple its revenue to \$5 million per year.

Origins of a Winning Project

Seeds for the K&L project were planted in 2001 when an industry group association was looking for a legal firm to do what its current one could not: quickly deliver high-quality legal content to a distributed base of users. Up to that point, legal information (such as updates on industry-relevant cases) was delivered to its members via CD-ROM. If something changed in the legal arena, the association had to either wait until the next quarter to update the information or send out paper notifications, both of which were cumbersome.

The association (which Agnoli declined to name) turned to K&L. The legal side was confident that it could offer the information the client sought; the question was whether the firm's IT capabilities were up to the challenge of this center-stage project. Agnoli said this posed a risk and an opportunity for his IT group, adding that it relied on a team that had built a strong infrastructure and a trustworthy track record of performing well. (See "Six Keys for Creating an Innovative IT Team.") That track record was key to starting the project and building the foundation of the resulting innovation: The IT team worked with K&L lawyers and the client organization around strict project development guidelines and with multiple checkpoints. In 2002, what resulted was a technology platform that combined off-the-shelf Web-based applications with custom-built tools. For example, the system uses packaged software's document management functionalities but incorporates custom-built online query and search capabilities. This allows users to search legal cases and commentaries by industry, area of law and information access requirements. Content creation, review, approval and posting are managed by a workflow process, which allows K&L lawyers to quickly update the site to help clients understand important, emerging issues.

IT Doesn't Always Work This Well

The K&L anecdote represents IT at its best, but it's not necessarily the rule. Forrester analyst Laurie Orlov published a paper in November 2005 called "Make IT Matter for Business Innovation." In it, she commented that "many IT organizations have lost their way in the past few years," and that corporate leaders tend to see IT as inflexible and unable to keep up with business change. For example, IT relies on change-resistant software that is too costly to modify or too reliant on too many ERP systems to stay in sync with changing business conditions. She added a pointed critique, quoting a consultant: "We help sales and marketing bring customer service innovations to market—but having to go through the IT resource inhibits our efforts to get it done."

That inflexibility is, in many cases, an issue of IT complexity, says Stephen Shapiro, business adviser and author of *24/7 Innovation*. "I think of creativity and innovation as connecting the dots," he says. "How do you connect the dots when you have 850 ERP systems?" (One of his consulting clients, which he declined to name, had that many ERP systems.) The problem, Shapiro adds, is that business and IT tend to operate in their own silos.

IT complexity and its debilitating effects on business were also noted by Rudy Puryear, Bain & Co's head of IT for the Americas region, in an interview with CIO.

"Business change continues to accelerate—what I oftentimes call the MTBS, or mean time between surprises, continues to get shorter," says Puryear. "In an environment where that happens, the mean time between surprise and response also has to get shorter." But all too often, he points out, response time is anything but fast. "The cycle times in IT are increasingly much slower and out of sync with the cycle times required by the business to stay competitive."

This year, the Boston Consulting Group's study on innovation found that although the majority of companies are spending more on innovation, fewer than half of the respondents reported being happy with the return on their innovation spend. To blame? Overly lengthy development times was ranked as the number-two obstacle with 36 percent (just after risk-averse culture at 38 percent). And 54 percent of those respondents—2,468 senior executives from around the world—said their companies moved from idea generation to revenue generation too slowly.

Is IT in the Way, or Not Clued into the Right Conversations?

On the surface it may appear that IT, in many cases, is actually standing in the way of innovation, but the matter is not as simple as it seems, says Jeanneane Rae, an innovation consultant. Rae, cofounder and president of Peer Insight, says she finds that IT is usually absent in strategy and innovation conversations. And on the occasions when CIOs and other IT staff have been at the table for those conversations, most look bored, Rae says.

When she sees this disappointing dynamic unfolding, Rae says she wonders what cultural issues are at work. She wonders, for example, if IT teams' goals are defined by the business such that innovation conversations actually take IT teams away from the work for which they are judged. In other words, in some organizations are the CIO and his team actually penalized for being a part of innovation? Is there a misalignment between what is said to be rewarded and what is actually rewarded?

In BCG's innovation study, lack of coordination or organizational misalignment scored as the third most common obstacle to innovation at 34 percent.

Puryear points out IT's role as a scapegoat. "Company after company is waking up today and saying, 'IT's too expensive and it's too slow,'" he says, "but when you peel back the covers, you discover a lot of that is because there were a couple of decades of unnecessary business complexity that's now mirrored with significant unnecessary complexity in IT."

Using IT to Fix the Fix We're In

What's important now is fixing the problem and placing IT where it belongs: at the center of innovation with other drivers of business, innovation experts say. That doesn't mean putting technology at the center; technology, after all, should be in service to the greater strategic goals. What it does mean is making the CIO (and team) a full partner of innovation efforts. They can work with the business to create new technology-enabled growth areas, a key in today's economy.

Medtronic, Zipcar, IBM and other innovative companies are marked by agile and responsive IT departments placed at the center of business operations, says Rae. As the economy becomes more reliant on services and less reliant on products, CIOs and IT departments are more important than ever, she adds.

Shapiro says that although IT systems have been siloed, the IT department can help with important enablers of innovation: service-oriented architecture, knowledge management systems and applications that foster end-user collaboration, for example. IT can also help with Web 2.0 tools, which can help streamline and consolidate information at a low cost, say their proponents. The ability to find standard data forms is a key to innovation, Shapiro says. "Standardized data is far more important than standardized [business] processes."

This is because as he, Rae and Puryear point out, untapped data can yield insights that can change a company's or industry's strategy. Puryear points to American Express as a company that redefined itself by analyzing customer spending data to develop new products, reward programs and cobranded partnerships.

Innovation is about using the right tool in the right way at the right time to solve a problem. And that will usually involve IT. "You can't say IT is just about keeping the lights on," says Agnoli whose law firm built an information-sharing system. There's the increasing use of the Web and how it binds the world together, there's the acceleration of change, there's the ubiquity of connectivity. "In this environment, IT is a key component of business innovation and a key revenue driver."