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eBay was a fluke - an experiment in how equal access to information affected the market that occurred at just the right time in technological history. It would have remained a fluke, too, except that its founder recognized the potential of the idea and had the technology to get AuctionWeb, as it was first called, online. Catapulting it from a nondescript black and white list to the world's premier online auction site took the foresight to use technology to drive the business. It used technology to become better, faster and safer, to give customers an experience they raved about.

By the time eBay was founded in 1995, people were fairly comfortable with online transactions. eBay's took that a step further, though, in deploying technology to increase the perception among customers that their transactions were actually safe. For example, the Feedback Forum was launched in 1996, followed the next year by feedback stars, giving potential customers a word of mouth way of assessing the seller's reputation. In 1998, the "My eBay "personalization tool was introduced, and in 1999 "Buy it Now" fixed price trading debuted for customers unwilling to wait for auctions to close. In 2000, it made several APIs publically available and later introduced the eBAY Developers Program, to let developers use APIs to monitor auctions and extract information. eBay Stores was introduced in 2001, advancing the "Buy it now" concept. In 2002 it acquired PayPal. Do you see a trend here? Each year, eBay used technology to somehow improve the customer experience.

That's a fairly logical approach, but one many businesses overlook. Why? It's simple. CIOs, CEOs and nearly everybody else views IT as a support function...the group that keeps email running and the Web site functional. As long as that's the prevailing view, nothing much will change. When IT sees itself as the organization's secret weapon, however, it has the power to transform business as usual into business as it ought to be. The results can reverberate enterprise wide.

Want to duplicate eBay's success? Think about what you'd like to do, without the technological constraints, and then find a way to make it happen. Think like "Skunkworks," Lockheed Martin's advanced development program, known for its outside the box thinking. "Every IT department should spend a percentage of its budget doing "SkunkWorks" type projects," Patrick Gray, president, Prevoyance Group, Inc., stresses. "Look at the new technology. Do off-the-wall stuff. Play with it and find a way to use it to advance the organization's goals," he admonishes.

"IT doesn't realize how much it knows about the company," Gray says. It knows the technology, the systems, the market and how everything fits together. IT is in the position to become knowledge broker, enhancing its value by bringing new ideas and best practices from throughout the organization to the discussion as well as new technologies, thereby spurring participants to think of options in new ways. To build the next eBay, "take a comprehensive view of the data center," advises John Bennett, HP's worldwide director for data center transformation solutions. "If you're focused on servers, networks, and other aspects, you won't see the opportunities."

What eBay did isn't rocket science, but "most IT executives don't know how to relate IT to competitive pressures" in an organization, according to Tony Bishop, CEO and founder of Adaptivity. Bishop does know. He transformed IT into a strategic weapon for Wachovia, where he was senior vp and chief architect for that bank's corporate investments. The goal, Bishop recalls, was to turn its commercial banking organization into a big league, best-in-class player. The challenge was to do that at half the normal costs.

"First, we aligned the value chain against our products and services, and looked at industry benchmarks and infrastructure systems," Bishop says. That exercise helped Bishop and his team determine "what to build, what to buy and what to get rid of," he explains, and yielded changes to the basic business processes as well as to the computing architecture. Standardized applications in a virtual environment are key. "The resulting platform is consistent across the entire line of business," he says. Those systems are part of the Wachovia's value and will become part of Wells Fargo, which recently acquired Wachovia.

That's back-end work, though. IT's real value as a strategic weapon is in delivering ways to interact that make it easier for customers to conduct business with the firm. "If you can do things faster, that's another plus," Bishop adds. So is lower cost. Delivering those attributes is how IT shapes the business plan. Extending such benefits helps firms retain existing customers and attract new ones. When costs are lowered, it also frees up capital that can be reinvested to grow the business. As Bishop suggests, "If you marry the right work with the right (architecture) and management system, you can run multiples - five to fifty-fold - more on the same infrastructure."

Bishop describers the platform he put in place at Wachovia, and the platforms he designs for his clients today, as modular franchises. "McDonald's, for example, has different franchise models for food courts, for free-standing restaurants and for gas stations." Each has slightly different requirements, and the franchise tailors its template to meet those requirements. Likewise, the IT franchise he developed also can be tailored to fit the industry and situation, he points out. Think of critical business platforms - like benefits and risks, or customer service - as modules. Management frameworks like ITIL or the Software Engineering Institute are used to tailor those modules.

"The secret sauce is how to get the best work done in the best way possible," Bishop says, returning the fast food analogy. For computing, he refers to demand management - knowing, for example, not only the demand for resources at any given time, but also who is using those resources, their costs, the level of quality required and level of efficiency necessary. That approach helps companies eliminate what he calls "spaghetti transactions that are linked all over the place." In-





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stead, the logical, modular approach he developed at Wachovia maps demands and lets administrators see the interactions to identify what infrastructure is used, and when it is used, to better manage transactions and leverage resources to help the organization do more, faster, better and more economically.

Virtualization was one part of Wachovia's strategy and figures prominently in any IT transformation project. Another ingredient, championed by Google, is to use commodity hardware. "Google's real intellectual property is how it manages its data center," insists John O'Brien, CTO at Dataupia. Google made the decision to use commodity hardware and put the intelligence into the applications rather than in the hardware. The result, O'Brien explains, is a system that is "fully self-healing," so an application can be switched to another server quickly and easily. The server sometimes can be replaced less expensively than it can be repaired. Virtualization levels the playing field. "Any company can run 50 and 100 TB systems and high end analytics at commodity prices," he says.

Virtualization, then, is one of the keys to transforming IT into a strategic weapon. "Anything that gives you the ability to build for today and is extendable is a fundamentally right step," according to Vic Nyman, co-founder and COO of Bluestripe Software. "Flexibility is the issue." He's an advocate of service oriented architecture (SOA) because of its flexibility. SOA, inherently, is modular and helps ease organizations into clouds or in-house virtual environments.

Standardization is another vital ingredient in transforming an IT department into a competitive advantage. Logic dictates that one set of standard operating procedures that fit the entire organization can be managed more efficiently than one with hundreds of exceptions and multiple computing environments. The result is increased uptime for the organization and, importantly, for its clients. Further steps, like adapting SaaS and desktop virtualization, can streamline IT management while increasing data availability enterprise-wide and decreasing the need for execs to synchronize laptop and desktop systems. It has the potential to enhance security, too (but that's another story).

In the case of hosting services, such transformations mean that recovering from what Nyman calls "a really bad power outage" may take 180 seconds versus the eight hours it may take without virtualized systems. And, he says, "Imagine the number of companies you could support" under a virtual environment, without increasing hardware.

The transformation of IT into a competitive advantage is underway, especially in large organizations, in an effort to drive costs out of operations, HP's Bennett says. There are two approaches. First, he says, the strategic application of computing resources can be used either to lower the cost of goods or to increase the profit margin. The former makes it harder for competitors to compete, and the latter give sales more flexibility in negotiating contracts. "More interestingly," he says, "from a business standpoint, the next generation data center lets business respond very quickly to meet unexpected demands and to support new business initiatives more quickly."

FIMBank in Europe is one example, Bennett points out. By restructuring its data center operations, it cut the time to open and support a branch office from two to three months to two to three days. FIMBank consolidated operations, virtualized IT and added blade servers and server management applications. The result was a standardized infrastructure that freed administrators to focus on aligning their processes to not only support the business but to advance the business.

"Data center transformation lets you go after opportunities quicker," Bennett reiterates. Being forced to wait three to six months to launch new services or products typically transforms front-runners into also rans. "Speed and agility are benefits," Bennett stresses.

Using IT strategically has been among CIO's top concerns for the past 30 years, the Prevoyance Group's Gray says. Yet, "Only about 20 per organizations do this well." Organizations are ready for this approach, Bishop asserts, "but vendors and traditional consulting firms don't know how to pull it together. The people who 'get it' are moving very quickly with it, but you have to do this top down, and synchronize from the bottom up," he says.

To build the next eBay, "IT needs to see itself as something more than a support function," Gray reiterates ."And," he continues, "business needs to see IT as a way to grease the skids." To achieve that mutual understanding, CIOs need to hire business-savvy people who can sit at the table with the vice presidents and contribute to discussions, and the CIO needs to drive the value inherent in IT in a way that is understood by the business unit managers.

IT knows more about the business than it realizes. When it applies those insights to help drive service and profitability, it is on its way to becoming a true, strategic weapon.

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