

**IT TALENT STRATEGY:**

**NEW TACTICS**

**FOR A NEW ERA**

**CIOs Share How to Compete  
in 2020 and Beyond**

Sponsored by



## SPONSOR PERSPECTIVE



**JIM WHITEHURST**  
PRESIDENT AND CEO  
RED HAT

As the technical landscape continues evolving at such a rapid pace, so do the skills necessary for building and maintaining a competitive advantage in the market. In the decade ahead, business success will require shifting to a talent strategy that prioritizes constant learning and personal development among technology teams.

Talent isn't a new struggle for leaders, of course. No organization has ever been immune to the challenges of attracting, retaining, and nurturing the right talent and skills in IT. But in 2020, we find ourselves at an inflection point. Business innovation is no longer driven by our ability to predict the right technological path forward but rather by our capability to adapt to whatever changes come our way.

If IT leaders don't change their approach to talent development—from the ways they recruit to the skills they develop to how they train people on new technology—their organizations are unlikely to reap the promises of this new digital era.

Some CIOs, like those interviewed in this report from Harvard Business Review Analytic Services, are further down this path than others. Through their remarkable experiences and firsthand advice, you'll learn how leading companies are redefining best practices and creating a talent strategy that will overcome today's challenges and prepare businesses for tomorrow's unknowns.

For instance, the skills such as communication, influence, and empathy, once only considered necessary for customer-facing roles, are now must-haves throughout the entire IT organization. Training has moved from top-down to employee-driven, with CIOs empowering teams to take ownership of learning while also sharing knowledge with peers. And IT executives are stopping at nothing to grow their talent pool with these new skills. Your competition is literally rowing down the Charles River and calling out that they're hiring to students at the MIT boathouse.

This report includes dozens more examples from leaders who are changing their approach to talent in big and small ways. I encourage readers to use this report, sponsored by Red Hat as part of The Enterprisers Project, as a practical guide to assess their own strengths and adapt to the new talent challenges for 2020 and beyond. Once you do, join us on The Enterprisers Project, Red Hat's CIO community and publication, where we will continue the conversation about the future of IT talent.

# IT TALENT STRATEGY: NEW TACTICS FOR A NEW ERA

## CIOs Share How to Compete in 2020 and Beyond

Talent—attracting it, retaining it, nurturing it—has been a perennial pain point for chief information officers (CIO). But the year 2020 brings completely new challenges. It represents an inflection point for how organizations manage their operations and the talent that fuels their success. Yet in a recent Deloitte report, 51% of CIOs who were surveyed cite a significant mismatch between current competencies and future needs.<sup>1</sup>

Within the next few years, most organizations expect to be able to operate with more streamlined, often automated processes; with greater knowledge gained through artificial intelligence (AI); and with a customer-centric, anywhere-anytime way of doing business. Not that any organization will be “done” when they have made these changes. Forward-leaning CIOs know that one of the defining characteristics of the digital age is that nothing’s ever really done.

“The most critical skill for IT in the decade ahead will be the ability to constantly learn and adapt,” says George Westerman, a senior lecturer at MIT Sloan School of Management, principal research scientist for Workforce Learning at the MIT Jameel World Education Laboratory (J-WEL), and author of *Leading Digital*. “Technical people need to keep up with constantly changing tools and technologies. But everyone needs to be able to adapt to changes in their work and, in the longer term, to reskill and pivot to new roles over the course of their careers.”

Pursuing digital transformation and continuing to hone it require special talent. If technology is the business and the business is technology, then having the right digital skills, capabilities, and mindsets are more important than ever. Given the reality of ongoing change, the most valuable employees aren’t those who know the most but those who learn the best. And since digital solutions are by their nature cross-functional, the ability to collaborate and co-create solutions—and even to train business colleagues in digital concepts and capabilities—is paramount.

This Harvard Business Review Analytic Services report identifies the principles and best practices of talent management that CIOs should focus on to be successful in the next decade, with special emphasis on what’s new and different as we head into 2020 and beyond.

### FIVE TALENT PRACTICES TO ADOPT NOW

- 1** Develop a talent strategy that aligns with the needs of your business.
- 2** Focus hiring and talent development not on what people know but on how well they learn and adapt.
- 3** Build and promote a compelling IT brand that attracts people with a passion for both technology and the mission of your business.
- 4** Shift the bulk of your training budget to critical non-tech abilities like communication, collaboration, problem solving, and networking.
- 5** Unleash your own team to help the rest of the business adopt digital skills, mindsets, and ways of working.

---

For instance, learning happens faster and is more effective when it is driven by the employee rather than pushed from the organization—an approach that CIOs are developing strategies to foster. Whether learning happens in a classroom or on the job, being able to apply it immediately to a real work situation deepens its impact. Soft skills are more important than ever, and while some of these can be “taught,” they also must be learned through coaching by managers who can model behavior, observe, and give feedback. In addition, new concepts and skills are increasingly taught by expert peers, not professional trainers.

Winning today’s talent battle with a focus on current skill needs won’t be enough; CIOs must take a more expansive approach and think about how skill requirements will evolve if they want to thrive in and beyond the next decade.

“We don’t know what tomorrow will bring,” says Manjit Singh, chief information officer at Toyota Motors North America, “and so you have to be flexible, you have to be able to adapt to those changing requirements. And I think those who are less flexible will find themselves to be much more challenged in the future as the pace of change only gets faster.”

### **New Ways to Boost Agility**

The talent strategy CIOs adopt depends on many factors, including the organization’s business model and the philosophy of its leaders. While one company relies on outside talent for the bulk of its IT work, another doubles down on keeping and cultivating talent in-house. One thing most leaders agree on, however, is the need for flexibility.

Justin Kershaw, global CIO at Cargill, the \$114 billion in revenues privately held food and agriculture business, has gained that flexibility by radically decreasing the percentage of his permanent, full-time IT staff—now only 23% of his total people resources—while raising the bar on the capabilities of all technology employees. “The growing technology acumen in our business is driving an increasing need for even deeper technology knowledge and capability in the technology organization,” Kershaw says.

Internally, that increasing need means adding more solutions architects, agile coaches, and software engineers. But filling that need also means Kershaw relies on his outside service providers to keep up with rapidly changing technology skills. “They put thousands of people a year through tech training. I can’t afford to do that inside Cargill.” By tapping these outside resources, he is able to employ deeper engineering skills, “yet we have a more flexible model so we can flex in top talent, and we can flex them out.”

Singapore-based DBS Bank has taken the opposite route, moving from a heavily outsourced model to having 90% of its technology staff made up of full-time permanent employees, according to the company’s executive director of technology and operations. Retraining and upskilling employees are big on the bank’s agenda. “We’ve made it a priority to build our leadership through ‘growing our own timber;’” she says. At the same time, the bank occasionally supplements its bench with external talent to gain new perspectives.

These two different strategies require very different capabilities and approaches to talent management. For instance, Cargill’s model requires expertise in vendor management, sequencing large ambitious efforts in a series of projects, and having great solution architects on the internal team. DBS Bank’s strategy is focused on inculcating a spirit of lifelong learning. “Embracing a culture of continuous learning has been an integral part of getting our people future-ready,” the executive director says. In both cases,

---

Data is **at the core of digital business**, and the next decade will see an increase in AI, automation, and analytics to better interpret that crush of information.

and in many of the situations that fall somewhere between the two, IT talent must be more capable and adaptable than ever before. Traditional training and talent development approaches won't be enough, because 2020 and the decade that follows will demand flexibility and adaptability on a scale not seen in most CIOs' lifetime.

### Abilities Prized for the Future

The pace of technology change has become so rapid that in 2020, many companies will shift the focus of their talent strategies away from specific narrow roles, skills, and competencies to a broader set of capabilities. "Hard" and "soft" skills will both be in greater demand.

Data is at the core of digital business, and the next decade will see an increase in AI, automation, and analytics to better interpret that crush of information. The stakes are especially high at advanced science organizations, such as NASA's Jet Propulsion Laboratory (JPL). "Everybody we hire now into our IT innovation lab is a data scientist," says Tom Soderstrom, IT chief technology and innovation officer. "That's table stakes." On top of that data science core, IT innovation technologists at JPL specialize in one of five areas: the internet of things (IoT), cloud, data visualization, analytics, and artificial intelligence/machine learning (AI/ML).

Of course, when everyone is seeking the same valuable and not-yet-widespread skills, such as machine learning, it may be too expensive to hire those skills fully developed and take too long to grow them internally. That's why one Boston-area CIO and others like him are initially "renting" such skills from a professional services firm. This arrangement lets them fill a critical gap until they better understand the technology's place in their business and gives their own staff time to develop the skills themselves. Claus Jensen, who was appointed chief digital officer and head of technology at Memorial Sloan Kettering Cancer Center in October 2019, has made it a practice in the past to bring in supplementary talent when necessary for "an infusion of talent and knowledge," he says.

### Nothing Soft About Soft Skills

CIOs have long understood the importance of soft skills—things like the ability to communicate, collaborate, and influence. But until recently, the need for such skills was pressing only for a small subset of the IT organization. It started at the top, with CIOs themselves, then moved to the CIO's senior leadership team and into certain roles, such as business relationship managers. Today, it's a must-have throughout IT—even for roles that aren't customer- or product-facing. "You need to collaborate and communicate within and across the IT organization itself," says Ken LeBlanc, partner at CIO Sensei, an IT advisory firm in Boston. "You need to be able to negotiate, be flexible, understand one another, have empathy, and be able to recognize your blind spots."

Melissa Swift, leader for digital advisory at Korn Ferry, sees empathy as the key ingredient. She predicts that will only increase in the decade ahead. "As work gets more automated and more procedural work is done by technology, what you need from your human workers—and particularly your human leaders—is greater empathy. If you can really understand your end user, it gives you an edge. But populations that have grown up in a very process-driven, results-oriented environment haven't been exactly encouraged to grow the empathy muscle."

In the past, certain IT jobs could be done without interacting much with other people—the "just slide the pizza under the door" jobs. But as IT work becomes more ingrained in every aspect of operations and customer and employee interactions, "every IT job needs to accelerate its empathy quotient to different degrees," says Swift. "This idea that certain jobs are procedural and behind the scenes has led to some big misses in the technological world"—for example, a fitness tracker that unknowingly pings a pregnant woman as she gains weight.<sup>2</sup>

Dan Roberts, CEO of Ouellette & Associates, an IT talent development company, and author of *Unleashing the Power of IT*, wants people to stop using

## CRITICAL SKILLS FOR 2020 AND BEYOND

The hard and soft skills of digital transformation

### HARD/TECH SKILLS

- Data science
- Data analytics
- Data visualization
- Cloud
- Software engineering
- AI/Machine learning
- Internet of things
- Security

### SOFT/CORE SKILLS

- Communication (written, verbal, pitching, storytelling)
- Collaboration
- Consulting
- Coaching
- Influence
- Empathy
- Networking
- Problem solving

### DIGITAL SKILLS

- Agile methods
- Design thinking
- DevOps
- Journey mapping
- Platform model
- Product mindset

**TRADITIONAL TRAINING AND TALENT DEVELOPMENT APPROACHES WON'T BE ENOUGH, BECAUSE 2020 AND THE DECADE THAT FOLLOWS WILL DEMAND FLEXIBILITY AND ADAPTABILITY ON A SCALE NOT SEEN IN MOST CIOs' LIFETIME.**



---

the term soft skills. “Labeling skills as soft undervalues them,” he says.<sup>3</sup> Instead, CIOs should consider why they are important and refer to them as “core” skills, he continues.

All the IT leaders interviewed for this report spoke of the need for their teams to be effective verbal, written, and visual communicators. This communication requirement means being able to present in front of IT and business colleagues, to be capable of pitching ideas and influencing people’s thinking, and to master storytelling.

DBS Bank worked with the co-founder of an Oscar-nominated visual effects company to turn employees into storytellers. He taught over 200 key technology and operations leaders how to tell a great story and present a business case in a more succinct way. Each person wrote a story based on their work, department, or division, and the top 50 were showcased in a book. CIOs who don’t have budget for something on this scale can tap someone in their marketing department or a local creative firm to lead a workshop for their team.

Core skills don’t stop there. CIOs increasingly talk about the need for their teams to be great collaborators, consultants, and coaches, and to network effectively not only within their company but also with technology suppliers, startups, and that potential next great hire.

Memorial Sloan’s Jensen calls these “durable” skills. At his previous company, Jensen devoted 100% of his training budget—and some of his consulting budget as well—to helping his team develop them. These are “the aspects of the job that aren’t changing next year or the year after,” he says. “They’re much more durable” than the technologies du jour. “You know, it was big data yesterday, it’s cloud today, it’s going to be something else tomorrow.”

As for those technical skills, Jensen set a technical transformation agenda twice a year that let his team know what was important for the year ahead. Then it was up to them to seek out training to ensure they had the skills they needed. A longer-term cultural agenda drove his training budget.

### **Creative Ways to Find Top Talent**

Talent acquisition comes down to two things: where to find the talent you need and how to attract it to come work for your organization.

Toyota’s Manjit Singh covers the globe to find talent. “We want to source the best talent regardless of location,” he says. But remote workers represent a management challenge—one that has required reeducating IT managers. “The technology was never the problem; the mindset was,” says Singh. “The managers who don’t believe you are working unless they can see you—that’s a mindset that needs to be changed.”

A much better way to manage performance—for remote workers or others—is to have concrete objectives and measurable deliverables, Singh says. Managers should also “take into account the degree to which an individual or a team is dependent on others for their success.” This approach means keeping teams in the same or similar time zones, among other things. Singh is helping his managers make this shift by having them think through “the type of work and the type of interactions people need to have in order to be successful.” This exercise has opened the world—literally—to Singh in terms of talent.

As the lines between business and technology continue to blur, more CIOs are looking for great talent right inside their own companies. At Cargill, anyone from business operations—including an operator off the plant

---

“Take into account the degree to which an individual or a team is **dependent on others for their success**,” says Manjit Singh, CIO at Toyota Motors North America.



---

# As the lines between **business and technology** continue to blur, more CIOs are looking for great talent **right inside their own companies**.

---

floor—can be tapped to help with a technology implementation. If they show aptitude and initiative, they are given the chance to move into IT, and “we’ll just grow your career from there,” Kershaw says.

Brook Colangelo, CIO at Waters Corp., a \$2 billion life sciences technology company, has had success in the past with “acqui-hiring”—acquiring a smaller company with the skills to develop something new and “inject a whole new thought process and thinking” into the organization.

Another way CIOs are expanding the talent pool is by being more flexible in what degrees and certifications they require. Bill Mayo, CIO at the Broad Institute, a biomedical and genomic research center in Cambridge, Mass., is “not automatically assuming a degree is needed in every case,” he says. Rather than focusing on particular skills, titles, and training, he is more interested in how a prospective employee approaches problems. “We can’t always predict the technical challenges we’ll be facing in the next three or five years as an IT organization,” he says. “What we can predict is that we will need strong, diverse, confident teams to solve whatever problems arise.”

MIT’s Westerman encourages CIOs to abandon the college degree requirement for some IT jobs and instead to “investigate nontraditional ways to get people in,” such as coding boot camps or programs that help military veterans, urban youth, or women returning to the workforce after raising children.

## **How to Build an IT Brand That Attracts the Best**

CIOs looking for top talent leave no stone unturned. They and their teams engage with local colleges and high schools, the open source community,

social platforms, and their own professional networks. They attend job fairs and conferences, and they invest in startups that have the new capabilities they need. But finding the right talent is just half of the equation. Attracting top talent to join their team requires defining and promoting a compelling IT brand.

CIOs focus on brand building for two reasons. Internally, it’s a tool to build or enhance the credibility of IT within the business or to redefine its role as the company transforms. Outside the organization, promoting a compelling IT brand attracts top talent and adds to the overall corporate reputation. External branding typically combines enterprise mission with the idea that this is a place where IT professionals can do interesting, leading-edge work.

At Cargill, for example, the pitch to prospective employees is that the company is applying modern data science and advanced technology to solve some of world’s greatest challenges, including climate change, sustainability, farmer livelihood and prosperity, and land and water use. The idea is to create a reputation that Cargill is a place where young, passionate technologists can have a major impact on the world.

Kershaw takes every opportunity to make that pitch to the right prospects. A lifelong rower, he was preparing to race in Boston’s Head of the Charles Regatta last year when he and a friend rowed past the MIT boathouse. “It was early morning,” he recalls, “and people from the Sloan School Rowing Club were on the dock, and many were data scientists from all over the world. As we pulled by the dock, I yelled out, ‘Hey, all you data scientists—you can come to work at Cargill!’” Kershaw knows the coach, so they stopped and had a laugh about it. He told the students,





**EXTERNAL BRANDING TYPICALLY  
COMBINES ENTERPRISE MISSION WITH  
THE IDEA THAT THIS IS A PLACE  
WHERE IT PROFESSIONALS CAN DO  
INTERESTING, LEADING-EDGE WORK.**

---

“I’m the CIO at Cargill, and I’m looking for people just like you. Come work at our company and work on some of the world’s biggest real challenges as opposed to going to [one of the big technology companies] and working on ads.’ I had emails on my phone by the time I got back to the boathouse.”

It’s hard to match JPL’s existential-sounding pitch—“find life out there”—for a certain audience. To that, Soderstrom adds the fact that employees will learn the latest technologies “with a cutting-edge group that works and thinks like a startup.” Of course, IT’s brand image must be backed by reality, and it turned out one important piece was missing. A few years ago, Soderstrom and his team realized that by not contributing to open source, they were losing some prime candidates. “Adding that turned out to be a big attraction,” he says. “Now a lot of them come because they see that somebody has a bunch of stars on [software development hosting web site] GitHub, and they get intrigued by that.”

While Toyota’s mission is more earth-bound, the company is at the center of a major transformation in the transportation industry. Besides the natural enthusiasm that creates in recruits about being part of a change movement, Singh benefits as well from the company’s world-class brand. His pitch is that Toyota IT is an exciting, forward-thinking place where people are working on “some huge breakthrough things” like autonomous vehicles for a well-funded, stable company—a claim most startups can’t match.

Some CIOs build their brand reputation on the strength of their ideas, says Ouellette’s Roberts. “Big ideas and a

higher level of maturity win the day,” he says. Roberts mentioned one CIO who had hundreds of employees follow him from one company to his current one in the insurance industry because of his energetic vision of what they can influence. “They would run through the wall for that guy because he’s painting a picture, he’s thinking about different metrics for their business and how they engage the customer in different ways,” Roberts says. Such ideas can be compelling for people who want to have a positive impact on the world, even in an industry that isn’t inherently exciting.

Once CIOs have defined their brand, they still need to promote it. Several CIOs interviewed for this report have their own IT communications specialists on staff who help connect them with good media opportunities. Soderstrom encourages his team members to give presentations at conferences, which attract like-minded people. Jensen and others author articles in online forums and publications.

One final core skill worth mentioning: both Jensen and Singh have identified networking as a key capability for their teams. Hobnobbing helps employees be more successful themselves by giving them access to a wider range of contacts, knowledge, and resources. Strong employee networks are also a great way to amplify the message of a strong IT brand.

### **Learning Cultures Support Rapid Change**

Almost half of CEOs (46%) who responded to PwC’s global CEO survey say the most important initiative to close a potential skills gap is significant retraining and upskilling, compared

---

“They would run through the wall for that guy because **he’s painting a picture**, he’s thinking about different metrics for their business and how they **engage the customer in different ways**,” says Dan Roberts, CEO at Ouellette.

with just 18% who say it's hiring from outside their industry.<sup>4</sup> In a world that's changing all the time, the ability to adapt and learn new things is critical. Microsoft CEO Satya Nadella has famously said he would much rather have a company full of learn-it-all's than know-it-all's. This thinking is changing how leading companies approach talent development and pursue a culture of learning.

This is not just a matter of what companies teach but also how. "The urgency is enormous," said Sanjay Sarma, vice president for open learning at MIT, at an MIT J-WEL conference in October 2019. "People worry about machines taking their jobs, and they should, because we're still training them to be automatons." Learning needs to awaken people's curiosity, and employees should be given the opportunity to experiment and apply learning right away.

Recent research conducted at MIT J-WEL<sup>5</sup> identified key ways in which workforce learning is changing to address this challenge at more than a dozen leading companies. Learners are spending less time in the classroom. Instruction is being digitized and offered as micro lessons that employees can consume whenever it's convenient—sitting at an airport or over a solo lunch. Formal trainers are being replaced by peer instructors and coaches. And learning is being integrated into the work itself in various applied-learning models.

Not only is learning becoming self-paced, but it's also becoming self-driven as well, as progressive IT leaders embrace self-motivated learning as the best way to make transformation happen. At Toyota, "one of the things we believe in very strongly is that each team member owns their own development," says Singh. "That's a big change from the past when, as management, we used to kind of force development and career guidance on employees. It is much more powerful to have them own that."

Self-motivated employees also enable organizations to challenge convention. "If employees are driven to learn

and be curious to try new things, then it becomes much easier for the organization to adopt new concepts," says DBS Bank's executive director of technology and operations. Rather than trying to anticipate each new trend and push learning on those topics, DBS focused on how to "get employees to be motivated to keep learning new things," she says. "Instead of nagging, we choose to provide more opportunities for employees to learn and grow."

A turning point for DBS Bank was when it launched its "Back to School" program, in which internal subject-matter experts simultaneously teach one-hour classes over the course of a couple of days. Classes cover a wide range of technology, business, and soft skills, with a hands-on approach. Topics include user experience design, DevOps, microservices, trade finance, story writing, creating great LinkedIn profiles, or digging into how credit card companies make money. Some 40 to 50 subject-matter experts from all levels of the organization teach the classes. This teaching wrinkle has the added benefit of highlighting the importance of knowledge over hierarchy. "Anyone can sign up, and because the program is elective and fun, it's helped ignite people's innate curiosity and desire for learning," the executive director says.

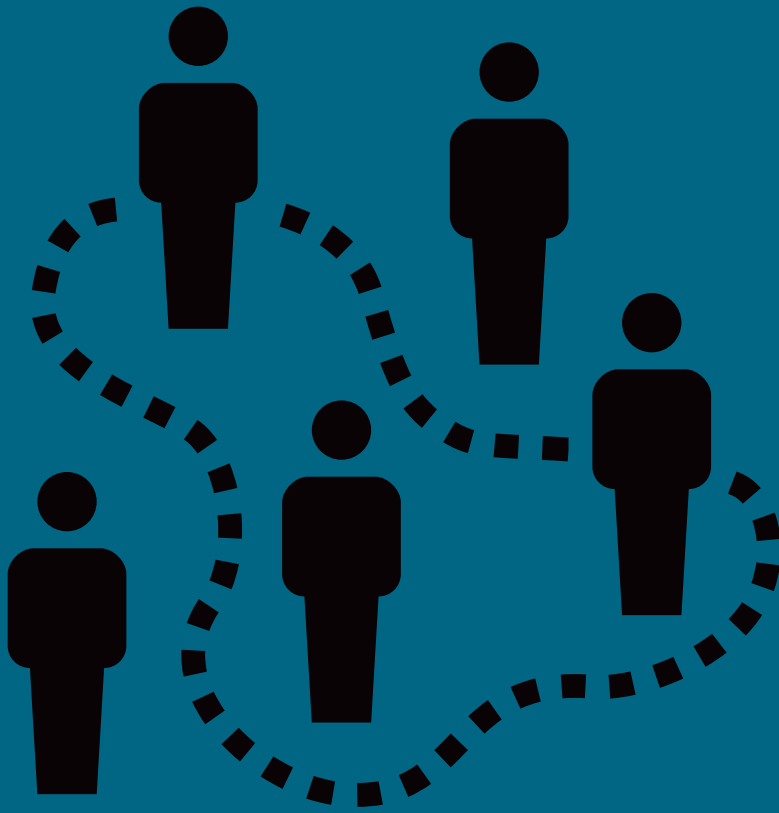
Jensen's approach to learning differs for his culture agenda, where he focuses on those durable skills and which he manages closely, and the technical transformation plan, which he sets on a biannual basis. For the latter, he asserts, "I basically say, 'Hey, let's sit down and talk about where the technology industry is going and what things are important now.'" He then relies on people to learn what they need in order to be successful. "When you give good people that kind of freedom and you're supportive of their requests for time, you'd be surprised how many of them step up."

### The Power of Peer Learning and Coaching

Peer learning, like what DBS Bank is doing with Back to School, can be targeted to address specific needs as well. To develop scarce skills and

## THE EVOLUTION OF IT TRAINING

Classroom	Anywhere, anytime
Comprehensive, mass produced	Targeted and customized
Lecture	Digital, interactive, or experience-based
Instructor-led	Peer-led



**“YOU CAN GO OUT AND HIRE A BUNCH OF REALLY TALENTED MACHINE LEARNING EXPERTS AND PAY TOO MUCH MONEY, OR YOU CAN HIRE A COUPLE AND HAVE THEM HELP YOU AND YOUR ORGANIZATION GET READY.”**

**GEORGE WESTERMAN, MIT SLOAN SCHOOL OF MANAGEMENT**

make talent budgets go further, MIT's Westerman suggests hiring one person who knows a technology really well and having them train others.

"You can go out and hire a bunch of really talented machine learning experts and pay too much money, or you can hire a couple and have them help you and your organization get ready," he says. "That second way is a much more sustainable approach, especially as each new technology rolls around." Westerman also suggests working with vendors or startups to gain experience with a new technology before hiring a whole team of people to provide that expertise. "If you don't know what you're looking for, you risk being sold a bill of goods by a sweet-talking 'expert' who can't deliver," he says.

While human resources and training organizations can provide support for talent development, managers play a pivotal role. "Their job is to be a mentor and coach to their teams," says Toyota's Singh. This is especially important as IT employees are being asked to stretch beyond their core technical skills. He demonstrates what effective coaching looks like through his own behavior, and he encourages his managers to think about a good coach they've had in their own lives and to mirror what that coach did.

"Everybody I know has had a coach somewhere in their life," he says, perhaps as part of a sports team in school. Singh has them tell him about that experience. "What made it valuable?" he asks. "What traits did a good coach have versus a bad coach? And now think about that in the context of what we're asking you to do inside the enterprise. You're trying to help somebody maximize the skills and capabilities that they have in the most effective way. Put yourself in the position of a coach. Most people relate to that."

### **CIOs Focus on Learning by Doing**

Learning takes hold when concepts are applied. This process can be as simple as creating a new type of data model after engaging in a lesson or as

ambitious as delivering a new product in a completely new way. Companies are increasingly using scenario-based training as a way for employees to learn how to achieve outcomes that go beyond a one-dimensional skill.

Sumedh Mehta, CIO at Putnam Investments, is a strong proponent of applied learning, especially when people need to make step changes. Transformation requires setting clear expectations, managing change, and immersing people in a new way of doing things. For instance, he says, automation and machine learning may impact certain first- and second-level production jobs. Speaking frankly with production leaders can stimulate ideas on how their teams can adapt for the future. It's an opportunity for associates to consider how best to move forward within a changing business environment, including new skills and capabilities they might need to develop.

Mehta believes it is important to set expectations for a new work dynamic and provide employees with a chance to learn by doing. To that end, he assigns people to new product development efforts and provides them with the tools they need to be successful. Trying something completely different may be unsettling and lead to mistakes initially, he acknowledges, but employees will have the strong support of their managers to learn from their mistakes and improve. That said, they'll still be accountable for solid levels of quality and production. "This becomes very empowering over time," Mehta says.

Singh also knows the value of learning by doing. In a previous company, he says, "we wanted people to adopt the agile mindset. And the first thing we did is we went out and we got agile trainers and we put people through it and we said, 'Congratulations, you are now agile.' And nothing really happened with it."

Shortly after that, he had a team that needed to meet a business objective in a short time. The team was empowered to organize themselves to be successful. They decided to use an

## **SELF-DRIVEN, APPLIED LEARNING**

### **CIOs WHO WANT EMPLOYEES TO OWN THEIR OWN LEARNING PROVIDE A DIFFERENT KIND OF SUPPORT:**

- Cultivate a culture of curiosity
- Provide an impetus for change (e.g., certain jobs going away)
- Set a business objective with clear goals
- Make employees accountable for achieving those goals
- Provide tools, resources, and support
- Make sure employees have the time they need to learn
- Position mistakes as learning lessons, not black marks against the employee

---

agile approach, even though none of them had formal agile training. “We let the team decide how they were going to make that happen. And in the space of a few months, that team became our benchmark agile team.”

For Singh, this experience illustrated the power of letting people discover and learn on their own. “We created the space and the environment to allow them to learn. We gave them the time. We certainly gave them access to tools and resources, but they did it all themselves, and it ended up being much more successful.”

### IT’s Role in Training the Business

Bringing all of these new approaches—peer learning, coaching, and applied learning—to bear inside an enterprise is having a powerful impact as IT leaders help their business colleagues become digital leaders themselves. At Cargill, for instance, Kershaw and his team helped a manufacturing operations leader build the capabilities to lead a digital platform solution for shrimp farmers. “We’re trying to bring people out of the business into those types of roles,” Kershaw says. “That’s all new learning for them. We’re not sending them to a class. We have coaches, we have scrum masters; people are learning from their peers, and they’re learning from the experience of trying to get the results.”

To increase tech literacy throughout the company, Kershaw also hosts “tech days” to introduce people to digital topics such as new business models, full stacks, data platforms, and the workings of the cloud. Anyone can sign up. “There are a lot of non-technology

people going because they want to learn it, and they’re going to pull it into their business, we hope,” he says.

Evolving the way the business runs on technology is a key part of IT’s role at commercial real estate company Cresa. “We bridge the gap” between technology and what it can do, says CIO Dave Nuss. Moving 100% to the cloud has enabled him to make that shift. “We partner with those companies that are [doing] the blocking and tackling of IT, and our team is the IT strategists,” he says.

### Conclusion

Digital transformation asks a lot of CIOs and their organizations. They must learn new skills and become adept at problem solving, coaching, consulting, and influencing. They must partner with people throughout the business to create the capabilities that will fuel the enterprises of the future. These demands are coming at a pace that makes it impossible for traditional approaches to talent development to keep up. CIOs who can create an environment of self-driven learning and innovation will have an edge. Some IT leaders are now developing talent by making learning fun and igniting people’s innate curiosity. Others like Mehta present a compelling impetus for change while providing employees the support they need to learn on the job. All agree that the core skills that will make their teams and their companies successful go well beyond the latest technologies. Asked to identify the most critical trait for IT employees in 2020 and beyond, CIOs interviewed for this report most often said it is the ability to adapt to change.

Jensen goes further. “I think we will see a seismic shift in what’s considered top talent in technology,” he says. “We’ll be hiring for and nurturing a whole different set of skills. Because the technology functions need to step up, not just to react to change, not just to enable change, not just to advise on change, but to drive change.”

The year ahead represents an important inflection point for CIOs. The choices they make now will determine their organizations’ fate for the next decade and beyond. Those who make talent a top priority, redefining what it looks like and adopting new approaches to how they attract and cultivate it, will lead their enterprises’ transformation into the digital future.

### Endnotes

- 1 “Help Wanted: Tech Talent With Soft Skills,” Khalid Kark, Deloitte, *Wall Street Journal*, <https://deloitte.wsj.com/cio/2019/10/09/help-wanted-tech-talent-with-soft-skills/>
- 2 “How fitness- and health-tracking apps failed me during my pregnancy,” Swapna Krishna, Engadget.com, <https://www.engadget.com/2018/09/07/fitness-health-tracking-pregnancy/>
- 3 “Goodbye soft skills, hello core skills,” Dan Roberts, The Enterprisers Project, August 20, 2019, <https://enterpriseproject.com/article/2019/8/why-soft-skills-core-to-it>
- 4 “Talent Trends 2019: Upskilling for a Digital World,” PwC, <https://www.pwc.com/gx/en/ceo-survey/2019/Theme-assets/reports/talent-trends-report.pdf>
- 5 “The Transformer CLO,” Abbie Lundberg and George Westerman, to be published in the January/February 2020 issue of *Harvard Business Review*



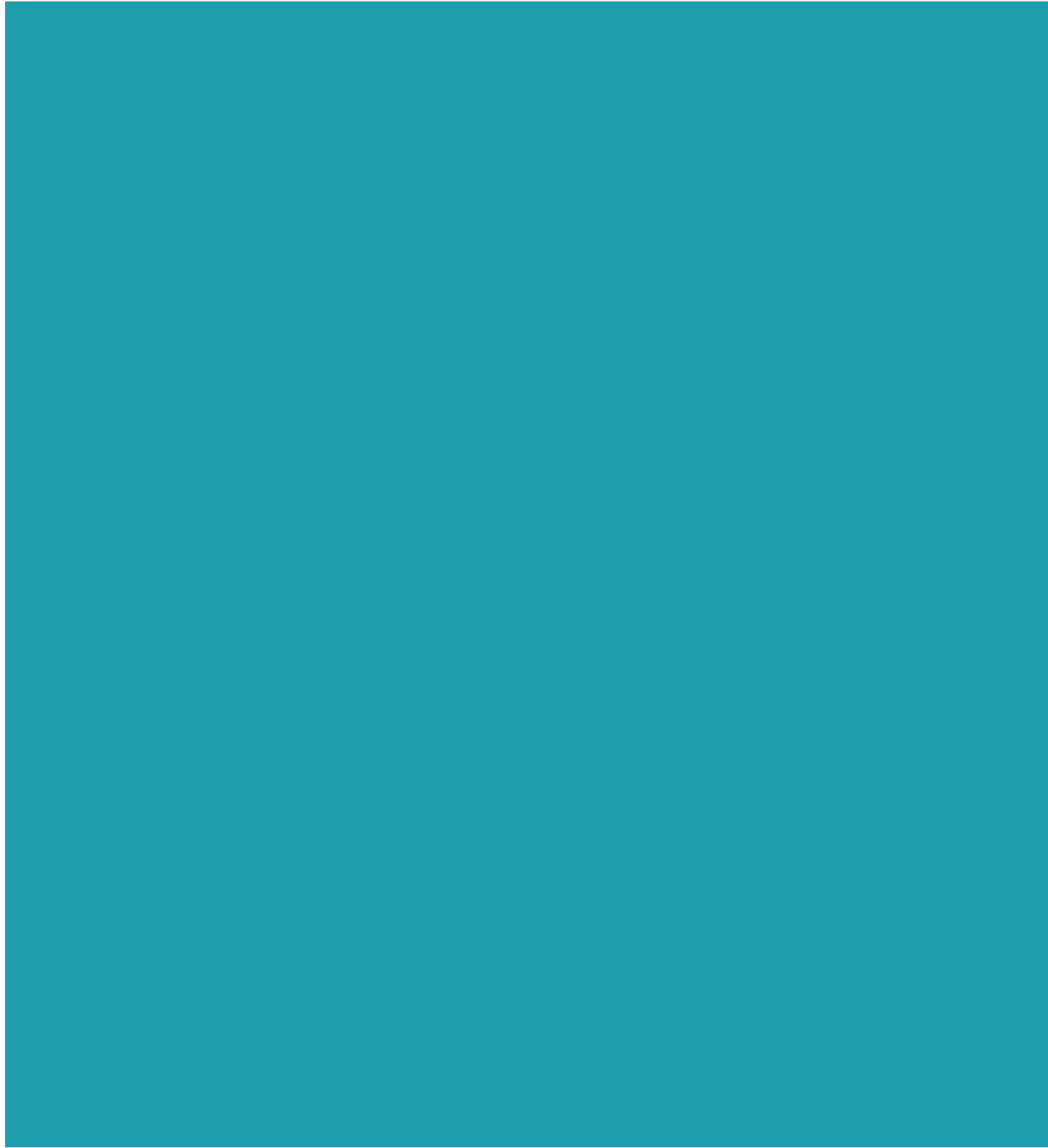




**Harvard  
Business  
Review**

ANALYTIC SERVICES

[hbr.org/hbr-analytic-services](https://hbr.org/hbr-analytic-services)



**CONTACT US**

[hbranalyticsservices@hbr.org](mailto:hbranalyticsservices@hbr.org)

Copyright © 2019 Harvard Business School Publishing.

MC215551219