

# The 2021 Workplace Learning Trends

## Top Tech Skills for Enterprise Organizations

When it comes to keeping employees' technical skills up to date, companies have been feeling the pressure for several years now. In 2017, the McKinsey Global Institute estimated that **375 million workers** — or 14% of the global workforce — would have to switch occupations or acquire new skills by 2030 due to automation and artificial intelligence.

And as 2030 looms closer, the skills gap is becoming more pronounced. According to a recent McKinsey Global Survey, **87% of executives** were already experiencing a skills gap or expected to in the next few years. Yet less than half of respondents had a clear sense of how to address the problem.

Which popular technical skills will help companies address this skills gap? And what does this mean for your learning plans in 2021 and beyond? In this report, we'll dig into Udemy's 2020 course consumption data for insights into the tech skills your teams should invest in for the year ahead.



## Data literacy is everyone's business

According to research by PwC, **61% of executives** want their companies to rely on data more. As executives look to integrate data into company strategy, data literacy skills are no longer just for technical roles.

"Clear understanding of dashboards, visualizations, and analysis will soon become a default skill set required of any office worker," says Jose Portilla, [Udemy data science instructor](#) and Head of Data Science at [Pierian Data](#). He compares the trend to the moment when basic computer skills became a necessity for workers of past generations.

This trend is also beneficial to data science teams. Workforces with strong data skills across all departments are more "data self-sufficient." As a result, data scientists can spend more time on complex projects.

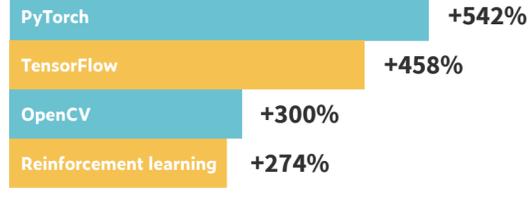
"Recently, huge strides in machine learning and artificial intelligence have allowed for the creation of new data science tools that automate a variety of repetitive tasks," says Jose. "Data scientists have more time to focus on developing clear business solutions instead of cleaning data."

### Take action

### How can you help your organization adapt to these changes?

1. Support the development of business intelligence and business analysis skills.
2. Make sure employees are comfortable with platforms like Salesforce, SAP, and Qlik Sense.
3. Encourage data scientists to deepen their expertise with machine learning skills like reinforcement learning.

## Machine learning automation skills



Course consumption percentage growth from 2019 to 2020

## Say hello to the hybrid tech role

"With the adoption of agile and DevOps plus the continued budgetary pressures of doing more with less within IT, tech professionals can no longer be one-dimensional," says Doug Redfield, Senior Director of Architecture and Governance at BMC Software. "They must become experts at more than one discipline to be effective."

Doug predicts the growing need for H-shaped skill sets. This refers to people who have expertise in more one than technical skill. To hear Doug speak on

this topic, check out his presentation from [Udemy Forward 2020](#).

To expand their skill sets, technical professionals are adding cloud computing and infrastructure skills to their wheelhouse. Software testing and the software development cycle are also critical skills for hybrid roles. The consumption of these topics on Udemy for Business grew by 370% in 2020. Expect to see an increased focus in these areas in 2021.

### Take action

### What does this look like in practice?

1. QA testers and developers are working together to expedite project completions.
2. IT specialists are moving beyond help center or security specializations.

## Cloud computing skills



Course consumption percentage growth from 2019 to 2020

## The shift to remote work highlights the role of cybersecurity

As COVID-19 drove global workforces remote, cybersecurity took on new urgency for IT teams. Employees were no longer within the secure digital network of the office. Many started using personal devices for work.

"With remote work here to stay, IT leaders must examine the security gaps in every part of the

organization's network," says Nathan House, Udemy instructor and CEO of cybersecurity consultancy Station X.

What's at stake? According to PwC, organizations with poor security practices risk financial loss. Their intellectual property, employee data, customer data, and hard-earned reputation may also suffer.

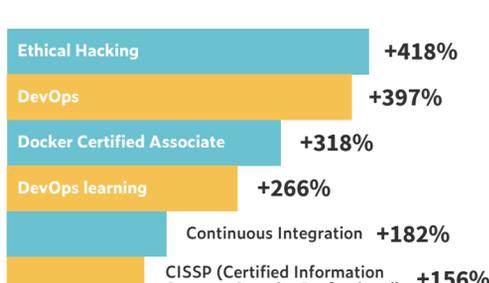
### Take action

### How can organizations prepare themselves and their tech talent to face these challenges?

**Organizations must protect their employees and bottom line by:**

1. Offering continuous security training for all technical teams.
2. Requiring training for all employees in cybersecurity best practices.
3. Consider implementing initiatives like single sign-on and multifactor authentication.

## Cybersecurity skills



Course consumption percentage growth from 2019 to 2020

## Prepare your organization to face tomorrow's technical challenges

You can help your technical employees succeed by creating opportunities for them to develop a wide range of tech and soft skills.

Want to learn more about these trends and others that are shaping the learning landscape for 2021? [Download the 2021 Workplace Learning Trends Report.](#)

The pace of change in technical fields can be especially fast. Wondering what your next steps should be? Learn how we can help your organization prepare for tomorrow's technical challenges. [Connect with a technical learning expert at Udemy for Business.](#)

### Methodology

The 2021 Workplace Learning Trends Report is based on data from the learning behavior of thousands of global companies using the Udemy for Business platform and a survey of over 500 Learning and Development professionals.

Skills data compares the consumption of courses in the Udemy for Business collection from January 1, 2019-August 1, 2019 to January 1, 2020-August 1, 2020. All courses are associated with topics, with each course having up to five topics. These topics are what you see as the trending skills within the report. For courses with multiple topics, consumption minutes are divided equally across all topics associated with those courses.

From August 19, 2020 to September 10, 2020, 528 global Learning and Development professionals completed a 16-question survey on the current state of their companies' training programs.