

EXECUTIVE SUMMARY

2022 Shifting Skills, Moving Targets, and Remaking the Workforce Report





ABOUT LIGHTCAST

Lightcast provides trusted global labor market data, analytics, and expert guidance that empowers communities, corporations, and learning providers to make informed decisions and navigate the increasingly complex world of work. With a database of more than one billion job postings and career profiles, our team provides best-in-class customer service with robust data, clear analysis, and expert guidance on skills, jobs, and opportunities.

Headquartered in Boston, Massachusetts, and Moscow, Idaho, Lightcast is active in more than 30 countries and has offices in the United Kingdom, Italy, New Zealand, Canada, and India. The company is backed by global private equity leader KKR.

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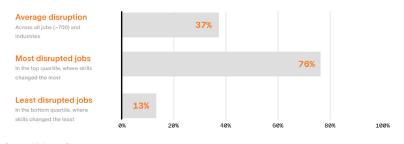
Executive Summary of the 2022 Shifting Skills, Moving Targets, and Remaking the Workforce Report

Discussions about the job market usually focus on jobs created and destroyed. But even in the most tumultuous times, that is not what most workers or most businesses experience. Jobs do come and go, but even more significantly, jobs change. For the vast majority of workers, their job is much less likely to go away than to evolve into something new. Day by day, skill by skill, the basic building blocks of a job are repositioned, until the role looks much different than it did just five years ago. Yet the job title—and the worker in the job—may remain the same.

But even company leaders may not realize how profoundly and rapidly the jobs throughout their business and industry are evolving, even in areas that don't seem so susceptible to change. A comprehensive look at job listings from 2016 through 2021 reveals significant changes in requested skills, with new skills appearing, some existing skills disappearing, and other existing skills shifting in importance.

The challenge for employers and employees alike is to keep up or, better yet, to get ahead of the trends. To meet that challenge, Lightcast, BCG, and The Burning Glass Institute analyzed millions of online job advertisements for the same occupations posted between 2016 and 2021 and compared how rapid and significant the changes are in specific roles. We looked at two measures in the <u>original report</u>: the emergence of new skills and the change in the importance of skills.

In the Top Quartile of Jobs, 76% of Top 20 Requested Skills Have Changed Since 2016



Source: Lightcast Data

Note: The analysis covered 2016 through the third quarter of 2021; n>15 million. On average a job posting has 16 skills; we have considered postings with at least 5 skills.

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The Great Disruption

The pace of change has accelerated such that jobs are more disrupted today than ever before: we consider this period to be the Great Disruption, a workforce phenomenon that exists alongside the Great Resignation and the Great Recalibration and likewise demands swift and thoughtful action by employers and other stakeholders. Of course, not every job is getting disrupted uniformly—to the same degree, at the same rate, in the same way. Leaders and decision makers need to understand what skills their organization needs and how to access them. Essentially, they need to capture a moving target.

We investigated what is actually happening, at both a high level and in detail for select, broadly relevant job categories. We identify macro trends in the evolution of job skills and offer leaders, employees, educators, and the public sector the clarity they need to create strategies that will enable them to get ahead of the Great Disruption.

To develop a sense of how skills have changed across jobs, we looked at the top 20 skills underlying each job in the Lightcast database and how they have evolved since 2016. Overall, 37% of the top 20 skills requested for the average US job have changed since 2016. One in five skills (22%) is entirely new. And certain sectors—finance; design, media, and writing; business management and operations; HR; IT—have changed faster than others.

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4 big trends in skill change

1. Digital skills in non-digital occupations

The growth of digital skills isn't limited to jobs in IT. Roles across industries increasingly demand technical fluency and abilities. These skills include data analysis, digital marketing, networking, and digital skills in manufacturing (e.g., AutoCAD, 3D modeling).

2 . Soft skills in digital occupations

Digital jobs don't just demand programming skills. These technical jobs now demand a balance of soft skills as well, since teams of employees are more connected and collaborative. These include skills involving organization, time management, verbal communication, leadership, positive thinking, listening, critical thinking, and building effective relationships.

3 . Visual Communication

The use of data visualization has increased across occupations, becoming increasingly important even outside of traditional data occupations. Skills like D3.js, Canva, Adobe Analytics, MS Visio, and Alteryx are in demand.

4 Social Media Skills

Careers are evolving to the current media climate, where technology is more widely available, accessible, and flexible all the time. This means that many jobs now demand social media knowledge to keep pace. Adobe InDesign, and YouTube are examples of in-demand skills.



These trends, like many others that have emerged from tech- and pandemic-driven change, are likely to accelerate and proliferate.

Disruptive skills across the labor market

From AI to supply chain disruption, from connectivity to climate change, the global trends shaping business decisions are becoming ever more complex, and the pandemic accelerated these changes. Companies must adjust what they do and how they do it.

New initiatives, new technologies, and new strategies are all required, but if the company's workforce doesn't have the right skills, it is extremely hard to succeed. If a company launches new digital tools, for instance, but its employees cannot use them, the new tools will hardly live up to their desired impact. Investments in recruitment, upskilling, and reskilling must accompany technology investments.

Even when it's clear that new approaches are required—and even when they're underway—it's hard to gauge the true degree and pace of change across job roles, within a company and across an industry or job family. For employers, it's critical to understand shifting requirements for the roles key to their business. With that insight, they can adapt their

recruitment and development practices, keeping their workforce and their organization competitive.

Lightcast's taxonomy of over 32,000 skills has been developed by a team of taxonomists studying the labor market for more than a decade. Using data from both job postings and online profiles, Lightcast is able to hone in on market-relevant skills to provide actionable data and insights to a range of audiences, including jobseekers, employers, students, educators, employers, government leaders, and researchers across the globe.

Each skill in Lightcast's taxonomy is defined, tagged with a skill type, and placed in a category of similar skills.

Four common job families seeing high skill disruption

After looking at all job families across the labor market, we focused on four functional areas common across businesses and industries — and that have seen significant skills disruption.

1 Information Technology

Given the significance of technology as a driver of change, it comes as no surprise that skill disruption is higher in IT roles across frontend, systems, and data occupations than in any other job family. When we look at the most disrupted IT jobs like data engineer, we see particular trends in the pattern of change: designing in a modular fashion, relying on the cloud, emphasizing data and advanced analytics, using multiple channels, and working in agile ways.

2 Marketing and Public Relations

Highly disrupted occupations in the marketing and public relations job family span very different types of roles—tech-side, managers, and specialists—with advertising/promotions manager being the most disrupted. More and more, marketing and PR is about testing products and tactics quickly, measuring results, and adjusting accordingly.

Key Trends in IT and How They Relate to Skill Change

Rapidly Evolving Tech and Architecture Are Driving New Skill Requirements

	Examples of Trending Skills
Designing in a modular fashion	Vue.js, Kubernetes, Docker software, Spring Boot, Flask
Relying on the cloud	TensorFlow, Azure, Salesforce, Journey Builder, AWS Redshift
Emphasizing data and advanced analytics	Artificial intelligence, Microsoft Power BI, Robotics, Microsoft Azure, deep learning
Using multiple channels	Vue.js. TypeScript, AWS Redshift, Docker software, OpenShift, Server configuration
Working in agile ways	Agile, Confluence, workflow management, design thinking

Source: Lightcast Data

Key Trends in Marketing and PR and How They Relate to Skill Change

Test, Learn, and Adapt is the New Mantra for Marketing

	Examples of Trending Skills
- Testing ideas	Experiments, test development
Measuring results	Adobe analytics, Al, Data science, data visualization, KPIs
Driving consequent change in marketing channels	Affiliate Marketing, API, Instagram, Mailchimp, podcasting, social media
Driving consequent change in marketing content	Business writing, content curation, copy editing, video editing, videography
Adjusting ways of working	Design thinking, DevOps, Atlassian JIRA (project software), Confluence (knowledge-sharing software), HubSpot (CRM software)

Source: Lightcast Data

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Key Trends in HR and How They Relate to Skill Change

Data, Talent Acquisition, and Engagement are on the Rise,

	Examples of Trending Skills
Emphasizing data and digital	Microsoft Power BI, Tableau, ADP Workforce, KPIs, information systems
Sourcing talent in new ways	Social media platforms, needs assessment, talent acquisition, candidate sourcing, Facebook
Leading and engaging stakeholders	Conflict management, employee recognition, thought leadership, team building, stakeholder management

Source: Lightcast Data



Key Trends in B2B and How They Relate to Skill Change

The Shift Toward Solution Sales is a Key Driver of Change

	Examples of Trending Skills
Creating customer value	Critical thinking, thought leadership, enterprise sales, investment management
Improving the customer experience	Virtual sales, customer experience improvement
Emphasizing digital skills	CRM software, data analytics (DataDog software), data visualization (Docker software)

Bource: Lightcast Data



3 Human resources

HR holds a unique position: the skill and job changes in every job function require the attention of HR, even as the HR function itself is being transformed. We see three key trends in the skills required of HR practitioners: emphasizing data and digital, sourcing talent in new ways, and leading and engaging stakeholders. Unsurprisingly, the most disrupted job on our list of highly disrupted HR roles is the talent acquisition/recruiting manager.

4 Sales

B2B relationships and transactions are in a particularly dynamic state, influencing the skill requests for many different roles, with the technical sales representative as the most disrupted. With B2B customers today seeking comprehensive solutions, trends in requested skills focus largely on creating customer value and improving the customer experience. B2B sales roles are also seeing a larger emphasis on digital skills.

How people can use these insights

Organization Leaders: Many organization leaders are defining the future of their core business and support functions—from technological change to new ways of working. They need to clarify their strategic direction and then assess how roles need to evolve, in skills and capacity and at what speed, to support that strategic direction. Frequently, these leaders will need to shake their teams out of status quo thinking and timid incrementalism to prepare for the substantial shifts occurring across sectors and roles and to get ahead of the curve instead of falling behind.

HR Teams: HR teams must partner with organization leaders to define the talent-sourcing strategies (from among the buybuild-borrow-automate options) that will supply needed skills at the capacity and pace required by the organization's strategic objectives. Learning and development functions will play a critical role, equipping workers at all levels and at scale with the rapidly advancing skills required to succeed, but those internal efforts likely won't be enough to satisfy all talent and skill needs. L&D, recruiting, talent management, and people analytics functions will have to work together via holistic, integrated approaches. Strong HR business partners must serve as powerful connection points between the business and the HR capabilities, to support customization, agile experimentation, and fit-for-purpose solutions.

Over just five years, skill change has been rapid and wide ranging. In some occupations, it has been overwhelming. There's a need to seek talent with new skills, to reskill and upskill employees, and to train and develop those in search of jobs. And all of this must happen while the skill profiles of many jobs continue to morph—it's a moving target for each impacted group:

Educators and Public-Sector Leaders: Educators, training providers, and governments need to prepare for their role in this challenge. Not only does the life-long learning challenge change the focus in education, but the pace of skill change also requires educators to rethink both the curriculum and the process by which they review and adapt curriculum. They must also guide individuals to the right kind of learning. Workers also need actionable information about how their jobs are changing. Failing to acquire new skills is bad, but so is acquiring the wrong skills—those that don't provide a return on investment in pay or advancement. Both employers and educators should provide clear guidance on how skills link to career pathways.

Individuals: The job you've been showing up to faithfully for years is likely no longer the one you signed up for—and that's okay in the context of career longevity. Workers and job seekers need to embrace lifelong learning. People should look for employers and programs that help to build the skills needed to stay relevant.

Conclusion

With the Great Disruption marking an unprecedented shift in skills across a variety of roles and industries, almost everyone—including government leaders, HR professionals, educators, executives, and many of those in the workforce—needs to be agile in how they're thinking about the skills. Non-technical roles are increasingly needing people to have greater facility with technology, but we're also seeing the converse: digital occupations are now asking for more soft skills.

In addition, visual communication and social media skills are both in higher demand. As data figures more prominently in decision making, clearly illustrating those numbers becomes essential—and not just for data scientists. Similarly, as social media continues to grow in importance as a way to reach audiences, associated skills like YouTube are required more frequently.

Unsurprisingly, IT roles are seeing huge disruption as technology continues to evolve, but it isn't just jobs in tech that are shifting in their requirements. Marketing/public relations, HR, and sales are also asking for different skills than they were just five years ago.

Skill change is a constant evolution—and a source of ongoing disruption across the economy. The pandemic has accelerated the process, but facing the fact that jobs are always evolving, even when not in the midst of a crisis, is a major shift in how the world thinks about the nature of work. Staying informed and rethinking processes to get ahead of trends will be the key to flourishing in an increasingly dynamic talent landscape.

SHIFTING SKILLS 10



LIGHTCAST DATA

Insight for the real world—at every level of the labor market.

Lightcast software, consulting, and data delivery are all powered by best-in-class data, with the world's most detailed information about skills, jobs, and supply and demand throughout the labor market. We deliver clarity to enterprise and staffing, education institutions, and regional leaders.

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