Skills Gaps: A Practical Guide to Reskilling and Upskilling Today’s Workforce
Introduction

In 2014, Carnegie Mellon had some of the world’s brightest robotics minds working on its campus. These scientists were focused on the bleeding edge of robotics research, improving upon the capabilities of existing technology, and designing incredible new systems. As with most academic research, they hoped their discoveries would improve the lives of all mankind.

But then, virtually overnight, they all left.

In a shocking move, ridesharing startup Uber lured the scientists away, scooping up a significant portion of Carnegie Mellon’s robotics talent in a single hiring spree. This bold move was a step forward in the ridesharing firm’s pursuit of a self-driving fleet of automobiles, but it clearly caught the university by surprise. In hindsight, it’s hard to blame Carnegie Mellon for not seeing this technology firm in an entirely different industry as a threat. From a logical perspective, when Carnegie Mellon considered its peers in the marketplace, it evaluated other top-shelf universities and research think tanks as competitors. However, it didn’t consider the possibility of a ridesharing service snagging its top-shelf robotics talent.

What this means for today’s business leaders is that it’s no longer enough to simply look at two or three competitors to keep a pulse on the industry. New market competition can come from virtually any direction. Company leaders are sometimes reluctant to believe that this will apply to their own firm or their own industry, but it happens every day. This is a small example of disruption and how it impacts the workplace, but it signifies a larger change that leaders must take seriously.

This story offers a clear understanding of the concept of industry convergence, one of the trends disrupting the workplace today. Change may also come from technological advances, such as artificial intelligence, but the end result is the same: disruption. For example, in a discussion with a Canadian banking and financial services employer with tens of thousands of employees, one of the executives was quick to redirect the conversation when industry was mentioned. He claimed the firm was a technology company first and a financial services institution second. This means that more employers are looking to hire and develop technical engineering talent, even if they aren’t in traditional technology industries, tightening the labor market for
sought-after software engineers and putting a premium on development opportunities to prepare people for those roles.

Look around you. Today’s learning and development practices are not the same as that of years past. More and more companies are looking for ways to leverage their people as a strategic differentiator, giving them an edge over the competition. New technologies and tools are shifting the conversation for learning and business leaders, enabling them to have greater insights into organizational functions, outcomes, and variables. Yet in spite of all of this, there are challenges that we simply can’t seem to shake. Globalization is forcing employers to change how they have traditionally approached markets and talent. Disruption is affecting businesses in a wide spectrum of ways, from changes in consumer preferences to radical departures from traditional business models and methods. And greater demands for delivering memorable, engaging employee experiences continue to stress out HR and learning leaders that are doing more with less.

While recruiting and talent acquisition practices can help companies to some degree, the real secret to success lies with upskilling and reskilling employees to be able to meet the coming demands. It’s not only less expensive and risky—it can lead to better outcomes as well.

In this report, we:

- explain the difference between upskilling and reskilling
- look at today’s skills gaps, and L&D’s role in closing them
- determine what skills gaps you should target
New Research Insights on Skills, Disruption, and More

In a new study, *Disruption Drives Reskilling and Upskilling*, our team found that 81 percent of learning professionals say that the current pace of change, automation, and disruption will drive a need for reskilling and upskilling employees.

*Note: the Disruption Drives Reskilling and Upskilling research study was developed by surveying nearly 1,000 learning professionals and learners to understand their challenges, beliefs, and other facets surrounding the need for a tighter focus on employee skills.*

While the terms are sometimes used interchangeably, reskilling and upskilling actually have distinctly different meanings:

- **Upskilling** is the development of additional skills to help make someone more valuable in their current role. For example, a software developer learning an additional coding language.
- **Reskilling** is the development of significantly different skills to make someone suitable for a different role. For example, retraining a former cashier to work as a personal shopper instead.

These two components are critical for employers facing a skills gap, defined as the difference between the skills mix that workers currently have and the skills mix the employer needs to accomplish its goals. In a recent research study, my team found that the number one driver of learning content demand for employers was to close skills gaps.

In the Disruption Drives Reskilling and Upskilling study, only 60 percent of employers in the study said they methodically track the skills of every employee, which obviously puts them at a disadvantage. How can you know how big the skills gap is if you don't know what skills you currently have? Whether you currently do or don't, perhaps this will give you some ideas on how to do it more comprehensively.

In the study, we asked employers and learners about the most common ways the business identifies worker skills. Note that aggregate responses may be over 100 percent because participants could select more than one method of skills identification.
### Method

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<thead>
<tr>
<th>Method</th>
<th>Learning Professionals</th>
<th>Learners</th>
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<tbody>
<tr>
<td>Manager Observations</td>
<td>63%</td>
<td>58%</td>
</tr>
<tr>
<td>Assessments</td>
<td>51%</td>
<td>37%</td>
</tr>
<tr>
<td>Peer Feedback/360s</td>
<td>34%</td>
<td>29%</td>
</tr>
<tr>
<td>Self-Reported</td>
<td>26%</td>
<td>19%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>5%</td>
<td>18%</td>
</tr>
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Source: Lighthouse Research & Advisory

What’s interesting about this is that the rankings were the same in terms of priority, even if the overall numbers vary quite a bit. For instance, learning professionals are heavily reliant on manager observations to identify worker skills, even though a wide variety of research says that humans are inherently biased.

Note that nearly one-fifth of workers are not sure how or even if their employer actually measures their skills. How can they be sure they’re receiving the right opportunities for development? Might this create friction because the worker doesn’t think the employer cares about their capabilities? Interesting questions worth exploring.

Another key component of the research was around the cost of closing a skills gap. Virtually every company today is struggling to hire specific key roles. How many of those companies could minimize or even solve their skills gap problems by leveraging training and development instead of trying to hire their way out of the problem?

Research from the Work Institute shows that the average cost of employee turnover is 33 percent of the position’s salary, which is approximately $20,000 for a job paying $60,000 a year. However, according to our new data, 95 percent of learning professionals say that it takes less than $10,000 to reskill someone for another job.
Using these data points, we see the cost to hire someone else is at least twice as expensive as developing someone else internally. If we combine this with data developed by Matthew Bidwell at the Wharton School, we see that external hires not only cost more money, but they also perform worse on average in their first two years on the job.

Between those two data points alone, it's astonishing that any employer prioritizes hiring over training to the degree that they do. L&D professionals are in the ideal position to help employers solve this skills gap problem, and it's time to step up as strategic partners of the business.
Best Learning Methods: Hard Skills

In the study, we asked both learning professionals and learners about the best options for teaching workers new job skills. Interestingly, both groups ranked the options exactly the same in terms of priorities.

<table>
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<tr>
<th>Best Training Methods for New Skill Acquisition, Ranked</th>
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<tbody>
<tr>
<td>Experiential/On the Job Training</td>
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<tr>
<td>Coaching and Mentoring</td>
</tr>
<tr>
<td>Company-Provided Training (Lecture, eLearning, etc.)</td>
</tr>
<tr>
<td>Job Rotation</td>
</tr>
<tr>
<td>Reimbursable Higher Ed/College Courses</td>
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Experiential learning is the best method for acquiring hard skills, and while other methods may support it in various ways, none of the other options can be the primary choice for skills acquisition. It’s simply not feasible to create a new training course or develop a mentoring program every time a new skill is identified.
Key Soft Skills

As was reflected in my new book, the future of work will require essential human skills. Within the context of the new research, we asked both learners and learning leaders what skill everyone needs to be successful in their job. The results of each set of answers are below for reference.

<table>
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<tr>
<th>The Number One Skill Workers Need According to Learning Professionals</th>
<th>The Number One Skill Workers Need According to Learners</th>
</tr>
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<tbody>
<tr>
<td><img src="image1.png" alt="Word Cloud 1" /></td>
<td><img src="image2.png" alt="Word Cloud 2" /></td>
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As is abundantly clear, both sets of respondents said that communication skills are the number one priority for success on the job. While hard skills made it onto the shortlist (technology, computer, and similar words/phrases), soft skills were much more abundant (customer service, people skills, and communications, to name a few).

Training soft skills, especially those relating to communications, can’t happen in a passive manner. Similar to the hard skills discussion, soft skills require people to practice repeatedly. The difference is while soft skills need an experiential component, it may be best to firewall off these experiences from actual work situations. Having a “safe space” to role play and test their newfound skills without fear of repercussions can create a more stable foundation, encouraging the learners to use their new skills “out in the wild.”
Google’s research says that high-performing teams create psychological safety for their members, and this is a prime example of that. Having a high-trust environment means team members can support and coach each other because they know they are working towards the same goals. In this case, it’s about working towards mutual skill development.

Developing new soft skills in this type of high-touch environment can also help to evaluate whether someone actually does or doesn’t have the skill. While it is difficult to assess soft skills, observations and interactions by a trained professional are some of the best methods for determining if the training was a success or if the learner needs additional support. In other words, high-touch methods are not just about teaching new soft skills; they also offer opportunities for measuring the outcomes of the instruction as well.
Technology’s Role in Upskilling and Reskilling

While technology is driving a significant amount of change that requires a skills transformation for the workforce, it also offers an opportunity to harness skills for improved outcomes.

My team has mapped and explored the widespread market for learning technology. We have talked with hundreds of companies offering support in the form of learning management systems (LMS), learning experience platforms (LXP), content authoring and delivery, microlearning, analytics, and other categories. These types of technology can offer some value in this process as you capture the learning people are taking and deliver courses to support this process.

However, the training methods for reskilling and upskilling are somewhat dependent on human effort. There is a place for these technologies to support, but the primary value I see is in tracking and measuring skills across the workforce. Imagine for a moment that you work on a team of ten people, and I asked you to write down the strongest 10 skills for each person. Chances are you will stall out fairly quickly, because it’s hard to be that precise.

Technology, on the other hand, can scale infinitely. A simple database will do, but some learning technologies in the market actually provide ways to track employee skills on a more granular level.

Consider this reality facing many organizations: I recently spoke with the head of Digital Transformation at a financial services firm with more than 40,000 employees. The firm is trying to become more mature at identifying employee skills to support current and future needs. We discussed the company’s maturity level with regard to skills classification, and I popped the million dollar question, asking her how many employees her firm could clearly identify skills for as of today. Her answer? About 10 percent. That means more than 36,000 employees within the firm were completely disregarded when thinking about skills, competitiveness, and future capabilities of the business.

Think about how many skills that diverse group has--thousands? Tens of thousands? This clearly signifies just how important it is to identify the skills of the workforce if employers are going to remain relevant in a fast-moving marketplace.
Conclusion

As with many business processes, it’s important to see this approach to reskilling and upskilling not as a “one and done” solution. There must be a feedback loop that continuously looks out into the future to evaluate potential disruption for the business as well as the skills necessary to support the firm through the change.

By making this analysis a regular component of strategic planning, employers can create a degree of “future proofing” in the business by staying ahead of the curve on any skills that are shifting. This prevents the firm from being caught flatfooted and having to invest heavily to try and catch up.

Of all the things that occur in the world of business, change is constant. Learning professionals are ideally positioned to help the business not only deal with change, but come out on top after the change has passed.
About Lighthouse Research

Lighthouse Research & Advisory is a modern, independent analyst firm dedicated to setting the standard for excellence in talent, learning, and HR with practical research and a hands-on approach. By providing compelling research and actionable insights, our team enables HR, learning, and talent leaders to deliver more value to the business. Our research examines competitive practices, cutting-edge technologies, and innovative strategies.

Ben Eubanks is the Principal Analyst at Lighthouse, providing insights for today’s talent leaders and vendor partners. His book, Artificial Intelligence for HR, was published in 2018. This was the first piece of in-depth research on the topic published anywhere in the world and and reinforced the position of Lighthouse Research as one of the world’s leading analyst firms.

Prior to joining Lighthouse, Ben worked as a researcher, writer, and speaker for nearly more than 10 years, focusing on learning, talent acquisition, and talent management. During his tenure as a researcher, he has published more than 1,000 reports, case studies, and articles in addition to providing advisory services to executives from some of the largest and most respected organizations in the world.

He also has hands-on experience working as an HR executive, leading both strategic and tactical talent practices and giving his research a distinctly practical perspective. Ben has interviewed business leaders from notable organizations such as Southwest Airlines, H&R Block, Cox Enterprises, and AlliedUniversal in his role as the host of We’re Only Human, a podcast focused on the intersection of people, technology, and the workplace. In addition, he founded and operates upstartHR.com, a community serving HR leaders that has reached more than one million readers since its inception.