udemy business
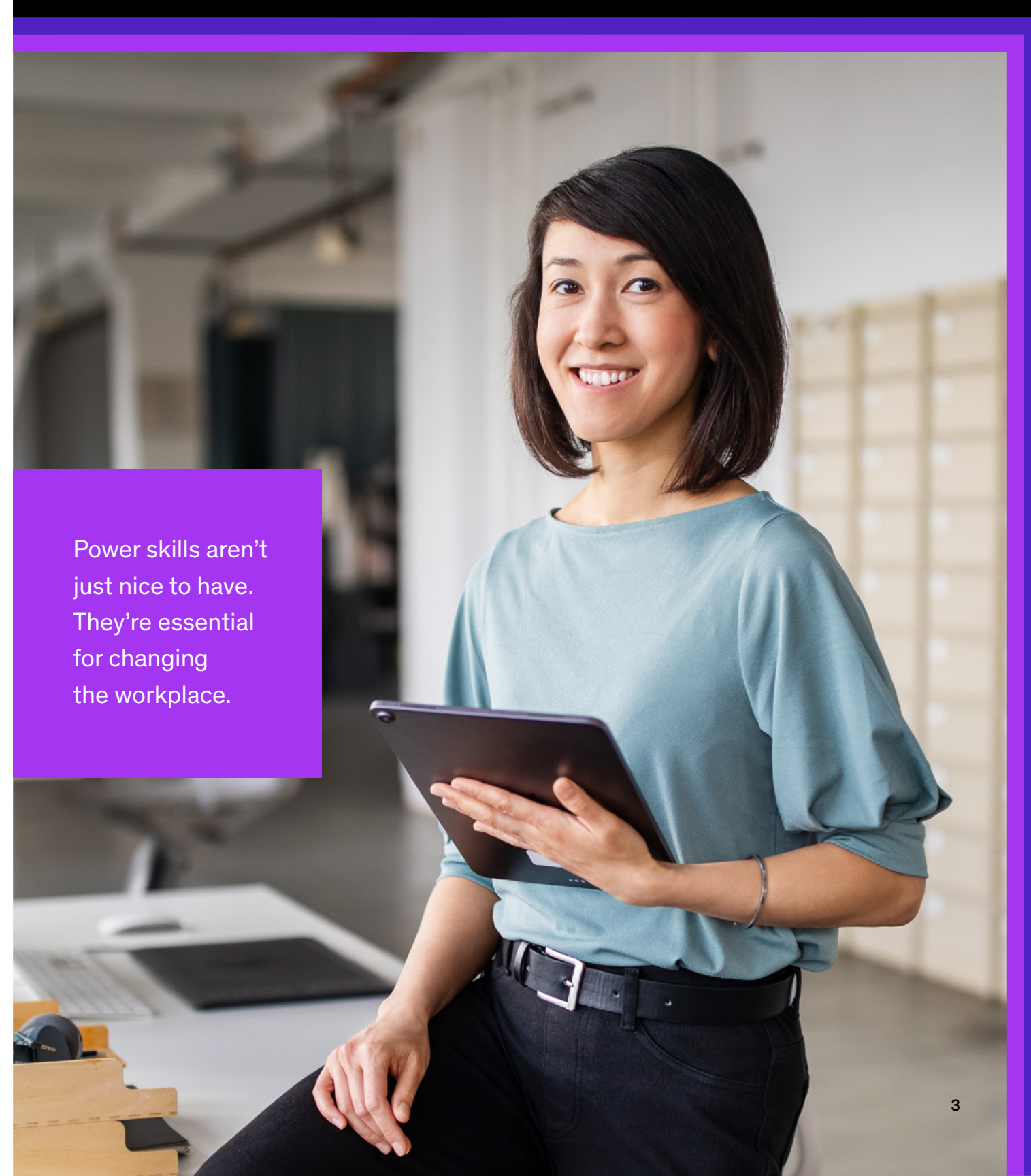
2022
Workplace Learning Trends Report

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Reframing soft skills

It's no secret that the demands of the workplace are changing. Whether it's adapting to a remote or hybrid setting, building more diverse, equitable, and inclusive organizations, or finding new ways to enhance productivity, working in a state of constant flux is now accepted and expected.

All this change doesn't exist in a vacuum. It has a very real impact on employees and their ability to excel. Keeping up with constant change, both in the industry and the workplace, is a serious challenge. This is why nearly **nine in ten** executives and managers say their organizations either face skill gaps already or expect them to develop within the next five years.

Power skills aren't just nice to have. They're essential for changing the workplace.
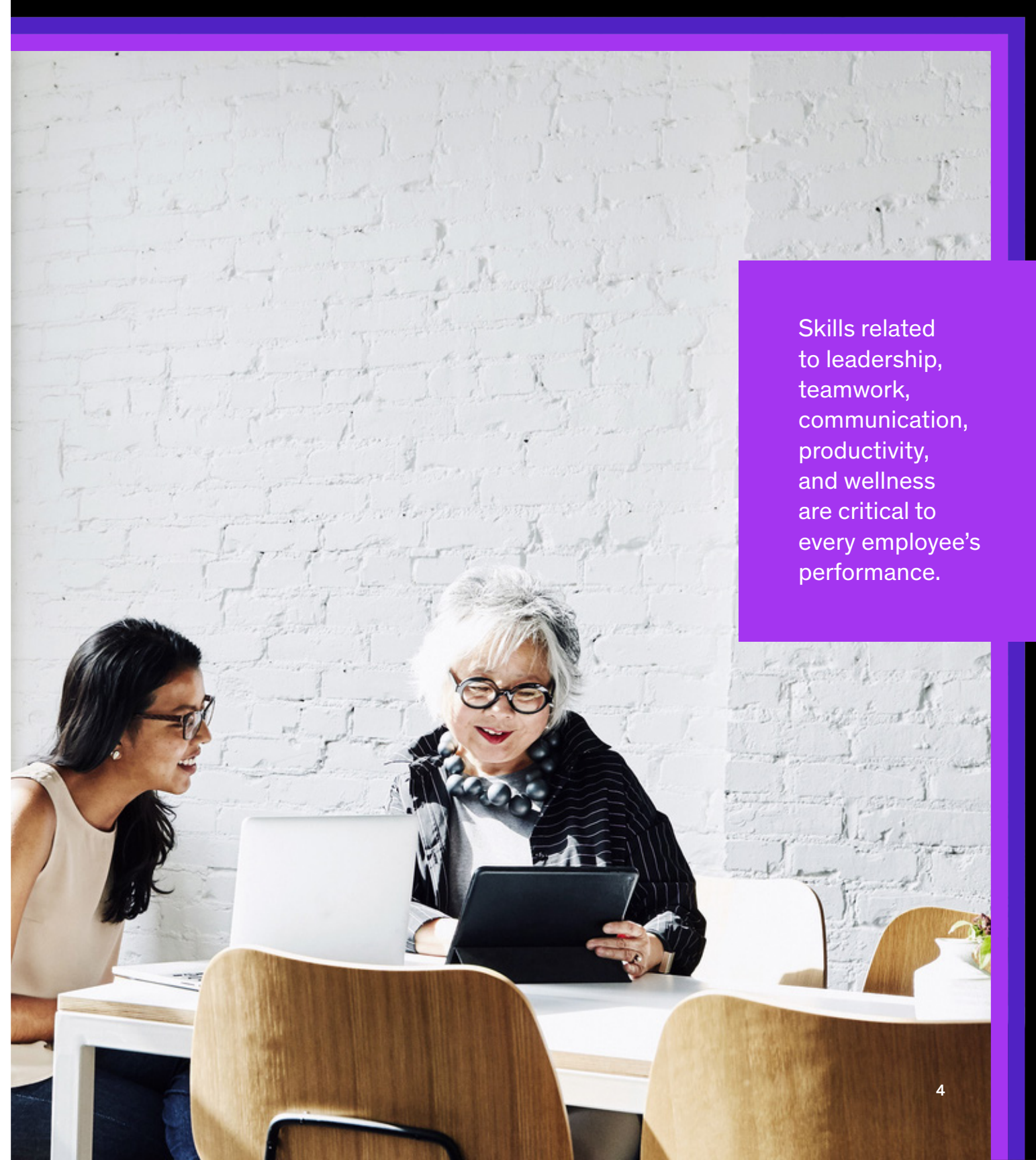
"

Power skills have always been an important part of workplace learning, and their importance has only grown more urgent as the global workforce navigates the changes of the last few years. Enabling employees to develop power skills related to communication, collaboration, and change leadership is key to building an agile business and a strong company culture.

— Melissa Daimler
Chief Learning Officer, Udemy

The most in-demand skills aren't just about staying ahead of the technical curve. Skills related to leadership, teamwork, communication, productivity, and wellness are critical to every employee's performance. This is why it no longer makes sense to call them "soft skills," as if they represent a less important set of skills in the workplace. These skills aren't just nice to have. They're essential for changing the workplace.

Why "power skills"? Learning and Development (L&D) and HR leaders agree these skills are what **give employees power at work**. Power to collaborate, power to communicate effectively, power to lead. When it comes to developing training programs for the world's leading companies, we at Udemy Business believe these skills should be top-of-mind when building a robust training program. After all, these are core competencies that all employees need — whether they're in a financial, technical, administrative, sales, or marketing role.

So goodbye, soft skills. Welcome to the new era of power skills.

Skills related to leadership, teamwork, communication, productivity, and wellness are critical to every employee's performance.

Executive summary

As buzz about a **Great Resignation** in employee ranks grows, leaders find themselves at a pivotal crossroads between employee retention and business results. But this isn't an either/or dilemma. Business **growth hinges on employee engagement,** which employers can reinforce by investing in their talent through career development and learning opportunities.

The priorities of leaders for the year ahead must shift to ensuring top talent not only stays with the company, but that their skills can evolve quickly enough to stay competitive. Regardless of where your employees work — in an office, in a hospital, in a manufacturing center, in their living rooms, or on a beach — empowering them with continuous learning opportunities will pay dividends in 2022 and beyond. Investing in workforce development facilitates employee productivity keeps employees engaged and satisfied in their work, boosts employee retention, and **supports the innovation** needed to grow revenue.

Developing power skills is a key priority for NTT DATA, a global IT services provider. This is a shift for the company, which once kept employee development focused on technical skills .

"

Communication and presentation are also topics of interest for us – and we continue to recommend these types of courses to continually improve our professional skills.

— Alfred Helmerich
Executive Training Manager NTT DATA Academy at NTT DATA Deutschland

For this report, the Udemy Business team analyzed trends based on what employees are learning across our thousands of customers around the world. With access to billions of data points, we believe we offer a unique perspective on the most in-demand job skills modern employees need to thrive in today's dynamic workforce — and how organizations can tie learning to business outcomes.

In this report, you'll learn:

1
Why power skills development is an investment your company can't afford to skip

2
How to mitigate the Great Resignation within your company by developing employees' career paths

3
That business strategy can only succeed through a robust technical strategy

4
Which skills the global workforce were most in demand in 2021, to help shape your training program in 2022

Power skills

Build skills that can't be replaced by machines.

Let's get one thing straight: there's nothing soft about power skills

They may not involve learning lines of code or crunching numbers in spreadsheets. But power skills are the key to future-proofing your company.

Udemy Business data shows us just how in-demand these skills are. **We've seen triple-digit growth in categories like office productivity, leadership and management, and personal growth over the past year.** It's worth noting that demand in topics like diversity and inclusion, strategic thinking, listening skills, and time management skyrocketed in the past four years. While these topics earned some extra time in the spotlight during the pandemic, we believe their four-year growth indicates a much larger trend.

> " In a labor market that is more automated, digital, and dynamic, all citizens will benefit from having a set of foundational skills.
>
> **McKinsey & Company**
> Defining the skills citizens will need in the future world of work

Research from the McKinsey Global Institute finds that no matter the sector, occupation, or geographical region, every employee needs a foundational set of power skills that allow them to:

Add value beyond what can be done by automated systems and intelligent machines

Operate in a digital environment

Continually adapt to new ways of working and new technologies

What this means for your organization

Within the lens of power skills, leadership development is a clear priority for every organization. From the executive team to middle management to individual contributors, leadership development of some kind is an imperative for the workforce. As businesses continue to navigate the challenges from the pandemic, **strong leadership skills like those featured in this chapter are essential for leading change, spearheading strategy, motivating teams, and fostering belonging.**
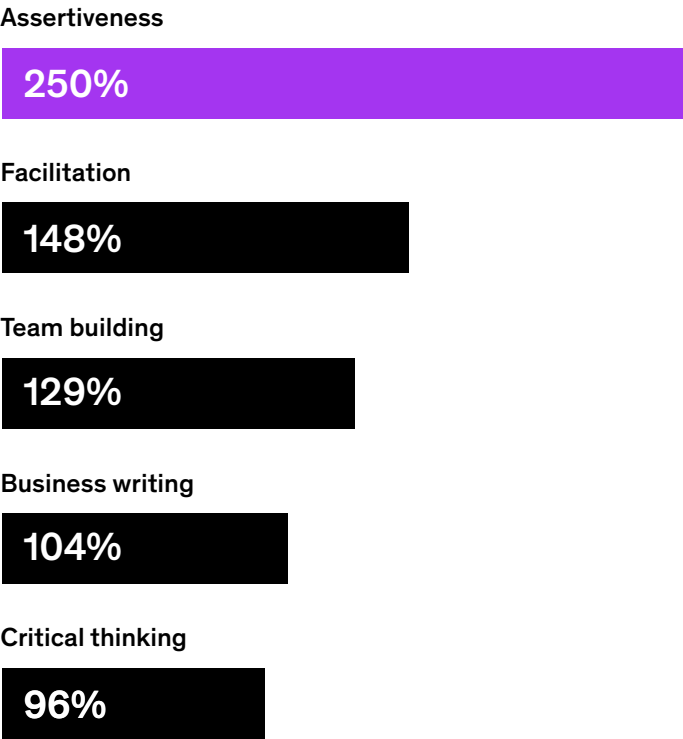
Communication & teamwork

The growth of remote work in 2020 introduced us to the ups and downs of video conferencing. And introduced the concept of **Zoom fatigue** — our brains get overwhelmed by staring at ourselves on screen all day. Whether in-person, virtual, or hybrid — however your workforce is currently collaborating — the fundamentals of communication and teamwork skills remain paramount.

INSIGHTS

Interest in the topic of team building had notable growth **(+129%)** over the past year, as teams looked to strengthen their relationships with each other. Four-year consumption of communication and teamwork shows a workforce adapting to global changes with topics like Microsoft Teams **(+760%)** and listening skills **(+530%)** seeing significant consumption increases.

Top 5 surging communication & teamwork skills, 2021

Assertiveness
250%

Facilitation
148%

Team building
129%

Business writing
104%

Critical thinking
96%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging communication & teamwork skills, 2017-2021

Microsoft Teams	760%
Assertiveness	602%
Listening skills	530%
Business writing	415%
Critical thinking	340%

Percentage consumption growth compared from 2017 to 2021

As the global footprint of many companies grows, employees are collaborating across time zones. The face-to-face experience of video calls is key for building these international relationships. Make the most of video meetings with these **simple tips** from **Udemy Confidence and Communication instructor, Alexa Fischer**.

DO
Be intentional about your energy. Your mood is contagious, even on camera. Listen to great music, be well-fed, and breathe deeply to put yourself into the best mindset before you begin your video call.

DON'T
Focus on yourself throughout the video call. If you find your mind wandering to inner chatter, pause and refocus your attention on the person speaking. Listening is a powerful way to make an incredible impression while giving you a break from thoughts that might be bringing you down.

Leadership & management

Leadership and management skills are for everyone — not just employees whose job title includes the word "manager." **Businesses that extend leadership training to all employees, regardless of managerial aspirations, are** [4.2x more likely to outperform](#) **those that don't in terms of revenue growth, operating margin, and return on equity.**

☰Q INSIGHTS

In the last four years, Udemy Business topics related to diversity and inclusion gained significant consumption growth as companies recognized that inclusivity needs to start at the top to see company-wide effects. **In the year-over-year view of topic consumption, diversity and inclusion again see growth as employees voice their need to leaders to work in an inclusive company.**

Top 5 surging leadership & management skills, 2021

Diversity and inclusion

205%

OKR

184%

Strategic thinking

119%

Problem solving

108%

Management coaching

108%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging leadership & management skills, 2017-2021

Strategic thinking	331%
Diversity and inclusion	324%
Mentoring	276%
Design thinking	208%
Problem solving	205%

Percentage consumption growth compared from 2017 to 2021

👁

Leaders, as role models of a business, are one of the most important puzzle pieces to building a more inclusive company. Alan Todd, founder of CorpU, [a Udemy company that offers cohort-based leadership development programs](#)**, explains how developing inclusivity skills in leaders affects the business:**

Diverse teams alone do not guarantee employees feel belonging and inclusion at work. For employees to feel engaged, empowered, accepted, and valued within their companies, leaders must go beyond surface gestures of diversity and build systems of inclusivity into how they lead. [Leadership training equips leaders to:](#)

1
Create a culture where employees feel they can bring their whole and unique selves to the workplace

2
Challenge the cultural misperceptions that can undermine diversity efforts

3
Develop strategies to define meaning at work and increase a team's sense of purpose in their work
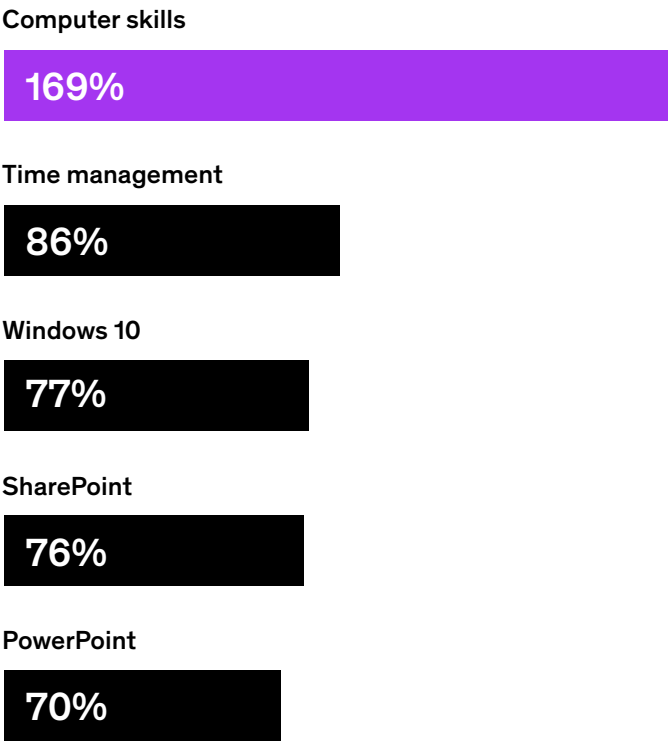
Productivity & collaboration

With many employees continuing to work from home (that includes approximately **70% of US white-collar employees**, as of May 2021) and the growth of global teams, productivity and collaboration has never been more important. To work efficiently and effectively, true collaboration with colleagues — wherever they are in the world — requires presenting ideas clearly. Tools like PowerPoint and Confluence are essential to help employees communicate and share their ideas. Courses related to "computer skills" share shortcuts and tips for making the most efficient use of computer work.

⊒ INSIGHTS

As we see in the four-year view and the year-over-year growth of topic consumption, **time management is a popular skill** that employees revisit when they feel their productivity lag.

Top 5 surging productivity & collaboration skills, 2021

Computer skills

169%

Time management

86%

Windows 10

77%

SharePoint

76%

PowerPoint

70%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging productivity & collaboration skills, 2017-2021

Computer skills	404%
Microsoft Word	272%
Time management	254%
PowerPoint	222%
Confluence	201%

Percentage consumption growth compared from 2017 to 2021

Managing a common time trap: email

The average employee professional checks their email **15 times a day** and spends **28% of the work day** checking or sending emails. But there's a better way to handle what can seem like an overwhelming task

How to take back your time and make email more productive:

1

'Process' email instead of 'checking' it. If you've opened it, deal with it (no marking as unread)

2

Batch-process email a few times a day (not 15+!); constant context switching decreases productivity

3

Do your most important work of the day BEFORE checking email (because once you're in there, you're stuck in reactive mode)

— Alexis Haselberger
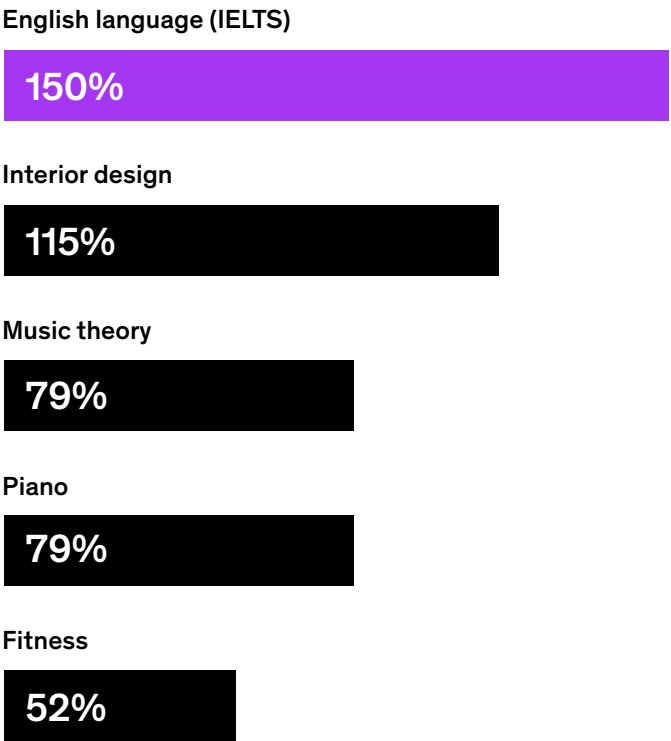**Udemy Time Management and Productivity Instructor**

Personal development & wellness

Well-being doesn't just happen during employees' off hours. Their personal and professional lives are interwoven. So much so, that employees now expect companies to **focus on worker well-being**, according to research by **Deloitte**. For L&D leaders, personal development and wellness means offering employees opportunities to learn subjects beyond their day-to-day job functions.

≡Q INSIGHTS

As part of a robust wellness program for employees, **ensure your online learning providers offer topics that enrich employees' minds during their personal time.** Helping employees stay active (note the continued growth in fitness-related courses in the most recent year and the last four years) and investing in hobbies (like interior design and piano) outside of work, ensures they return to their roles feeling refreshed and more productive.

Top 5 surging personal development & wellness skills, 2021

English language (IELTS)

150%

Interior design

115%

Music theory

79%

Piano

79%

Fitness

52%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging personal development & wellness skills, 2017-2021

Guitar	712%
Fitness	559%
English conversation	520%
Piano	380%
German language	362%

Percentage consumption growth compared from 2017 to 2021

Offering personal development and wellness programs can positively impact employees, and your bottom line:

Employees who participated in wellness programs regained an average of

10.3 HOURS

in productivity and saved companies an average of

$353 ANNUALLY

according to a study in the **Journal of Occupational and Environmental Medicine**.

Employers with wellness programs saw an ROI of

$3.27 PER DOLLAR

spent on the program, per **research from Harvard University**.

Tactical skills

Avoiding the Great Resignation through career investment.

Organizations are emerging from the pandemic crisis

As they do, executive teams are greeted with a set of new alarmist headlines — a **Great Resignation** among the workforce. While we'd like to write this off as clickbait, the numbers speak for themselves.

A **June 2021 PwC survey** found that **"nearly nine in 10 (88%) executives say their company is experiencing higher turnover than normal."** Buoyed by the growing acceptance of distributed workforces and a paradigm shift on work/life happiness, employees are making career changes they might not have imagined before the pandemic.

88% | Of executives say their company is experiencing higher turnover than normal.

To combat brain drain, employers must double down on the career development of all employees, not just those in fast-changing technical roles. For employees to stay with or join your organization, you must convince them that they'll have the opportunity to grow.

As job vacancies rise, leaders can't afford to lose the team members powering a company's financial decisions, marketing strategy, product design, and customer experience. Offering always-on learning channels is a win-win. Your company keeps the needle steady on talent retention, and employees develop a career path within your organization.

What this means for your organization

Just as all employees need power skills development, **every employee should be encouraged to develop the tactical skills that will help them excel in the day-to-day functions of their role**. The following topic categories aren't specific to employees that have these terms in their job title. Business intelligence skills are important for HR teams, just as design and finance best practices may be essential for marketing teams. Use the insights in this chapter to understand which tactical business topics are growing. Take time to analyze which ones make sense for your employees to add to their personal learning plans.
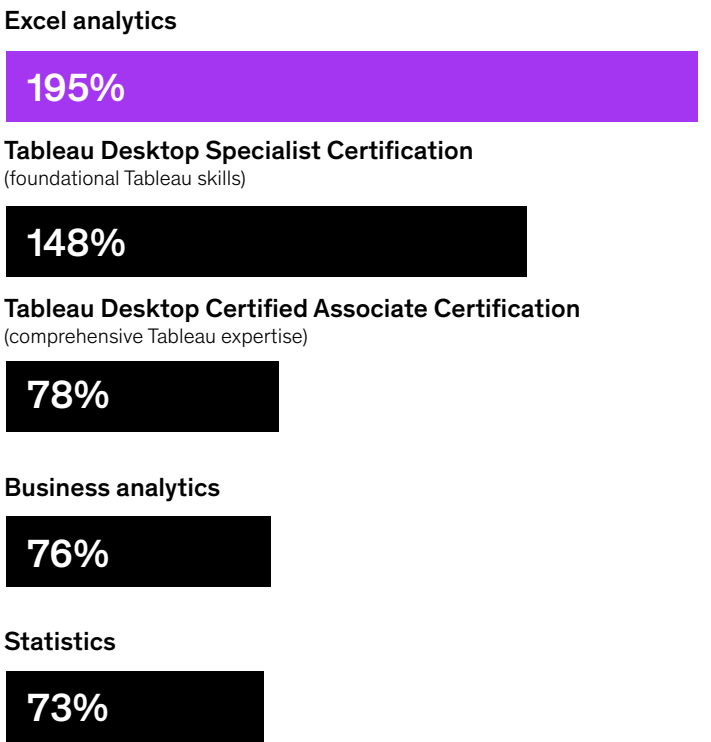
Business intelligence

Just as basic computer skills went from being highly specialized to required for everyone, data literacy has become the current language of business. But understanding data and its applications is an area where many companies are currently falling short. **Only 21% of employees** are confident in their data skills. Investment in business intelligence (BI) software that allows any employee to become data-driven is worthless if it's not accompanied by deliberate training on how to leverage the information provided by these tools.

In the last year, we've seen consumption of courses related to Tableau and data visualization software increase as organizations **grow their employees' data literacy**. Securing certifications in tools like Tableau validates employees' knowledge in the subject while offering career advancement opportunities.

≡Q INSIGHTS

Take note of the difference between "business analytics" and "business analysis" in the data below. Courses related to **business analysis**, which saw **150% growth** in hours consumed over the last four years, teach learners how to examine a company's business needs and determine solutions to improve business through suggestions like process improvements or organizational change. Courses on **business analytics**, which saw a **76% surge** in consumption hours this year, are data-focused, helping employees learn how to derive actionable insights from raw data.

Top 5 surging business intelligence skills, 2021

Excel analytics

195%

Tableau Desktop Specialist Certification
(foundational Tableau skills)

148%

Tableau Desktop Certified Associate Certification
(comprehensive Tableau expertise)

78%

Business analytics

76%

Statistics

73%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging business intelligence skills, 2017-2021

Excel VBA	194%
Excel	188%
Business analysis	150%
Splunk	150%
Business analytics	138%

Percentage consumption growth compared from 2017 to 2021

When prioritizing tools for 2022, add an appraisal of your company's current BI solutions to the list.

According to reporting from CIO

"ONLY

20-30%

of the data that could be used for analytics is currently being pulled into the average enterprise data warehouse." To use BI tools to their full potential, organizations need to invest in proper implementation, which could not only require onboarding a new vendor, but also additional employee training.
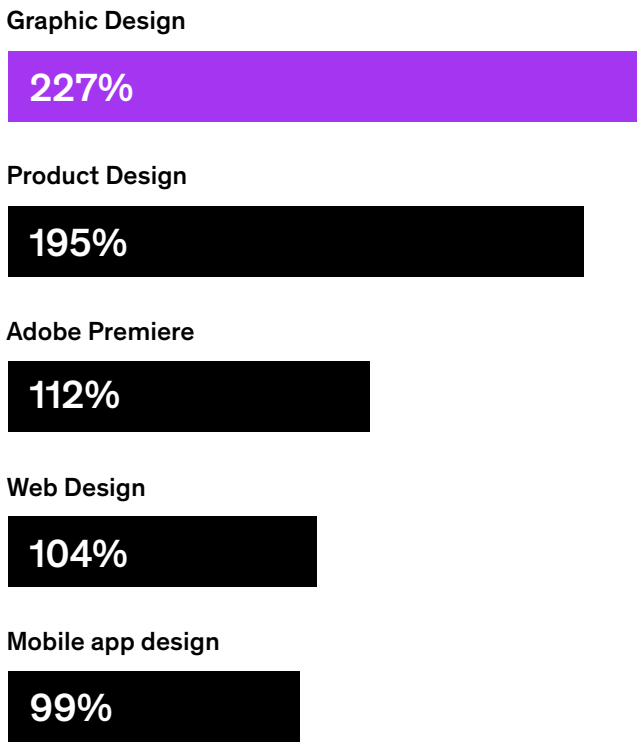
Design & UX

The first impression that customers have of your app, product, or website is long-lasting. If your brand's design lacks a cohesive visual story or your product's user experience (UX) isn't intuitive, the most skilled tech and marketing teams in the world can't help you retain users.

Today's design teams work across disciplines in user research, marketing, accessibility, and information architecture to create experiences that keep customers coming back.

≡Q **INSIGHTS**

It's worth noting that web accessibility **(+439%)** saw the biggest surge in consumption over the last four years. An accessible app or website ensures all your users, including those with disabilities, can access your information. **Web accessibility is now such an important part of information design, that it's become policy for many global government agencies.**

Top 5 surging design & UX skills, 2021

Graphic Design

227%

Product Design

195%

Adobe Premiere

112%

Web Design

104%

Mobile app design

99%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging design & UX skills, 2017-2021

Web accessibility	439%
User interface	395%
Adobe XD	318%
Design theory	297%
Product design	254%

Percentage consumption growth compared from 2017 to 2021

"" Great UX design has the power to elevate a product or service from being merely functional to being truly essential. It transforms a product into something we simply cannot live or work without.

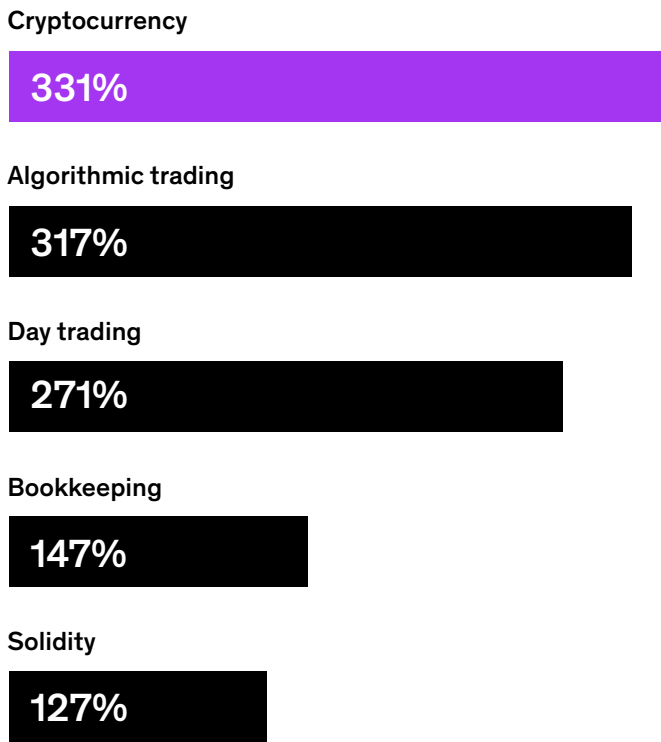**— Joe Natoli**
Udemy UX & UI instructor

Finance & accounting

From understanding the ramifications of your company's IPO to learning about the uses of cryptocurrency, workforce financial literacy goes far beyond the finance team. From 2020 to 2021, personal finance topics like cryptocurrency, Solidity (a programming language for blockchain platforms), and day trading saw the largest surge in consumption.

⬅Q INSIGHTS

Traditional finance topics like bookkeeping **(+552%)** and financial markets **(+263%)** saw steady growth over the last four years, showing that the foundations of finance remain important for organizations.

Top 5 surging finance skills, 2021

Cryptocurrency

331%

Algorithmic trading

317%

Day trading

271%

Bookkeeping

147%

Solidity

127%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging finance skills, 2017-2021

Stock trading	556%
Bookkeeping	552%
Technical analysis	343%
Financial markets	263%
Algorithmic trading	244%

Percentage consumption growth compared from 2017 to 2021

" "
Interest in cryptocurrency is growing because of its emergence on multiple fronts. Beyond trading coins like Bitcoin, it's also seeing growth thanks to the application of its underlying technology, such as blockchain and smart contracts. In the financial space, for example, blockchain technology is used to process financial transactions faster and more accurately than before.

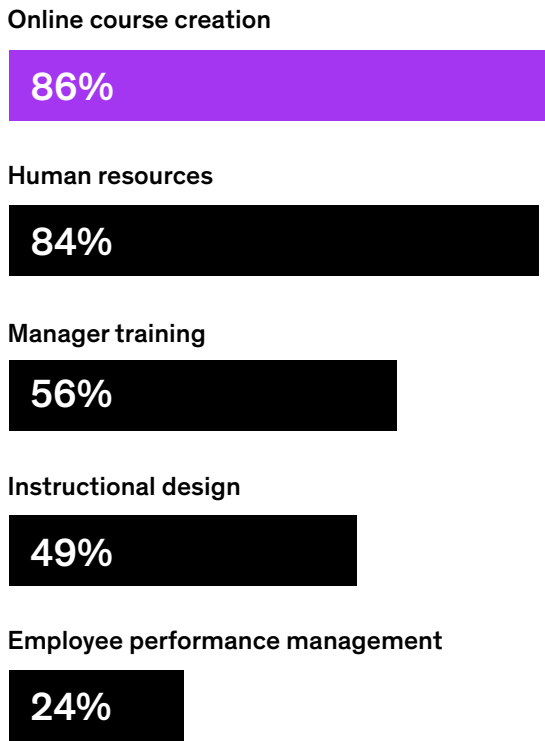**– Steve Ballinger**
Udemy finance and investing instructor

HR & talent development

"Previously tasked with compensation, compliance, and benefits," says **Cara Brennan Allamano**, SVP of People, Places, and Learning at Udemy, "today's HR functions are charged with supporting every aspect of the success and well-being of a company's greatest asset: its employees." While HR professionals are expanding their expertise, Udemy Business consumption shows they're continuing to prioritize key skills like compliance, health and safety, and HR analytics.

☰Q INSIGHTS

Our HR and talent development data highlight two trends. First, HR teams are focused on creating development content tailored to their company's needs and personalized for its workforce. We see this in the growth of **online course creation** and **instructional design** course consumption. The second trend reiterates a Chapter 1 assertion: Manager and leadership development is crucial to the health of a business. Hours spent on courses related to developing manager training programs **grew by 56% in the last year** and **104% since 2017.**

Top 5 surging HR & talent development skills, 2021

Online course creation

86%

Human resources

84%

Manager training

56%

Instructional design

49%

Employee performance management

24%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging HR & talent development skills, 2017-2021

Instructional design	182%
Online course creation	156%
Recruiting	145%
Human resources	112%
Manager training	104%

Percentage consumption growth compared from 2017 to 2021

Top HR certifications

Certifications — while not mandatory — are popular among HR professionals.

AT LEAST

34%

of HR professionals hold at least one certification.

Both the **Society for Human Resources Management (SHRM)** and the Human Resources Certification Institute (which offers the popular **PHR, Professional in Human Resources certification**) offer certification programs. Each type of certification requires a significant amount of time and dedication to studying, but the results seem to speak for themselves.

HR pros who have certifications see a

31%

pay boost to their salaries.

Marketing

While marketing skill sets have focused on the digital world for decades now, consumption trends of marketing topics on Udemy Business over the last four years provide an interesting snapshot of what's happening in digital marketing. The EU's GDPR (General Data Protection Regulation) marked a shift in how brands use consumer data. As consumers gain greater control over their digital data footprint, marketing teams are recalibrating their strategies and finding new ways to tie the results seen in marketing analytics to customer behavior.

☰Q **INSIGHTS**

It all comes down to the numbers when understanding the success of marketing activities. For example, digging into the Google Analytics numbers of a recent website update can paint a picture of how a customer interacted with the changes through their click journey on the site. These insights not only inform how the marketing team should proceed but can also be used by sales teams for guidance on messages that resonate with customers or by product teams to build a more intuitive user site experience.

Top 5 surging marketing skills, 2021

Marketing analytics

185%

Marketing strategy

119%

Content marketing

72%

Google Analytics Individual Qualification (IQ)

65%

Facebook ads

54%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging marketing skills, 2017-2021

YouTube marketing	285%
Business branding	264%
Google Analytics Individual Qualification (IQ)	256%
Marketing strategy	246%
Instagram marketing	206%

Percentage consumption growth compared from 2017 to 2021

👁

It's not just marketing teams using marketing analytics tools. Perhaps that's why the topic saw a

185%

increase in hours consumed in the last year.

Google Analytics proves itself a popular option within marketing analytics with courses related to Google Analytics Individual Qualification (IQ) surging

256%

in the last four years.

Project management

The increasing complexity of work projects — plus the challenges of working remotely — mean project management is an in-demand skill. Interest in efficiency-boosting tactics like Scrum and Agile has grown dramatically over the past four years. And it's not only technical teams that benefit from project management skills. Project management and operations knowledge is **useful across any industry**, from construction to health care to marketing.
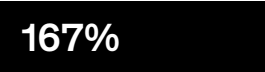
⧉Q INSIGHTS

Research from the **Project Management Institute** estimates that **25 million new project managers will be needed by 2030** to meet global talent demand. Without a project management strategy, teams are exposed to unclear goals, high risks, and the likelihood a project goes over budget. Employers can avoid a future shortage of project management talent by upskilling current employees.

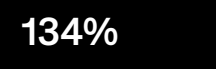**Top 5 surging project management skills, 2021**

PSPO (Professional Scrum Product Owner) certification
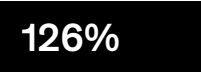
| 419% |

PSM (Professional Scrum Master) certification

| 167% |

Quality management

| 134% |

PMI (Project Management Institute) certification

| 128% |

PMP (Project Management Professional) certification

| 126% |

Percentage consumption growth compared from 2020 to 2021

Top 5 surging project management skills, 2017-2021

Scrum	250%
BPM (Business Process Management)	238%
Project risk management	208%
Lean	189%
Quality management	180%

Percentage consumption growth compared from 2017 to 2021

❝❞
In addition to managing project complexities, active listening is a key project management skill. It's the act of keeping engaged while talking with someone, so you truly absorb what they have to say. The role of a project manager is often to ensure that you communicate effectively with all involved parties. You must always be actively listening; you cannot be waiting for your turn to talk.

–Joseph Phillips
Udemy project management instructor

Sales & customer experience

Sales and customer success teams evolved quickly in the last year to effectively manage customer relationships that became remote-first. For employees accustomed to in-person conversations, this shift provided breathing room to develop skills that helped them understand their customers more.

Persuasion and negotiation are key skills when it comes to influencing someone to buy a product. These skills are always in demand and need regular refinement.

INSIGHTS

As customers and the competitive market shifts, customer-facing employees should expect to adapt their style of persuasion and negotiation as well. That may be why consumption of courses related to persuasion are up **382% in the last four years** and hours consumed of negotiation courses are up **151% in the last four years**.

Top 5 surging sales & customer experience skills, 2021

Persuasion

78%

Negotiation

67%

B2B Sales

27%

Customer success management

25%

Sales skills

6%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging sales & customer experience skills, 2017-2021

Persuasion	382%
B2B Sales	224%
Negotiation	151%
Sales skills	141%
Customer success management	133%

Percentage consumption growth compared from 2017 to 2021

" "

Relationships matter. It's what makes or breaks trust and loyalty between customers and a company. Active listening, empathy, and curiosity are key skills for sales and customer experience teams to 'unrobot' their relationships with customers and build meaningful connections.

–Jenny Dempsey
Udemy Customer Experience instructor

Technical skills

Tech strategy is business strategy.

More companies are implementing cloud computing solutions

And as they do, technical teams unlock new capabilities in productivity and speed to market. As a result, an organization's business strategy and technology strategy are no longer separate entities. The technology decisions of today are key to sustaining a long-lasting competitive edge in the future.

Companies must ensure that technical leaders have a seat at the table when business decisions are made. In a **Deloitte–Wall Street Journal Intelligence survey**, **40% of CEOs** said their CIO or tech leader will be the key driver of business strategy.

40% | Of CEOs said their CIO or tech leader will be the key driver of business strategy.

So with the growing focus on technical strategy, how should leaders focus their tech talent's ongoing learning?

We looked at course consumption growth across all technical Udemy Business courses to help you understand which skills to emphasize in training programs for the year ahead. We also took a look back to see which skills have been on an upward trajectory for the last four years.

What this means for your organization

The skills required for technical roles are no longer exclusive to the job titles for which they're traditionally associated. As companies incorporate some cloud solutions into their infrastructure, most tech employees will require some familiarity with cloud computing technologies. Similarly, DevOps processes for product development offer tech teams greater productivity and are a key factor for the overlap in skills required for roles like developers, cybersecurity specialists, or information architects. **To keep their teams agile, tech team leaders should consider how the skills mentioned in this chapter align with their organization's business priorities, and make learning plans to develop those skills in employees, regardless of their official job title.**
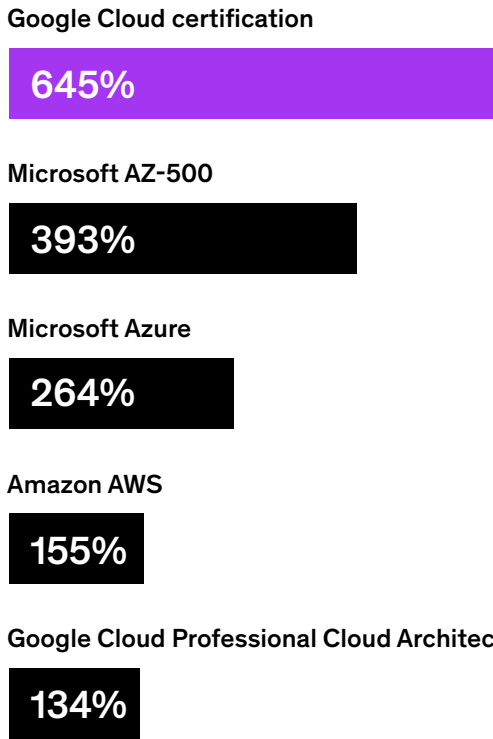
Cloud computing

Similar to web development, many technical workers need to be familiar with cloud computing tools and processes. From cybersecurity specialists to data scientists, cloud computing knowledge helps cross-functional technical teams work efficiently and within an agile process that ships products quickly.

INSIGHTS

In addition to the top surging cloud computing topics shown on this page, let's take a look at the cloud computing topics that saw overall most consumption in the last year. In order of most hours consumed, Udemy Business learners prioritized courses related to the following: Microsoft Azure certification, Amazon AWS certification, and Google Cloud certification. This is in line with industry trends that see **Amazon and Microsoft dominating the cloud infrastructure market**.

Top 5 surging cloud computing skills, 2021

Google Cloud certification

645%

Microsoft AZ-500

393%

Microsoft Azure

264%

Amazon AWS

155%

Google Cloud Professional Cloud Architect

134%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging cloud computing skills, 2017-2021

Google Cloud	**796%**
Microsoft Azure	251%
AWS Lambda	202%
AWS CloudFormation	174%
Amazon AWS	158%

Percentage consumption growth compared from 2017 to 2021

" "

I've witnessed firsthand that businesses are accelerating their cloud journey during the pandemic. Many enterprises are going beyond the leaders – AWS and Azure – and adopting Google Cloud. For those just starting their Google Cloud journey, certifications are a great place to begin.

— Ranga Karanam
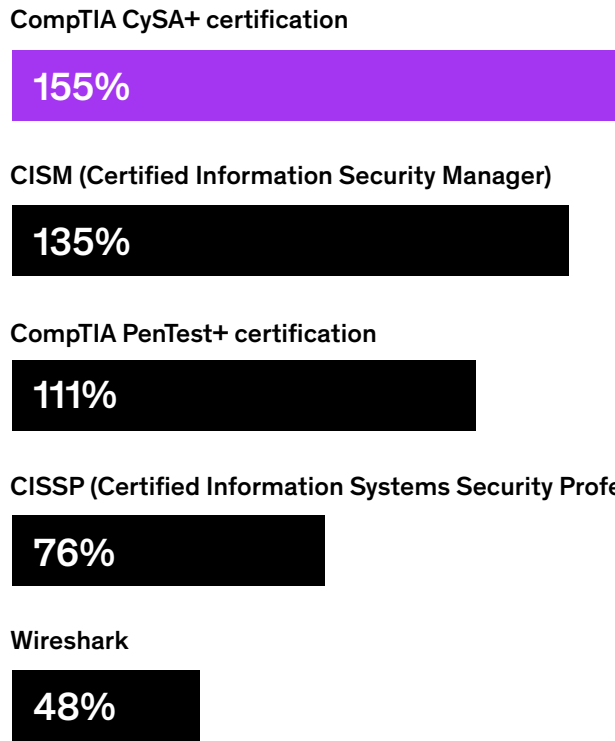Azure, AWS, and GCP Certifications Instructor

Cybersecurity

With cyber crime becoming ever-more sophisticated and widespread — and cybersecurity class-action lawsuits and settlements in the **hundreds of millions of dollars** — companies can quite literally not afford to ignore the security of their IT networks. Cybersecurity and corporate infrastructure are especially critical concerns as employees working away from their office networks or on personal devices increase the risk of hackers infiltrating a seemingly secure system.

≡Q INSIGHTS

Wondering where to start your team's cybersecurity upskilling?

CompTIA, an IT trade association, offers the **Security+ Certification**, which is a vendor-neutral security accreditation considered a foundational security certification. The exam covers identity and access management, installation and configuration of secure network components, secure network architecture, encryption and cryptography best practices, threat detection, and more skills fundamental to cybersecurity roles.

Top 5 surging cybersecurity skills, 2021

CompTIA CySA+ certification

155%

CISM (Certified Information Security Manager)

135%

CompTIA PenTest+ certification

111%

CISSP (Certified Information Systems Security Professional)

76%

Wireshark

48%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging cybersecurity skills, 2017-2021

CompTIA CySA+ certification	275%
CompTIA Security+ certification	243%
Kali Linux	157%
Network security	149%
Ethical hacking	138%

Percentage consumption growth compared from 2017 to 2021

Demand for cybersecurity skills currently **outpaces the supply of qualified cybersecurity** talent, according to research from the Information Systems Security Association (ISSA). To address this skills gap, companies must look inward and train existing employees in the skills required to address security risks. Topics related to popular cybersecurity certifications have seen notable growth on Udemy Business with courses related to the CompTIA CySA+ certification growing **155% in the last year**. We can also see how cybersecurity training became an important priority to companies since 2017 as network security **(+149%)** and ethical hacking **(138%)** noted growing learner consumption.
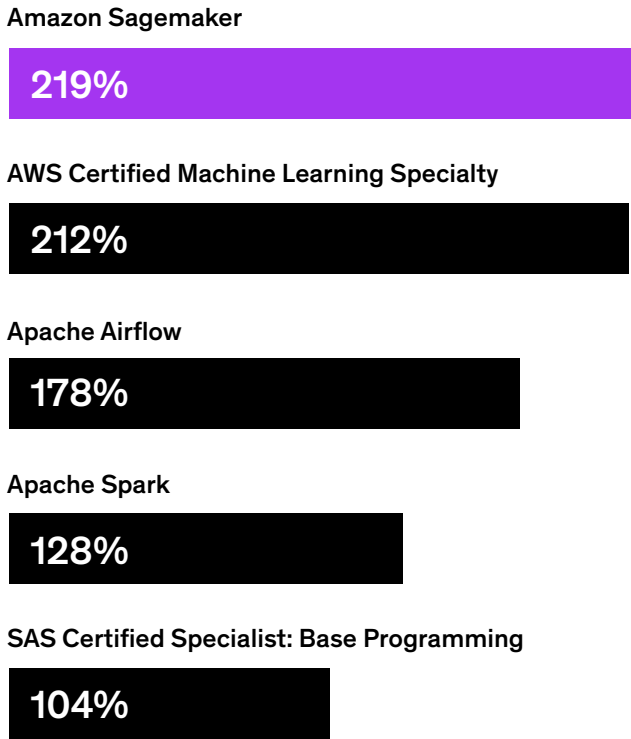
Data science

With the democratization of data across organizations, which **we spoke of last year**, data science teams are increasingly working with cross-functional technical teams on complex data initiatives. Data teams are evolving to build the data architecture for customer products and internal systems that use machine learning capabilities and AI-powered analytics.

☰Q **INSIGHTS**

Data science team roles now include highly-skilled data engineers and machine learning engineers, who have complex data analysis skills along with some engineering. The four-year consumption growth of computer vision **(+254%)** and natural language processing **(+195%)** highlight the advancements data science teams are prioritizing.

Top 5 surging data science skills, 2021

Amazon Sagemaker

219%

AWS Certified Machine Learning Specialty

212%

Apache Airflow

178%

Apache Spark

128%

SAS Certified Specialist: Base Programming

104%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging data science skills, 2017-2021

Computer vision	254%
Pandas	202%
Natural language processing	195%
Artificial intelligence	171%
Elasticsearch	163%

Percentage consumption growth compared from 2017 to 2021

" "
Given the increasing importance of using data to make better and faster decisions, the ability to rapidly build infrastructure and architecture for data (data-engineer skills) is likely to become more of a bottleneck than the ability to generate insights (data-scientist skills).
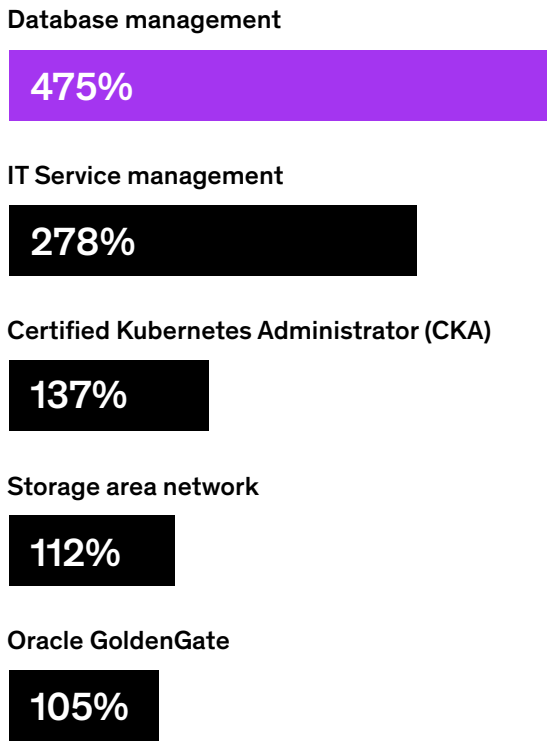
–McKinsey Digital

IT Operations

The IT teams of four years ago have few similarities to the IT teams of 2022 and beyond. As **Jason Johnson, CIO of music goods provider Sweetwater**, finds: "We used to think of software development as a primary skill, and it still is; however, it's rapidly becoming the basis for all IT jobs. Using standard APIs and Ansible (Python) to roll out configuration changes or leveraging cloud best practices that involve infrastructure as code using tools like Terraform. All of these skill sets require modern IT engineers to think and be software developers." Add the operations skills seen here and the growing development skills on the next page to your IT team's learning plans for the year ahead.

☰Q **INSIGHTS**

Operational skills like server administration (+398% consumption since 2017), database management (+475% consumption y/y), and computer networking (+202% consumption since 2017) continue to be important for IT specialists. But expect new topics like Kubernetes to grow in the IT industry as well; consumption of courses related to the **Certified Kubernetes Administrator credential grew by 842%** since 2017.

Top 5 surging IT operations skills, 2021

Database management

475%

IT Service management

278%

Certified Kubernetes Administrator (CKA)

137%

Storage area network

112%

Oracle GoldenGate

105%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging IT operations skills, 2017-2021

Certified Kubernetes Administrator (CKA)	842%
Server administration	398%
Cisco Nexus	379%
Computer network	202%
PowerShell	183%

Percentage consumption growth compared from 2017 to 2021

👁

Consumption of courses related to the Certified Kubernetes Administrator credential grew by **842%** since 2017.
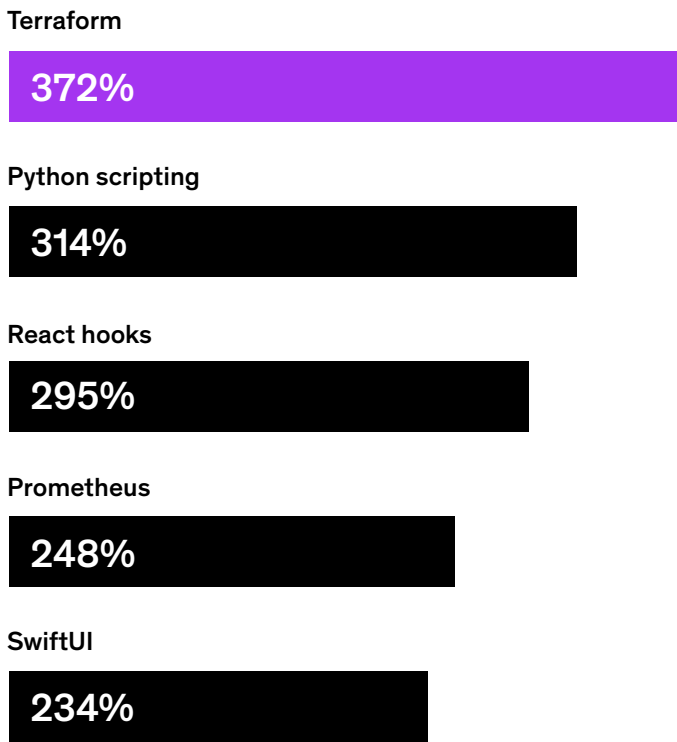
Software development

Coding experience is becoming a required skill in tech functions regardless of the job description. It's a trend helping teams bring products to market faster. "**Almost 60% of developers** are releasing code **2x faster** than before, thanks to DevOps," **according to GitLab's 2021 report, A Maturing DevSecOps Landscape**. "In a trend that we saw starting in 2020, developer roles continue to shift, taking on more responsibility for what were traditionally ops roles."

☰Q INSIGHTS

What does this mean for your organization?

It means extending skills and methods traditionally used by software engineers to entire technical teams. So embracing an agile methodology isn't just for the software development process, but should be key in your **approach to training development teams**. And finding time is always a factor. Encourage a learning culture with opportunities for developers to learn in the flow of work instead of waiting for an hours-long training seminar.

Top 5 surging software development skills, 2021

Terraform

372%

Python scripting

314%

React hooks

295%

Prometheus

248%

SwiftUI

234%

Percentage consumption growth compared from 2020 to 2021

Top 5 surging software development skills, 2017-2021

Google Flutter	966%
Terraform	224%
Open API specification	656%
Dart (programming language)	587%
Continuous delivery	574%

Percentage consumption growth compared from 2017 to 2021

👁

Software development's many hats

Udemy Business customer Synechron has always placed an emphasis on developing its talent. But in the last year the company embraced a growing trend and prioritized moving its web development teams away from specializations to holistic programming knowledge. Employees needed access to a breadth of technical training.

❝❞

Just having .NET or Java framework knowledge is no longer sufficient. We had to train employees to become full-stack developers, and acquire many other necessary modern skills.

–Varun Patil
Senior Manager of HR Development at Synechron

With the right skills, anything's possible

Regardless of whether your employee development plans focus on technical skills, tactical skills, or power (formerly known as soft skills) skills, an internal learning culture is your competitive edge. By building learning as an expectation into the flow of work, each member of the workforce is empowered to own their learning experience and unlock possibilities for themselves and the organization. **Imagine a world where employees discover skills gaps and address them proactively and immediately. Learning and applying new skills in this manner doesn't just keep employees engaged and motivated — it helps your company stay competitive and adapt to anything.**

Speak to our learning experts to discover proven methods for building a robust learning culture where employees eagerly learn, share information, and drive innovation across the company.

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ûdemy business

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METHODOLOGY

The 2022 Workplace Learning Trends Report is based on data from the learning behavior of thousands of global companies using the Udemy Business platform. All Udemy Business courses are associated with topics, with each course having up to five topics. These topics are what you see as the trending skill topics within the report. For courses with multiple topics, consumption minutes are divided equally across all topics associated with those courses.

Year-over-year topic data compares the consumption of courses in the Udemy Business collection from July 1, 2019–July 1, 2020, to July 1, 2020–July 1, 2021. The four-year topic data looks at the average year-over-year growth rates of course consumptions from July 1, 2017-July 1, 2021.