Good tech talent is still hard to find (how to bridge the gap)

Companies have big plans for digital transformation, but the lack of skilled IT talent remains an obstacle. Here's how to cope.

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In today's era of digital business, companies are intoxicated by the potential of technology-driven transformation. Manufacturers eye the internet of things (IoT) as a springboard for predictive maintenance and new product-as-a-service revenues.

Retailers are wielding big data analytics to drive new customer experiences and increase sales while players in banking, insurance, and pretty much every other industry are making a beeline to machine learning (ML) and artificial intelligence (AI) to automate and reimagine key business processes.

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The possibilities are endless, and the future of digital business seems bright. Yet a persistent trouble spot remains the serious shortage of IT talent, particularly among candidates with proven expertise in coveted skills in areas like cloud, security and AI.

The 2019 State of the CIO confirmed that finding and nurturing the right skills to support digital transformation and the ongoing IT agenda is a significant hurdle for many IT organizations. Technology skills were the biggest gap — half of respondents cited technology integration and implementation skills as the most elusive — but finding people with the right set of soft skills in areas like change management, strategy building and relationship management was equally challenging.

Data science and analytics skills were flagged as the most difficult to find (42 percent) with security and risk management (33 percent), AI/ML (31 percent), and cloud services/integration (22 percent) not far behind, the 2019 State of the CIO survey found. Business process experts, cloud architects and data scientists were among the experts in high demand, but short supply.

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While it's hard to find tech talent now, the situation is likely to worsen, according to research from Korn Ferry Institute. The digital skills gap is hampering digital transformation at more than half (54 percent) of companies surveyed by Korn Ferry, and by 2020, the technology, media and telecommunications industries may be short more than 1.1 million skilled workers globally. By 2030, Korn Ferry estimates the deficit will reach 4.3 million people. The need for software development skills is particularly acute: The U.S. Bureau of Labor Statistics predicts that by 2020, there will be 1.4 million more software development jobs than applicants who can fill them.

Filling the pipeline

SUSE, a provider of open-source Linux software, is grappling with a shortage of technology skills across a host of areas, especially given the shift towards a dynamic, hybrid, and multi-cloud application environment, said Melissa Di Donato, the firm's CEO.

To remain at the forefront of innovation, SUSE is in constant need of tech skills such as general open-source software development, documentation, quality assurance/engineering, packaging and maintenance and support. Knowledge of containers is another critically important area as are roles that require layered skills — for example a software engineer who also has a command of networking. "There is a huge demand for such skills and a chronic shortage of supply," Di Donato explained.

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To fill in the gaps in its talent pool, SUSE puts a lot of energy into fostering relationships within the open-source communities, leveraging what it calls SUSE ambassadors within these networks to help attract key talent. Specifically, SUSE leverages developer communities like Stack and Git in addition to specific job boards and its own career site to keep its pipeline flush. The company has also implemented a strong employee referral program while promoting extensively from within.

Yet even with a solid presence in all of these channels, recruiting remains a challenge, Di Donato says. "We have found that developers and engineers are spending less time updating their LinkedIn profiles and are increasingly limiting their professional digital footprint within developer communities," she said. "Given this shift, it's important for SUSE to play an active and influencing role in these communities."

At LivePerson, a provider of conversational commerce and AI software, you would think ML and AI talent would be most coveted competency set, but that's not where the company is struggling to find skills, according to Alex Spinelli, the company's CTO. Given all the hoopla over AI and ML, universities have stepped up their curriculum in these areas, which has led to better prepared graduates, Spinelli said. At the same time, current software engineers are pretty good about self-training to keep current, and they have much of the AI/ML skill set covered, he added.

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The bigger problem is finding robust talent in the area of human computer interaction — specifically, people who understand how humans use and consume information and can translate that knowledge into appealing and engaging user experiences, he said. "During the whole mobile trend and web 2.0, a lot of technologists spent time thinking about user interface …, but as things have swung towards AI, ML and math, we now have a dearth of those other skills," he said. Swelling interest in AI and ML have also kept technologists from focusing on how to build massively scalable systems, which is another skills area LivePerson has had trouble sourcing, he said.

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To keep its talent pool refreshed, LivePerson relies heavily on recruiting from target universities as well as on employee referrals. As part of the employee recruitment process, Spinelli believes it's imperative to make the company's values and mission clear. "People who share the company's values can rise above the others," he explained. "We have to make sure we find the people our mission excites because you make a better connection."

Back to school

For many companies, the best solution for closing the talent gap is reskilling employees and filling much needed positions from within. Deloitte Consulting LLP has always made training a priority, but it recently released a new program to empower the next-generation workforce with much needed skills in areas like AI, ML, blockchain and IoT. The new Cloud Institute, part of the firm's Cloud Practice, is a pilot program that includes a mix of instructor-led classes, e-learning and hands-on capstone labs to focus on reskilling and preparing Deloitte developers, engineers and architects with the skills they need to be fluent in cloud technologies, according to Ken Corless, CTO of Deloitte's Cloud Practice.

One of the key differences between this and other Deloitte training initiatives is that the content and delivery is focused on where the employee wants to evolve their career. For example, if they want to be an AI developer, the platform will steer them to the necessary learning tracks and skills they'll need to make that leap. Once the coursework is completed, the system updates that information on the human resource record, tags that employee with the skill set, and feeds that information into the staffing system so they could be tapped for new positions requiring those skills.

"We're making a commitment to prepare them for the next better job and we hope that it's with Deloitte, but if not, that's okay too," Corless said.

Given its brand recognition and company reputation, it's not that Deloitte can't fill its talent pipeline with new hires, it's that the process is time consuming and expensive. In addition, Corless said the company has tens of thousands of talented employees so the best approach is to make the commitment to take them from the middle of the pack to the front edge of technology skills. "Even if we were to hire 1,000 people, it's a drop in the bucket," he said. "Leveraging the existing people assets we have is absolutely key to scaling our cloud practices with the changes coming this way."

Beth Stackpole, a contributing writer for Computerworld, has reported on business and technology for more than 20 years.

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