IT Industry Survey:
Exploring the IT Skills Gap

TEKsystems

To examine the IT skills gap and identify areas where it impacts the organization, TEKsystems surveyed over 1,300 IT leaders and IT professionals on their experiences. In this summary, we explore the survey results to ascertain the extent to which the two groups believe if the skills gap is real, its impact, why it may exist and how many are currently approaching the skills gap problem.

IT Leaders and IT Professionals Agree the Skills Gap Is Real and Impacts Their Organization

The large majority of IT leaders and IT professionals believe the IT skills gap is real [Fig. 1]. Additionally, 60 percent of IT leaders say the IT skills gap moderately to severely impacts their organization, compared to 45 percent of IT professionals [Fig. 2].

Fig. 1 - Reality of the IT Skills Gap

Q: Which of the following statements do you most agree with? [Select only one]

● The IT skills gap is **real**　　● The IT skills gap is a **myth**

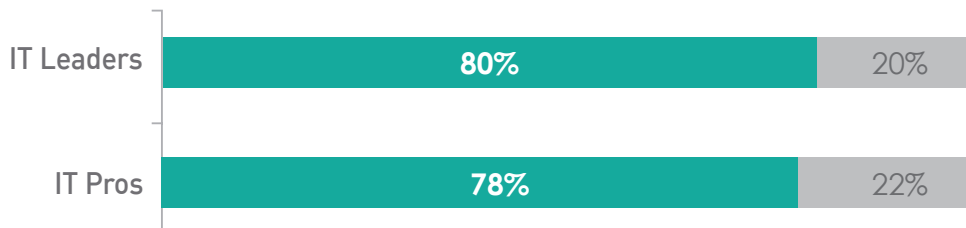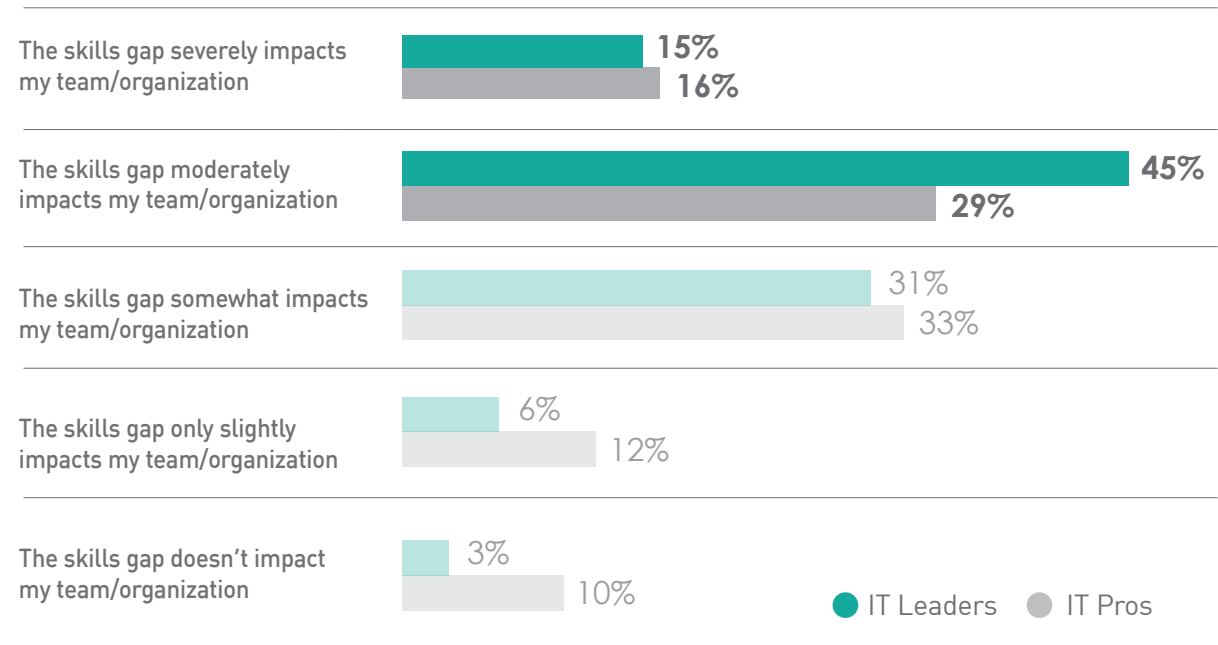|		
IT Leaders	80%	20%
IT Pros	78%	22%

Fig. 2 - Impact of the IT Skills Gap

Q. Which of the following statements best describes your opinion of the impact of the IT skills gap?
[Select only one]

The skills gap severely impacts my team/organization	15% / 16%
The skills gap moderately impacts my team/organization	45% / 29%
The skills gap somewhat impacts my team/organization	31% / 33%
The skills gap only slightly impacts my team/organization	6% / 12%
The skills gap doesn't impact my team/organization	3% / 10%

● IT Leaders ● IT Pros

IT leaders believe the skills gap impacts the organization much more deeply than IT professionals do, perhaps due to the more strategic nature of their role. As the ones managing projects and deadlines, it makes sense that IT leaders would feel the effects of the skills gap more than IT professionals, who may be focused on their own work.

Fig. 3 - Skills Needs

Q. Do you believe your organization currently has the skills in house to address your needs?
[Yes/No]

	Yes	No
IT Leaders	32%	68%
IT Pros	33%	67%

● Yes ● No
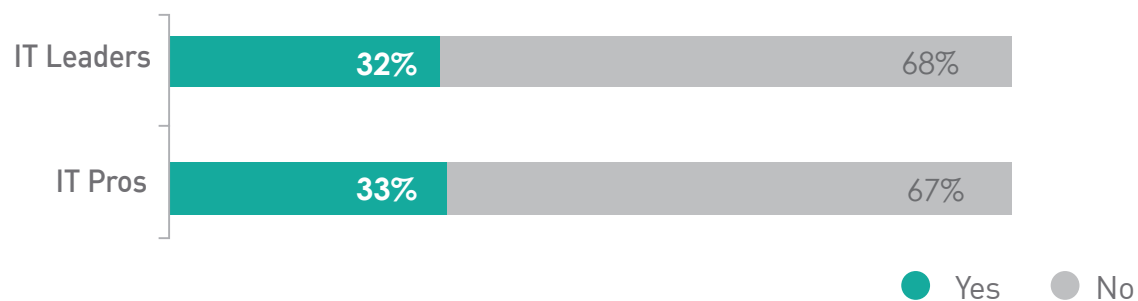
IT leaders and IT professionals both agree that their organizations lack necessary skill sets. Nearly 7 out of 10 do not believe they currently have the skills in-house to address their needs. When these needs are not met, IT teams are unable to run optimally, effectively take on new projects or thrive.

Beliefs in the Reasons Behind Unfilled Positions and Resulting Organizational Skills Gap Vary Greatly

There is a high level of disagreement amongst IT leaders and IT professionals in the underlying reasons for why positions go unfilled.

Seventy percent of IT leaders point to a lack of skills as the biggest issue when seeking quality candidates. However, only 25 percent of IT professionals claim a lack of skills as a reason why they were not offered a job. IT professionals cite a mismatch in experience or education (63 percent) much more heavily than IT leaders (20 percent).

Fig. 4 – Reasons Why Candidates and Open IT Positions Do Not Match

[IT Leaders] **Q: Which of the following candidate issues best describes why finding quality candidates is difficult? [Select only one]**

[IT Professionals] **Q: Which of the following best describes why you were not offered a position for which you were considered? [Select only one]**

	IT Leaders	IT Pros
Skills		
Lack of preferred technical skills	49%	20%
Lack of preferred soft skills	21%	5%
Experience		
Unqualified / lack experience	13%	19%
Overqualified / possess too much experience	3%	26%
Education		
Lack of preferred educational background	4%	18%
Company Culture		
Not the right cultural fit	10%	12%

The disagreement between IT leaders and IT professionals regarding skills points to a need for a skills assessment by both parties. IT professionals could be underestimating what is needed to do the job, while IT leaders may be trying to address all the possible skills needs within the job description in an effort to cover all their bases or attract the highest level of talent. However, this can end up setting the bar too high, turning off qualified IT professionals who might otherwise be a good fit for the job.

Second, a lack of standardization within IT can cause mismatches between candidates and jobs. The roles, responsibilities and compensation of an IT position at one company could be vastly different at another.

Finally, there's a lack of communication between IT leaders and the candidates they pass over. It is concerning that over one-third (36 percent) of IT professionals indicate they were never given a reason for why they did not get a job for which they were considered.

Closing the feedback loop is important if the skills gap is ever to be bridged. When looking at these three factors—unrealistic job descriptions, a lack of standardization and a lack of communication—
it indicates that to a certain extent the skills gap is self-inflicted.

Feedback is key: 36% of IT professionals are never given a reason why they were not offered a position for which they were considered

Challenges Reinforce the Disconnect Between IT Leaders and IT Professionals

The top three challenges IT leaders report (an unqualified candidate pool, mismatch of skills needs and skills available, and small pool of candidates) point to inadequate recruiting practices and a lack of consensus around what skills are required to be successful. Budgetary constraints is the only other challenge that received over 50 percent of responses [Fig. 5].

The challenges reported by IT professionals also point to gaps in recruiting practices and insufficient budgeting. Forty-eight percent of IT professionals feel unrealistic technical requirements are their biggest challenge, whereas 61 percent of IT leaders say an unqualified candidate pool is their biggest challenge. Similarly, 45 percent of IT professionals report that compensation not matching their expectations is a challenge, alongside 57 percent of IT leaders who cite budgetary constraints as a hiring challenge [Fig. 5, Fig. 6].

Fig. 5 - Biggest Challenges to Finding IT Talent

[IT Leaders] **Q: Which of the following are the top overall challenges for your team/organization as it pertains to finding quality IT candidates for your open positions? [Stack rank]**

	Rank	% of Responses
Unqualified candidate pool (i.e., the candidates available do not meet job requirements)	1	61%
Mismatch of skills needed versus the ones possessed by candidates	2	60%
Small pool of candidates (i.e., too few candidates available / short supply)	3	58%
Budgetary constraints (i.e., cannot afford to pay for top talent)	4	57%
Lengthy hiring process (i.e., inability to act quickly causes us to miss out on quality candidates)	5	24%
Partnership with HR (i.e., difficulty working with HR through the hiring process)	6	13%
Labor mobility / unwillingness to relocate	7	12%
False sense of scarcity / skills gap myth makes hiring difficult	8	9%
Baby boomer retirement	9	9%

Fig. 6 - Biggest Challenges to Finding the Right IT Job

[IT Professionals] **Q: Which of the following are the biggest challenges when trying to find a job that matches your skills, goals and interests? [Stack rank]**

	Rank	% of Responses
The technical requirements for the position are unrealistic	1	48%
The compensation does not match my expectations	2	45%
The experience or expertise requirements are too niche or specific (i.e., particular industry, software or technology expertise)	3	41%
The process takes too long (i.e., lag time between applying and getting a response)	4	38%
Getting insight about the position (beyond just the job description) is too difficult	5	31%
The educational requirements are too extensive	6	25%
The position includes vague soft skill requirements	7	23%
The experience/tenure requirements are too great	8	22%
The standard benefits do not match my expectations (i.e., medical, vacation/personal time)	9	17%
Additional benefits do not match my expectations (i.e., flexible hours, working from home)	10	14%

Strong recruiting strategies can ease hiring frustrations and increase the likelihood that employers find a quality candidate and IT professionals find a job that matches their skills, goals and interests. Consistent planning on the front end enables employers to navigate unqualified or shallow talent pools. A thorough recruiting process also provides insight into the local labor market so employers can better budget for the skills they need. Perhaps most importantly, a strong recruiting partner can provide guidance to help level set expectations and shape the job requirements to better fit the day-to-day roles and responsibilities of the position.

Difficulties and Hiring Delays Have Real Consequences; Majority Lack Strategic Plan to Address Skills Gap

Eighty-one percent of IT leaders report that it is extremely or moderately difficult to find quality candidates, while 73 percent of IT professionals say they have difficulty finding IT opportunities for which they are qualified [Fig. 7]. About half of IT leaders (48 percent) and IT professionals (55 percent) say that finding IT candidates or opportunities always or often takes longer than anticipated [Fig. 8].
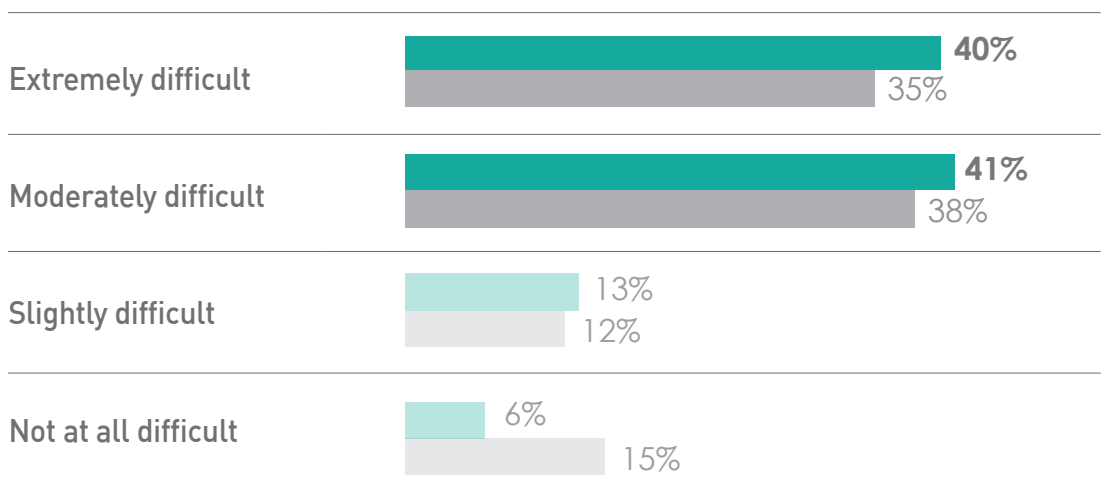
Open IT positions create problems that extend beyond just the amount of time, energy and resources spent trying to hire a candidate. Fallout ranges from decreased efficiency to higher turnover. More than half of IT professionals report that unfilled positions lead to significantly elevated levels of stress on their team.

Most concerning is that 63 percent of IT leaders do not believe their organization has developed a strategic workforce plan that positions them to successfully address IT hiring challenges [Fig. 10].

Fig. 7 - Difficulty in Matching Candidates to Positions

[IT Leaders] **Q: How difficult is it currently to find quality candidates for your open IT positions? [Select only one]**

[IT Professionals] **Q: How difficult is it currently to find IT opportunities for which you are qualified? [Select only one]**
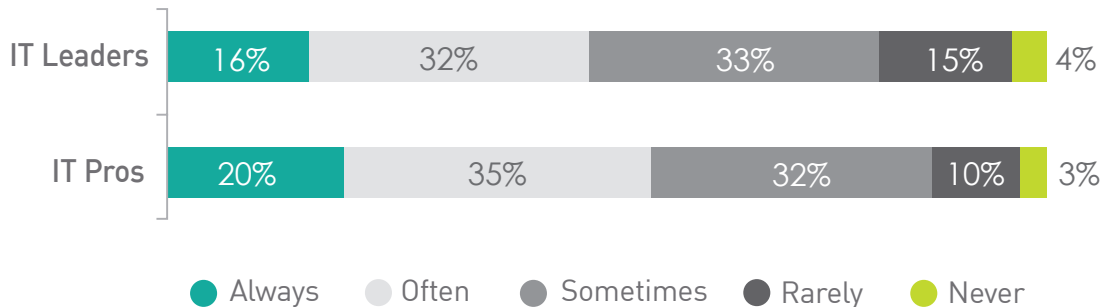
Category	IT Leaders	IT Pros
Extremely difficult	40%	35%
Moderately difficult	41%	38%
Slightly difficult	13%	12%
Not at all difficult	6%	15%

● IT Leaders   ● IT Pros

Fig. 8 - Lengthened Hiring Process

[IT Leaders] **Q: On average, how frequently do your open IT positions take longer than anticipated to fill due to a lack of quality candidates? [Select only one]**

[IT Professionals] **Q: On average, how frequently does it take you longer than anticipated to find a new IT position due to a lack of quality opportunities? [Select only one]**

	Always	Often	Sometimes	Rarely	Never
IT Leaders	16%	32%	33%	15%	4%
IT Pros	20%	35%	32%	10%	3%

● Always ○ Often ● Sometimes ● Rarely ● Never

> 52% of IT professionals report higher levels of stress when a position on their team goes unfilled for an extended period of time

Fig. 9 - Impact on Team

[IT Leaders] **Q: Which of the following most directly impacts your team/organization when an open IT position goes unfilled? [Stack rank]**

[IT Professionals] **Q: Which of the following most directly impacts you or your colleagues when an open IT position goes unfilled? [Stack rank]**

Stack Ranked	IT Leaders % Selected	IT Pros % Selected
Decreased efficiency (i.e., other employees performing unfamiliar jobs/duties)	71%	63%
Increased time to market / project completion	69%	51%
Less quality work	47%	51%
Decrease in employee morale	38%	52%
Lost profit/revenue	31%	28%
Reduced creativity/innovation	29%	34%
Higher turnover	20%	27%

Fig. 10 - Strategic Workforce Planning

Q: Do you agree with the following statement? "My organization has developed a strategic workforce plan that positions us to successfully address IT hiring challenges."

	Yes	Unsure	No
IT Leaders	37%	**43%**	**20%**
IT Pros	30%	32%	38%
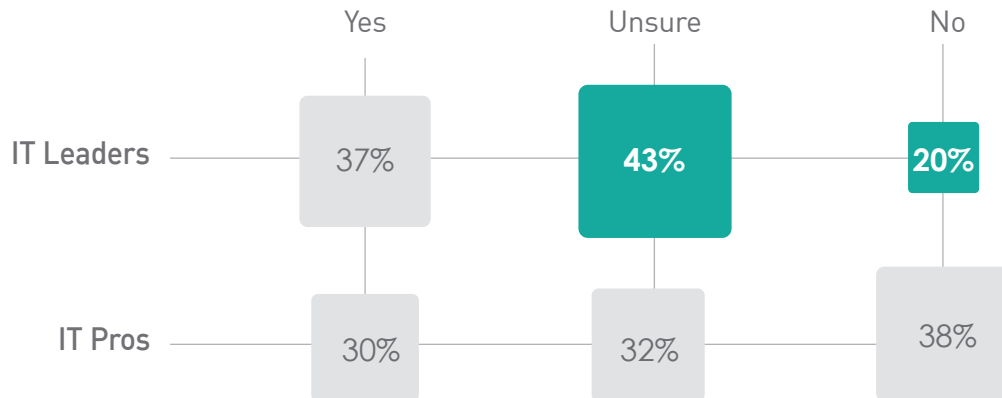
Employers that fail to develop strategic workforce plans will continue to experience difficulty finding quality IT candidates and risk losing the talent they already have. An ineffective workforce planning process means it takes longer to find candidates and fill open positions. IT leaders must be mindful of the collateral damage when positions go unfilled. Employees suffer lower morale which eventually leads to attrition. Effective workforce and recruiting strategies will protect against the impacts caused by inevitable IT openings.

> 63% of IT leaders aren't confident (or are unsure) that they have a plan to successfully address IT hiring challenges

Companies Taking Band-Aid Approaches

IT leaders are not entirely confident in their organization's strategic workforce plan but they are making attempts to counter the IT skills gap. The majority of IT leaders, 59 percent, look within the organization to train and develop their current workforce [Fig. 11].

Providing some type of training is the most common tactic used to counter a deficit of IT skills. Eighty-seven percent of IT leaders report they employ some kind of technical skill-set training method. The majority of IT leaders utilize supervisor- or coworker-led training and online or e-learning training programs [Fig. 12].

Fig. 11 - IT Skills Gap Countermeasures

[IT Leaders] **Q: Which of the following do you currently utilize to counter the IT skills gap? [Select all that apply]**
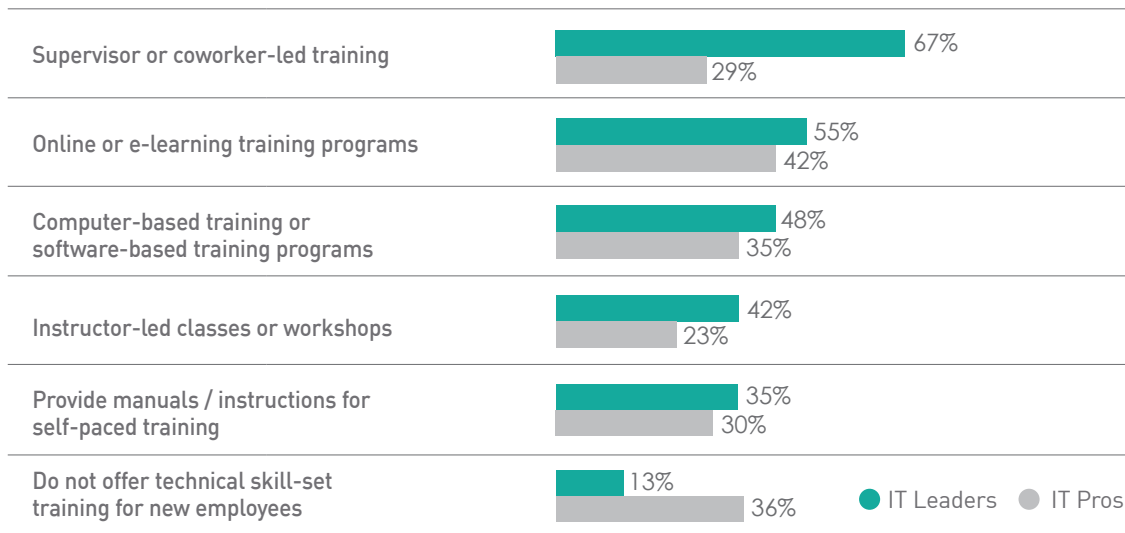
	% Responded
Train and develop current workforce	59%
Increase use of temporary/contract workers	56%
Outsource IT projects, functions and/or initiatives	55%
Invest in educational programs/initiatives	35%
Provide alternative work arrangements (i.e., flexible hours, telecommuting)	26%
Increase hiring of full-time workers	21%
Offer more lucrative compensation packages	9%

Another common method of countering the IT skills gap is the use of external partnerships. Fifty-six percent of IT leaders report they increase the use of contingent workers and 55 percent outsource their IT needs.

Fig. 12 - Technical Skill-set Training Methods

[IT Leaders] **Q: What types of technical skill-set training methods do you offer new employees (less than 12 months of tenure)? [Select all that apply]**

[IT Professionals] **Q: What types of technical skill-set training methods does your employer offer to new employees (less than 12 months of tenure)? [Select all that apply]**

	IT Leaders	IT Pros
Supervisor or coworker-led training	67%	29%
Online or e-learning training programs	55%	42%
Computer-based training or software-based training programs	48%	35%
Instructor-led classes or workshops	42%	23%
Provide manuals / instructions for self-paced training	35%	30%
Do not offer technical skill-set training for new employees	13%	36%

There is a disconnect, as about 2 out of 5 IT professionals (36 percent) report employers actually do not offer technical skill-set training. IT professionals say their employers mostly utilize e-learning (42 percent), computer-based training (35 percent) or they are provided manuals for self-paced training (30 percent).

The IT Skills Gap Is Real and Greatly Attributable to Lack of Accurate Needs Analysis

Our findings show that the IT skills gap is undeniable and a very real challenge faced by organizations today.

Failing to acquire the right IT talent in a timely manner generates external and internal consequences that must be considered. When employers include lengthy and sometimes unreasonable requirements for an open position, it can discourage potential candidates who do not meet every facet of the job description from applying, so the organization potentially misses out on a quality candidate.

Roles that remain unstaffed mean internal employees work to cover the gaps on the team, increasing stress and impacting morale. High levels of stress and low morale often correlate to employee attrition, creating a perpetual need to backfill open positions. Employe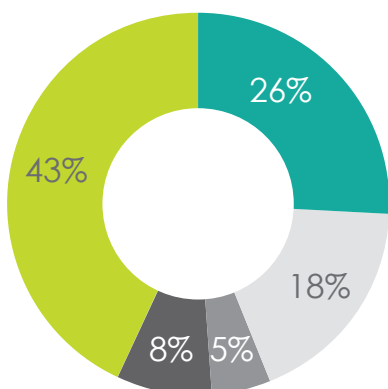rs are also hindered by compensation structures that do not always meet expectations. IT professionals are in high demand, and if employers do not provide competitive compensation packages or take too long to make an offer, the candidate will move on to a different opportunity.

For the most part, companies take a Band-Aid approach to solving their IT skills gap issues, instead of creating a plan to tackle the problem holistically. Workforce planning requires a comprehensive view of the labor market. Organizations must first evaluate their current IT teams and identify their skills gaps.

Next, they need to prioritize and weigh the skills deemed critical for success. Finally, they must analyze the local labor market to understand the competitive landscape and talent supply and demand trends. A well-defined, properly implemented workforce strategy will help mitigate the impact of the skills gap and position an organization to succeed.

Survey Methodology and Respondent Profile

Company Size by Total Revenue

- 26% Under $50 million
- 18% $51 million - $249 million
- 5% $250 million - $499 million
- 8% $500 million - $1 billion
- 43% More than $1 billion

Responses were gathered from more than 600 IT leaders (CIOs, IT VPs, IT directors and IT hiring managers) and nearly 700 IT professionals in North America in spring 2015. Company revenue was reported by IT leaders.