

BUSINESS TECHNOLOGY OFFICE

Winning the battle for technology talent

The right technology talent can be hard to find. But executives can learn from the ways in which leading IT organizations develop, retain, and recruit good people.

James Kaplan, Naufal Khan, and Roger Roberts Recently, a conversation with the CIO of a thriving, innovative company turned to the biggest hurdles he was facing. Talent acquisition was at the top of his list. He said, "I need a few senior architects. Note that I didn't say *good* senior architects. I gave up finding good ones months ago. I'd settle for a few mediocre ones—do you know any who are in the market?"

Even with unemployment hovering close to 10 percent in many countries, a remarkable number of CIOs and CTOs we know are having a hard time finding and retaining the talent necessary not only to extract value from investments in such areas as big data and enterprise mobility, but also to undertake everyday IT operations with the required quality, security, and efficiency. These executives are also struggling to get the most out of their existing talent. While they have staff with specific IT skills, they often lack stars who can solve thorny problems that span multiple

technology domains and engage business managers on topics such as technology innovation.

Interestingly, companies that heavily outsource technology wrestle with these talent challenges just as much as those that do not; outsourcing changes technology talent requirements but does not diminish them.

This issue is critical for senior technology leaders. Fortunately, our experiences of working with leading IT organizations show that these leaders do have a number of high-impact levers that can be used to develop, retain, and recruit talent.

Developing and retaining talent

Integrating new talent in a technology organization (or any other organization) costs money and, more important, is time-consuming and

Takeaways

Technology organizations need employees who can solve complex problems and engage senior business leaders.

The first imperative of the talent strategy is to develop and retain current staff, for example, by rotating high performers and building up training programs.

Companies also need to source talent externally, potentially acquiring entire teams or rethinking their location strategy.

Understanding the landscape using a heat map can help companies prioritize levers for improvement.

risky, particularly at the management level. Screening candidates, conducting interviews, negotiating employment terms, and getting a new hire up to speed in his or her role can take six months or more, even for a midlevel manager.

Therefore, the first imperative in winning the war for technology talent is to develop and retain the team you have. In addition to all the traditional people-management levers (competitive compensation, rewards for success, effective coaching, and so on), we found that leading organizations employ a range of other approaches to develop and retain technology talent.

Rotate high performers. In many technology organizations, the career path is a traditional one. A new hire starts out in a particular domain (Web development, databases, data-center operations) and advances to assume roles of greater responsibility in that domain by demonstrating a combination of technological expertise and operational or project competence. Although this path has its advantages, it also encourages relatively narrow specialization and, over time, can lead to a feeling of career "staleness." Some technology organizations are proactively rotating high performers across technology domains and into business or operational functions as well. The purpose is to groom managers who can engage with business leaders as peers and can more readily solve multifaceted technology problems that span many parts of a traditional IT organization.

Make training less technical. Many technology organizations provide high-quality training on technical topics such as requirements management, database design, and programming in a range of languages. As

critical as these skills are, some institutions are also experimenting with new types of training. Providing training that helps technology personnel understand the business—in some cases, all the way to the front line—makes technology's value more tangible and provides invaluable context for interacting with nontechnology managers. Such training can address the company's customers, products, strategies, and market position, as well as its operations.

Ensure senior exposure. Many technology organizations have found that the opportunity to interact directly with the institution's most senior leaders is an irreplaceable motivator for high-performing technology staff. As the chief administrative officer of a top 10 financial institution told us, "I don't present to the board on information security. I make sure that the chief information-security officer (CISO) gets a regular opportunity to interact with the board and the executive committee directly. He could go anywhere, but I think that's a key reason he stays here."

Support technology passions. The best people in technology shops have a passion for technology. They are excited by the opportunity to use innovative technologies to solve problems. With all the focus on top-down management of IT project portfolios, individual innovation and experimentation are easily discouraged or lost. One Web-services company we know of helps its engineers recharge after a long, grueling project by allowing them to work on an idea they are passionate about for a couple of weeks.

Facilitate outside exposure. Technology is a community that extends far beyond any individual company or institution. By making time for high performers to participate in

industry or functional groups (for example, standards-setting boards), leading technology shops expand their high performers' horizons and help them feel connected to a broader technology community.

Augmenting talent externally

Developing and retaining existing talent is important, but it is never enough. Skills and capabilities required to play key roles may not exist internally, and opportunities to upgrade talent always exist; new blood brings fresh ideas and perspectives into a technology organization. As such, sourcing talent externally is also critical. Naturally, great recruiting capabilities are a must, but there are also specific actions that IT organizations have found particularly useful.

Buy whole teams where feasible. Some companies use M&A to gain access to talent much more quickly than they would have by building internal capabilities. For example, Allstate's acquisition of Esurance provided Allstate with capabilities in developing online customer channels and systems.

Rethink location strategies when necessary.

IT organizations created tremendous value over the past decade by relocating functions to less expensive locations. Some IT organizations are now refining their location strategies to enhance their ability to attract critical talent. In many cases, this means operating a portfolio of locations that includes lower-cost sites to perform transactional activities and locations in city centers or near universities to attract technologists with cutting-edge skills.

Draft the best athlete. Large, complex technology requires dozens or hundreds of specialized skills, and needs can change rapidly: this year customer analytics and enterprise mobility may be pressing requirements, but other issues may be more critical in a few years. However, talented technologists can learn new skills quickly, so some IT organizations have focused recruiting on finding great problem solvers and communicators, with the expectation that they can pick up the skills required for a particular role.

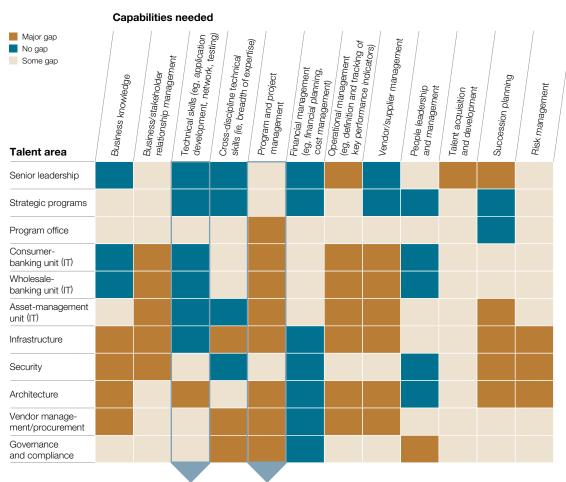
Leverage the network. Talent attracts talent, especially in technology functions. Investing in high-profile hires, potentially from nontraditional sources (for example, recruiting high-tech talent for enterprise IT roles), can help build buzz on the recruiting market. One company hired an experienced CTO and a senior software-product-management executive from a successful Internet player. Once these people came on board, the recruiters worked with them closely, leveraging their professional networks to identify additional candidates and using their reputations as a selling point.

Making required changes happen

Which of these levers to apply, how to apply them, and in what sequence depend heavily on a company's needs, existing capabilities,

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Exhibit 1
A heat map of priorities can highlight capability gaps.



- Overall technical skills are strong, with the exception of the architecture group; more skilled architects are needed to help drive architecture-simplification and modernization efforts
- Program and project management is a key gap given the anticipated increase in demand from offshoring and a managed-services model

and organizational constraints. Here's how to think about integrating these levers to help win the war for technology talent.

 Get an unvarnished picture of future needs and current capabilities. A technology talent strategy has to start with insight into needs: will there be large investments in multichannel customer care? Which is a bigger priority: business innovation or quality and efficiency of IT delivery? Will cybersecurity risk management have to improve? At the same time, IT organizations must develop an unvarnished view of their current skills and capabilities, which people are leaving and why, how current staff feel about their career

Exhibit 2
Trends in the market should also be considered.

Example technology area	Demand trend	Comments
Java	\longleftrightarrow	Popular development platforms will continue to grow, but the supply of practitioners will likely keep pace
Legacy (eg, CICS ¹)	↓	Demand for legacy platforms will continue to decline, though companies may occasionally encounter scarcity of skill sets
Enterprise mobility	†	Demand and the need for expertise will rise given an increasingly mobile workforce and customer base
Enterprise security	†	Increased mobility, the digital marketplace, and the cloud (online channel, social media) will push demand even higher
Hadoop ²	†	Cloud computing and big data are expected to increase demand for skill sets and knowledge related to distributed computing
TOGAF ³	†	Architecture simplification is a critical topic for IT organizations, and demand for related skill sets is expected to grow significantly
Enterprise information management	†	Enterprise information management will be hot, with a focus on data architecture and support for big data/analytics

¹Customer Information Control System.

experiences, how staff are perceived outside the company, and how current recruiting and career-development processes work—or don't work.

2. Develop a heat map of priorities. To focus efforts, leading organizations develop a heat map that shows the gaps between business needs and current skills, as well as risks related to those gaps. For example, a company might recognize that most of its developers grew up programming back-office applications, but that the business will need more sophisticated data analytics over the next two

years, or that given a planned consolidation program, the company can't afford to lose any high-performing infrastructure engineers (Exhibit 1). Moreover, the heat map should be informed by the trends in the market and their impact on the availability of talent in the near future. For instance, the need for enterprise mobility is expected to continue rising, thereby increasing the demand and competition for talent in this area (Exhibit 2).

3. Map levers to needs, taking constraints into account. Not every lever is appropriate to every situation. Board exposure will

²Apache Hadoop is a software framework that supports data-intensive distributed applications.

 $^{^3\}mathrm{TOGAF}$ is a framework for enterprise architecture developed and trademarked by The Open Group.



motivate senior leaders but will not increase retention in a frontline data-center operations team. In many cases, opening a new location or making an acquisition may not be feasible. Getting the right strategy in place requires systematically determining which potential levers will address each talent gap and risk.

4. Ruthlessly track and reinforce progress.

To make sure the required, everyday behavior changes occur, progress must be tracked against a set of metrics (for example, retention of high performers, the number of external hires who succeed in their roles, and the percentage of staff receiving business-oriented training) and syndicated with senior leaders who can resolve issues and accelerate progress.

Most technology organizations face a daunting agenda: to build new capabilities, to do more with less, to keep systems running "all day, every day," and to protect critical information assets. These initiatives cannot be addressed without exceptional technology talent. Traditional approaches for managing technology careers tend toward narrow technical specialization. By adopting a wide range of talentmanagement levers, many technology organizations can foster the broad-gauged innovators and problem solvers required to help exploit growing demand in cloud computing, big data, enterprise mobility, multichannel customer experiences, and a host of other areas.

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