



**Executive Learning
EXCHANGE**
Leading Learning Innovations of the Future

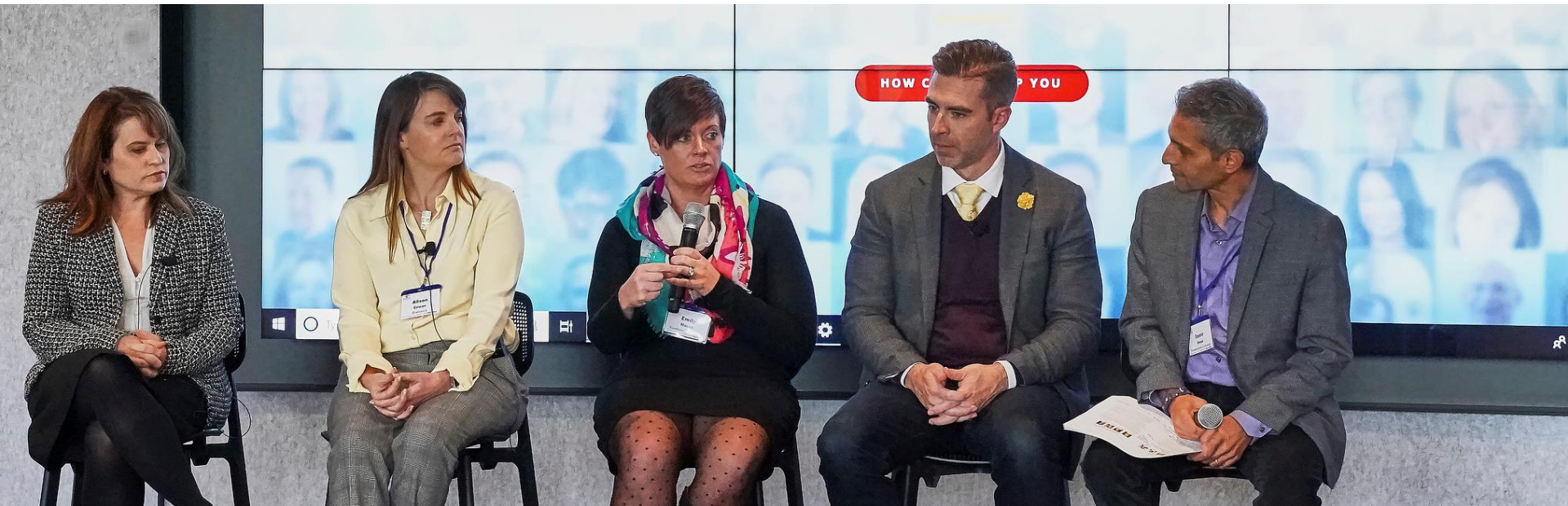
Chicago CLO/CTO Cohort

CNA Insurance

September, 15 2022



HELPING LEARNING LEADERS GROW



COMMUNITY

Connect with trusted learner leaders



GET FRESH IDEAS

NEXT practices, beyond best practices



COLLABORATE

You don't need to solve everything yourself



BUILD NEW SKILLS

Share experiences with your peers



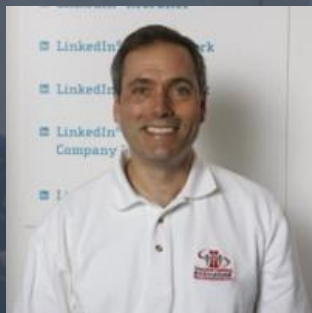
BUSINESS IMPACT

Create a future ready workforce



**Executive Learning
EXCHANGE**

Leading Learning Innovations of the Future



Dirk Tussing
ELE



Diego Frausto
Udemy



Bala Swaminathan
Cigna



Andrew Savikas
getAbstract

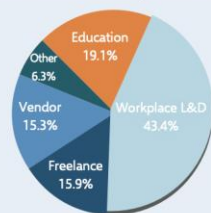
2022 L&D Global Sentiment Survey

- Collaboration between getAbstract and L&D Expert Don Taylor
- The L&D Global Sentiment Survey has run each year since 2014, with voters invited to participate via a combination of email and direct messaging. The 2022 survey ran for 61 days, from 8 December 2021 to 6 February 2022, with one obligatory question: ***“What will be hot in workplace L&D in 2022?”***
- In addition, respondents could answer two optional questions, one with a free text answer: ‘What is your biggest L&D challenge in 2022?’, and one multiple choice: ‘Which of these best describes where you do most of your work?’
- For a complimentary copy of the survey, email amy.cooper@getAbstract.com.

Who voted?



79% of voters chose to answer the optional question
'Which of these best describes where you do most of your work?'



Top 14 countries

In 14 countries, more than 90 people voted:

United Kingdom	775	Netherlands	133
United States	298	Spain	120
India	176	Germany	98
Brazil	164	Sweden	97
New Zealand	163	Poland	95
Australia	159	Nigeria	93
Israel	128	South Africa	92

Confidential

Key Results

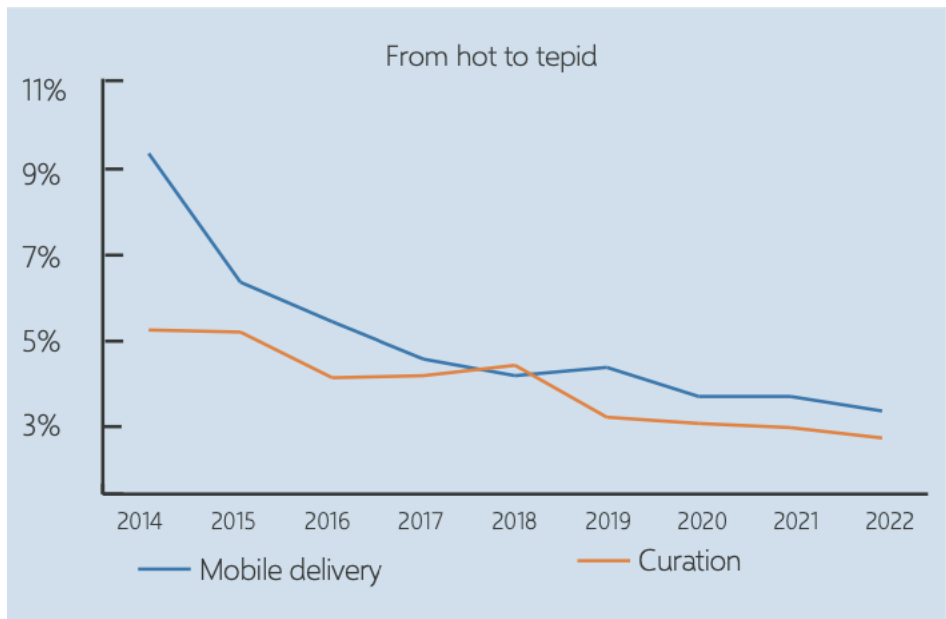
- Reskilling/upskilling stays #1
- Collaboration and Coaching on the rise
- Location Matters

GSS 2022		Δ%
1. Reskilling/upskilling (1)	12.5%	↔
2. Collaborative/social learning (2)	9.6%	↑
3. Personalization/adaptive delivery (4)	8.1%	↓
4. Coaching/mentoring (6)	7.6%	↑
5. Learning analytics (3)	7.3%	↓
6. Skills-based talent management (new)	7.2%	new
7. Micro learning (7)	6.9%	↔
8. Learning experience platforms (5)	6.7%	↓
9. Consulting more deeply with the business (9)	6.1%	↑
10. Showing value (8)	5.5%	↓
11. Performance support (10)	4.9%	↓
12. Artificial intelligence (12)	4.7%	↑
13. Virtual and augmented reality (13)	4.7%	↑
14. Mobile delivery (11)	4.0%	↓
15. Curation (14)	2.7%	↓
16. Other (16)	1.4%	↓
n = 3,518		
Figures in brackets show previous year's ranking		

Confidential

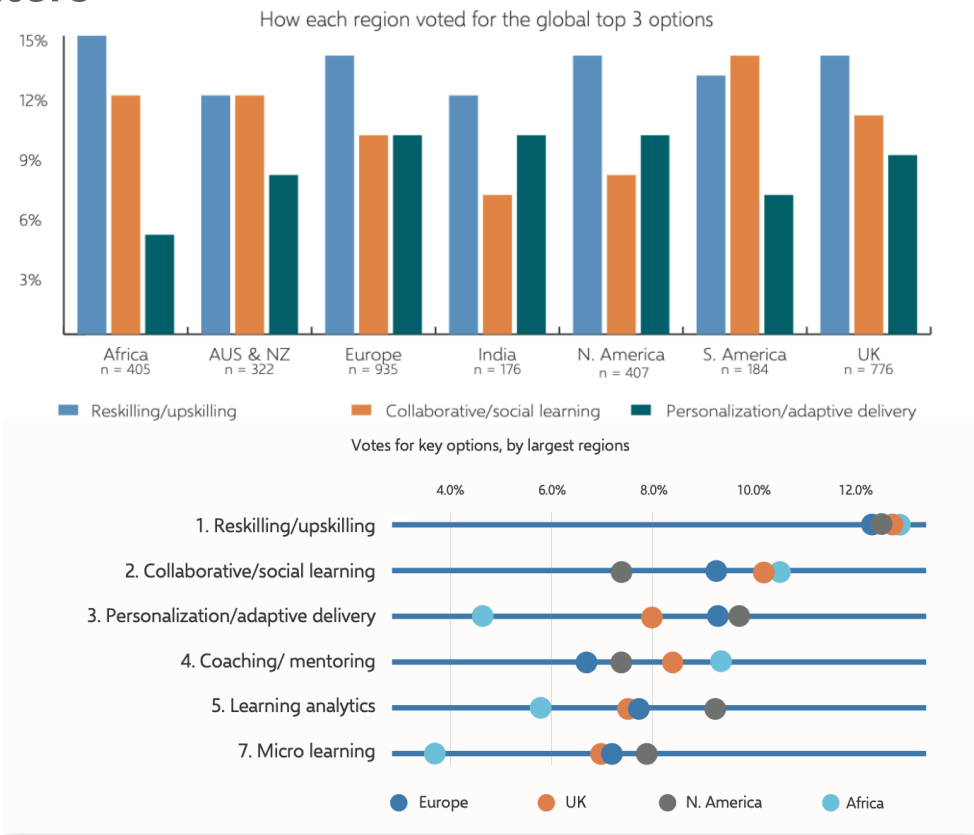
Opinions expressed are solely my

Ideas moving from “hot” to “in use”



Confidential

Geography Matters



Confidential

Three Predictions



[This Photo](#) by Unknown Author is licensed under [CC BY-ND](#)

1. Interest in Skills-based talent management will soar over the next two years and then falter and crash
2. Virtual reality will rally in 2022
3. Coaching/mentoring will continue to rally for the next year at least

Confidential

Opinions expressed are solely my

READ ME/DELETE ME

2022 Workplace Learning Trends Report

This is a discussion deck template for the annual workplace learning trends report. Build upon these slides in a standalone meeting or copy/paste them into another deck.

Ebook: [The 2022 Workplace Learning Trends Report](#)

Confidential



Udeemy business

2022 Workplace Learning Trends Report

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, Udemy Chief Learning Officer

9/10

Executives and managers say their organizations either face skill gaps already or expect them to develop within the next five years

Confidential

Welcome to the new era of power skills

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 power 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.

Confidential

“

Communication and presentation are 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

In this report, HR and L&D leaders will 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 learned this year, to shape your training program in 2022.

Confidential

Trends in Udemy Business learner data

Power skills

Formerly known as *soft skills*, power skills are essential capabilities for every member of the workforce, regardless of their role.

- Communication & teamwork
- Leadership & management
- Productivity & collaboration
- Personal development & wellness

Tactical skills

While not always essential to their primary roles, tactical skills help employees excel in their jobs.

- Business intelligence
- Design & UX
- Finance & accounting
- HR & talent development
- Marketing
- Project management
- Sales & customer experience

Technical skills

To maintain your company's competitive edge, ensure technical teams have access to the most in-demand skills.

- Cloud computing
- Cybersecurity
- Data science
- IT operations
- Software development

Confidential

Chapter 1

Power skills

Confidential



Build skills that can't be replaced by machines

There's nothing soft about power skills

Every employee needs foundational 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 realm of power skills, leadership development should be an important focus for organizations in the year ahead. Take note: leadership training isn't just for the executive team. Seasoned team leads, aspiring leaders, and individual contributors can all benefit from the empowerment of leadership development.

Build the trending power skills outlined here into your learning programs, but don't forget to give your employees time to recharge. Personal development and wellness practices are vital to helping employees disconnect from work and find new perspectives.

Confidential

Communication & teamwork

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

Make the most of video meetings (a form of communication that isn't going anywhere) with these tips:

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.

Alexa Fischer, Udemy Confidence & Communication instructor

Confidential

Avoiding the Great Resignation through career investment

What this means for your organization

To stem any coming 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.

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.

A large, bold, black graphic of the number 88 followed by a percentage sign (%). The numbers are in a serif font, and the percentage sign is a simple diagonal line with a circle at the end.

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

Confidential

Leadership & management

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

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:

- Create a culture where employees feel they can bring their whole and unique selves to the workplace.
- Challenge the cultural misperceptions that can undermine diversity efforts.
- Develop strategies to define meaning at work and increase a team's sense of purpose in their work.

Alan Todd, Founder of CorpU, a Udemy company

Confidential

Productivity & collaboration

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

The average employee checks their email 15 times a day and spends 28% of their day checking or sending emails. When email feels overwhelming, it's usually because we don't have a process for handling it.

How to help employees take back their time and make email more productive:

- 'Process' email instead of 'checking' it. If you've opened it, deal with it (no marking as unread)
- Batch-process email a few times a day (not 15+!); constant context switching decreases productivity
- 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 & productivity instructor

Confidential

Personal development & wellness

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 positively impact employees, and your bottom line:

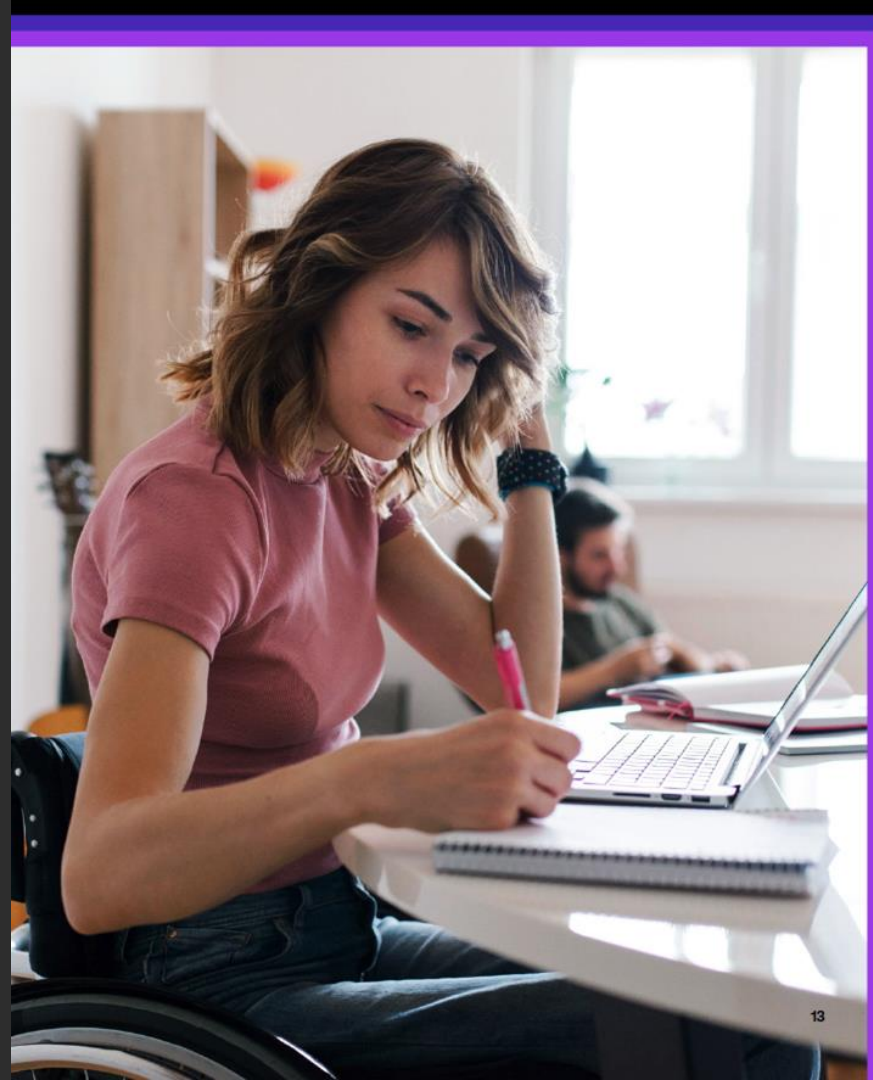
- **Employees who participated in wellness programs regained an average of 10.3 hours in productivity** and saved companies an average of \$353 annually, according to a study in the Journal of Occupational and Environmental Medicine.
- Employers will **wellness programs saw an ROI of \$3.27 per dollar spent** on the program, per research from Harvard University.

Confidential

Chapter 2

Tactical skills

Confidential



Business intelligence

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

Data democratization requires data tools training

- Only **21% of employees** are **confident** in their **data skills**
- Only **20-30% of the data** that could be used for analytics is actually pulled into the average enterprise data warehouse

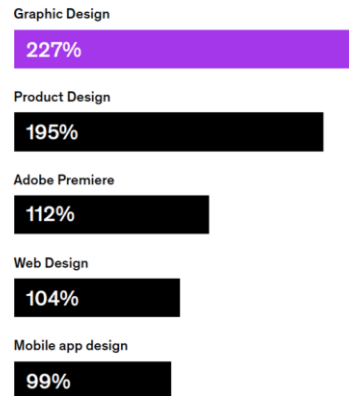
The solution?

- Investment in data literacy training, with topics like:
 - Tableau
 - Excel
 - Splunk
 - Statistics

Confidential

Design & UX

Top 5 surging design & UX skills,
2021



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 and UI instructor

Confidential

Finance & accounting

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

Confidential

HR & talent development

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

“

Previously tasked with compensation, compliance, and benefits, **today's HR functions** are charged with **supporting every aspect** of the success and well-being of a company's greatest asset: its employees.

Cara Brennan Allamano, SVP of People, Places, and Learning, Udemy

Confidential

Marketing

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

Marketing analytics expertise isn't just for marketing teams

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.

Confidential

Project management

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.’”

Confidential

Sales & customer experience

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.”

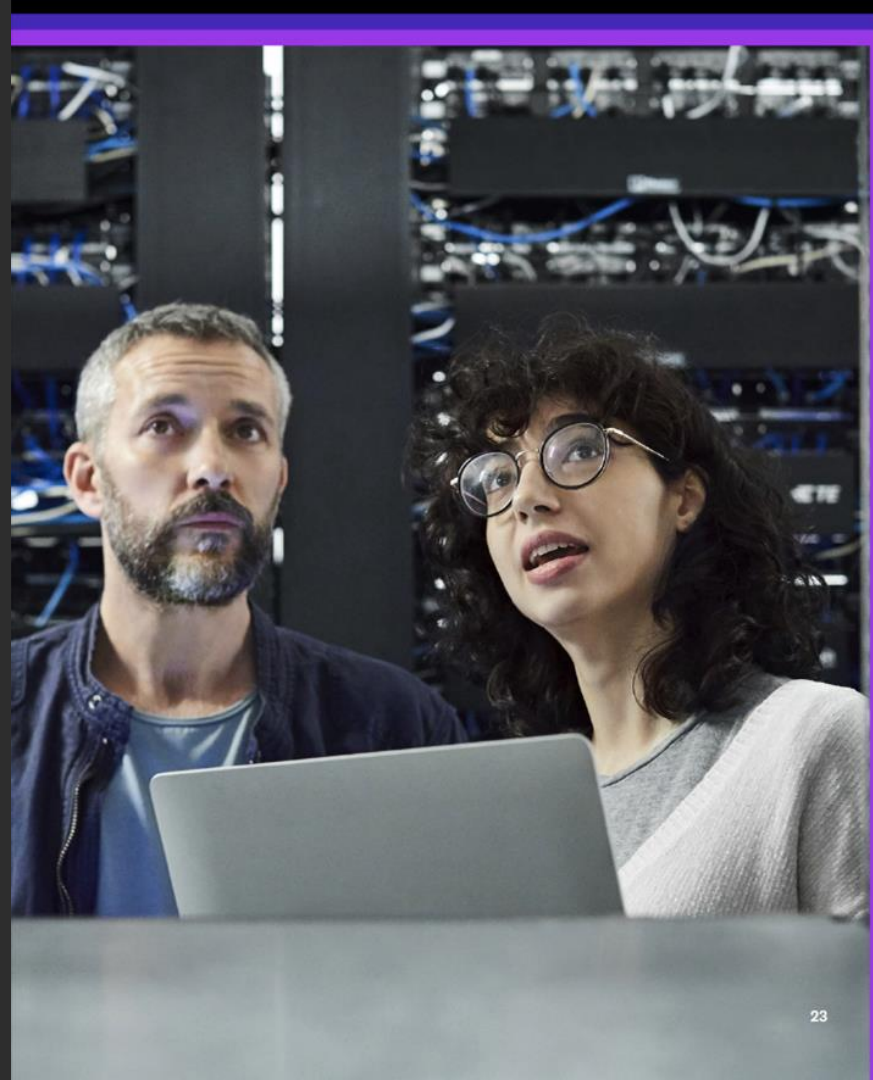
Jenny Dempsey, Udemy Customer Experience instructor

Confidential

Chapter 3

Technical skills

Confidential



Tech strategy is business strategy

What this means for your organization

As digital transformation solutions, such as cloud computing infrastructures, are implemented across more organizations, technical teams unlock new capabilities in productivity and speed to market.

An organization's business strategy and technology strategy are no longer separate entities. The technology decisions of tomorrow are key to sustaining a long-lasting competitive edge.

A large, bold, black graphic of the number 40 followed by a percentage sign (%). The numbers are in a serif font, and the percentage sign is a simple diagonal line with a circle at the top.

Of CEOs said their CIO or tech leader will be the key driver of business strategy, according to [Deloitte-Wall Street Journal Intelligence](#)

Confidential

Cloud computing

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, Udemy Azure, AWS, and GCP instructor

Confidential

Cybersecurity

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

Rising demand for cybersecurity skills

According to the [Information Systems Security Association \(ISSA\)](#), demand for cybersecurity skills currently outpaces the supply of qualified cybersecurity talent.

With 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.

Confidential

Data science

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

“

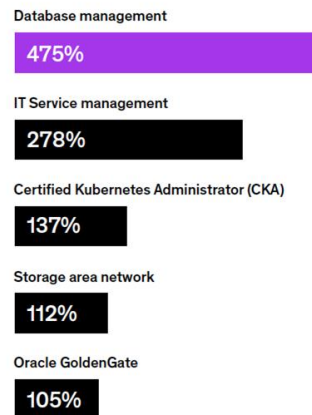
Given the increasing importance of using data to make better and faster decisions, the ability to rapidly build infrastructure and architecture for data (data-engineer skills) is likely to become more of a bottleneck than the ability to generate insights (data-scientist skills).

McKinsey

Confidential

IT operations

Top 5 surging IT operations skills,
2021



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

The many skills of IT Ops teams

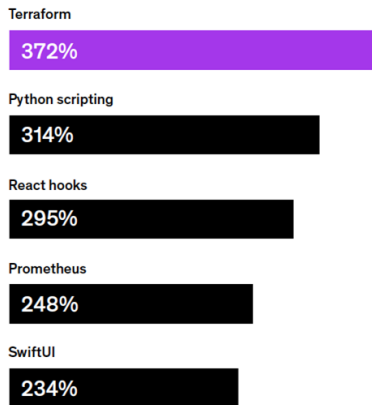
Operational skills like server administration (+398% consumption since 2017), database management (+475% consumption y/y), and computer networking (+202% consumption since 2017) continue to be important for IT specialists.

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.

Confidential

Software development

Top 5 surging software development skills, 2021



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

Udemy Business customer Synchrotron 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.**

“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.”

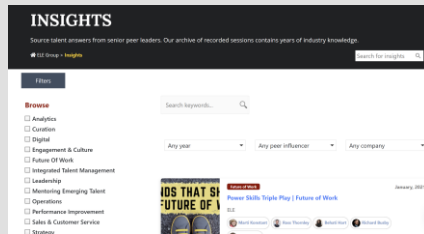
Varun Patil, Senior Manager of HR Development at Synchrotron

Confidential

Your questions

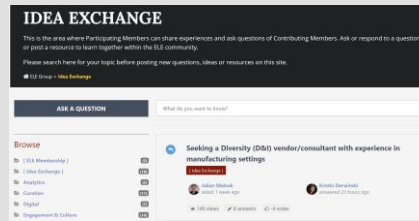
Confidential

Be sure to check out these resources on the [ELE website](#):



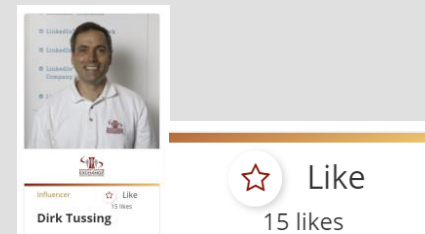
INSIGHTS

Recordings, slides and group chat are posted and archived on Insights.



IDEA EXCHANGE

Area where participating members can share experiences, post a resource and ask or respond to questions.



LIKE

Liked a presenter? Check out their ELE profile and hit the Like button.

Opinions expressed are solely my own and do not express the views or opinions of my employer

An i4cp Guidebook

Creating a Skills Database



Creating a Skills Database

Few things are more important in business than having a workforce equipped with the skills and capabilities to perform the work that needs to be done, when and where it's needed most—now and in the future. This is **workforce readiness** at its core.

Sadly, the current state of workforce readiness worldwide is dismal.

Data collected in June 2021 by the Institute for Corporate Productivity (i4cp) from more than 1,300 HR and business executives across 80 countries make it clear: **most organizations don't know the skills and capabilities of their workforces, what they will need in the next one-to-three years, or how to effectively bridge any gaps.**



About this Guidebook

Does your organization's workforce have the skills and capabilities needed now and for the future? How would you know?

This guidebook focuses on one foundational element of accelerating workforce readiness: **developing, maintaining, and leveraging a skills database.**

As you will see, the benefits of such a platform and its data are many; there are also considerations and best practices to follow along the way.

To start, embarking on a skills-centric journey takes planning.

Both the current and future state of skills in the organization should be assessed. The value proposition for employees needs to be established and kept front and center, even while the needs of managers, leaders, and the organization are also pursued.

There will be technology decisions to make, and a lot of mindset shifts as processes and people evolve to leverage skills information more than they may ever have before.

Table of Contents:

Part 1: Skills Databases:
The Current State

Part 2: The Goals and Benefits of
Having a Skills Database

Part 3: Skills in Context: Jobs,
Roles, Capabilities,
and Competencies

Part 4: How to Build a Skills Database

Part 5: Challenges, Culture,
and Other Considerations

Part 6: Case Examples, Summary,
and Additional Resources



PART 1

Skills Databases: The Current State

Skills Databases: The Current State

Few believe their organizations are ready.

i4cp's *Accelerating Workforce Readiness* study found that **only 30%** of participants believe that their organizations' workforce **currently has the skills necessary to advance strategy over the next 1-3 years**.

This belief was over **2x** higher among those from high-performance organizations.

Organizations reporting that they have the skills necessary to advance strategy over the next 1-3 years



Organizations with 1,000+ employees. Source: Institute for Corporate Productivity (i4cp).

Definitions:

MARKET PERFORMANCE INDEX (MPI)[®]

This i4cp index defines high-performance organizations based on self-reported multi-year performance in revenue growth, profitability, market share, and customer satisfaction.

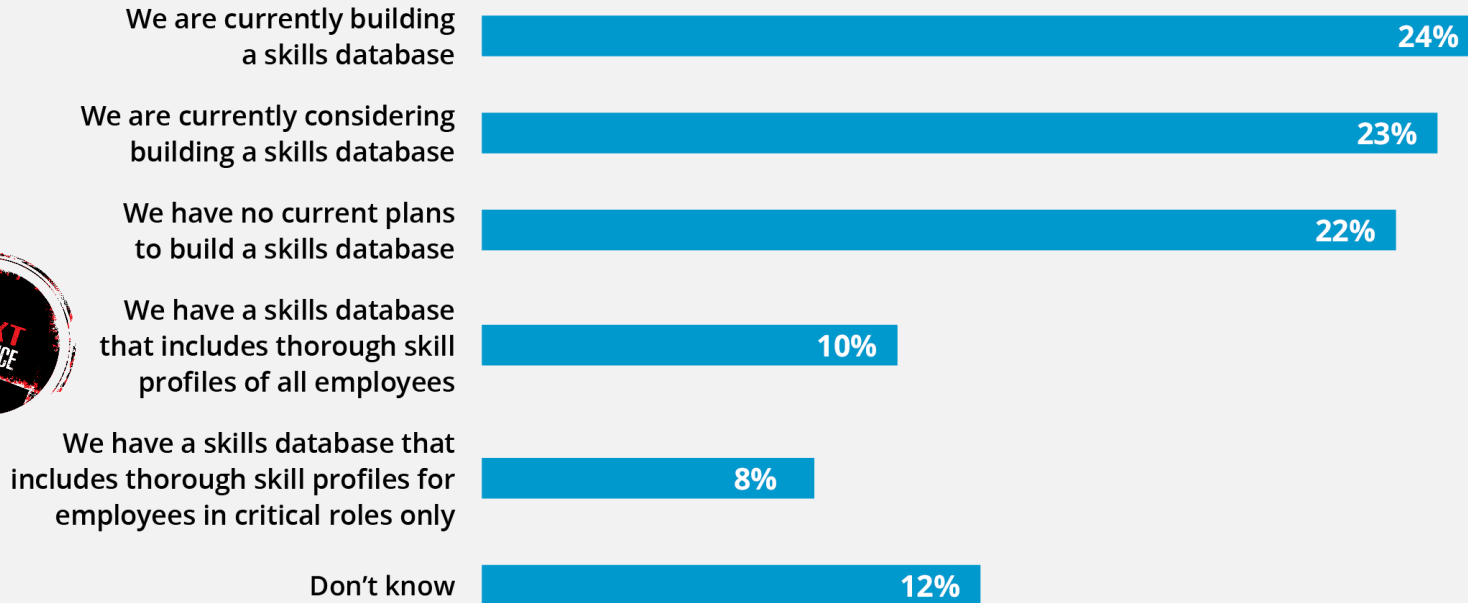
NEXT PRACTICE

i4cp defines a **next practice** as one that our analysis finds is highly correlated to market performance, but not yet widely adopted.

Skills Databases: The Current State

Few organizations have a skills database.

Which best describes your organization's current status in building an internal skills database?



Organizations with 1,000+ employees. Source: Institute for Corporate Productivity (i4cp).

Lack of confidence in the current state of workforce skills among survey participants is not surprising given how relatively few reported that their organizations currently have a skills database—not even one that covers critical roles, let alone one that covers all employees.



Skills Databases: The Current State

Lack of knowledge of the skills of the organizations' workforce is considered a primary barrier to workforce readiness.

53% of those surveyed said that **insufficient data** about the current skills and capabilities of the workforce is a major barrier.

47% said that **lack of clarity** about the skills and capabilities that will be most important going forward is a major barrier.

Strikingly, many survey participants (**27%**) said that **LinkedIn knows more** about their workforces than their organization does.



Skills Databases: The Current State

What's new about skills? Why focus on this now?

Technology, data-driven processes, and a holistic approach:

- **The emergence of artificial intelligence (AI)** to help identify skills from existing data, and match skills to jobs, roles, gigs, projects, learning opportunities, and more.
- **Better user interfaces and a more data-driven approach** to identifying and tracking skills in a more personalized way that employees will find meaningful and helpful in their work and careers.
- **New use cases** (e.g., talent and opportunity marketplaces that can match employees and their skills with projects, gigs, and full-time jobs and roles).
- **An emphasis on broader corporate needs** such as greater transparency, improved inclusion/diversity when it comes to hiring, talent mobility, employee development, and more.





PART 2

The Goals and Benefits of Having a Skills Database

The **Goals and Benefits** of Having a Skills Database (1 of 3)



There are many benefits to creating, maintaining, and using a skills database. Which are most important for your organization? Getting clear on your **purpose and goals** is the key first step in the process of creating and using a skills database.

Benefits for learning and careers:

- **Talent mobility.** It enables an internal talent marketplace to match people with jobs, roles, gigs, and projects.
- **Career pathing.** Connecting current skills, skill gaps, learning opportunities, and jobs/roles clarifies the career paths open to each employee. This in turn increases engagement and reduces the inclination to look for opportunities outside of the organization. With skills as the common foundation, learning and career-building become democratized for all employees.
- **L&D prioritization.** Identifying current skills and skill gaps makes clear to leaders and L&D professionals where to dedicate scarce development time and money for optimal impact.
- **Supporting a learning culture.** With skills at the forefront, employees are more likely to have a learn-it-all mindset—a key aspect of a strong learning culture. Identifying those who are experts in each skill area also makes it clear who those less experienced can go to for learning and coaching. Robust skills data also allows for greater learning personalization.
- **Employee branding.** Employees can more explicitly and consistently showcase what they know and can do, developing a personal brand for future internal opportunities and projects.
- **Knowledge transfer.** Especially relevant for employers that have those in key roles nearing retirement, but also important generally because employees can leave at any time. Having a skills database enables organizations to better capture and transfer critical knowledge that both grows employees' skills and protects the organization against the loss of essential capabilities.



LUKAS JAKUBICKA

Associate Director,
Talent Architecture and
HR Tech Transformation



"Skills are playing a big role in personalizing learning experiences for employees and making their investment in learning much more focused and outcome-based."

The **Goals and Benefits** of Having a Skills Database (2 of 3)



The rewards of having a robust skills database are far-reaching—**benefitting employees and employers alike.**

Benefits for talent intelligence:

- **Improve automation decisions.** Knowing the skills of employees, in addition to what tasks are automatable, informs decisions around job augmentation vs. elimination.
- **Leverage hidden talents.** Knowing employees' skills means the organization can tap otherwise hidden capabilities for projects and tasks when and where needed.
- **Increase business agility.** It is all about data leading to insights leading to action: the organization can quickly pivot and redeploy skilled talent when urgent needs arise.
- **Competitive intel.** Leaders (and investors and others) need to know whether employees' current skills are a competitive advantage or disadvantage for the organization.
- **Strategy and workforce planning.** Knowing the skill gaps in the organization informs talent build vs. buy decisions, and allows for better targeting of top-10 enterprise skills, digital transformation skills, industry trending skills, etc.



KIMBERLY ROSE

Head of People Experience,
Analytics and Digital Innovation



“Looking around the corner to anticipate the skills of the future and bringing this into your skills strategy and talent marketplace will unequivocally set a company apart from the competition. Also, having line of sight to redeploy a particular skill across programs enables an organization to be agile in pivoting work and priorities in times of change.”

The **Goals and Benefits** of Having a Skills Database (3 of 3)



In addition to the benefits for employees and the organization's talent intelligence capabilities, various talent processes will evolve and mature once a skills database is introduced.

Benefits for evolving and maturing the organization:

- **Consistency of skills information.** Centralizing disparate skills data provides a common language, and a common unit of measurement and currency enterprisewide.
- **Evolve talent acquisition.** TA can be reframed from degrees and past experiences to a focus on the work to be done and future potential via demonstrable skills and learning agility. This shifts the focus away from "jobs" by searching first for existing employees with the necessary skills.
- **Employee value proposition.** A skills-centric culture and skills-development mindset can be key elements of a strong employee value proposition and talent attraction/retention strategy.
- **Support DE&I goals.** By relying less on degrees and other proxies for capability, organizations can better meet various diversity and inclusion goals. Managers can staff projects and teams beyond who they know already with increased transparency of available opportunities. With skills as the common foundation, learning can be democratized for all employees.
- **Evolve total rewards.** Compensation can to some degree be reframed from job requirements/qualifications towards skills-based pay centered on skills needed for current and future work.
- **Evolve performance management.** Employees can be more consistently recognized for contributing to strategic growth of the organization through their identified skills and deep expertise. This in turn can lead to more evidence-based approach to promotion, leadership opportunities, and bonuses.

Harvard Business Review

Skills-Based Hiring Is on the Rise

by Joseph Fuller, Christina Langer, and Matt Sigelman

February 11, 2022



As noted, talent acquisition can faster evolve by taking a more skills-centric approach. **Doing so reduces reliance on degrees as a proxy for skills and likely performance on the job.**

As reported in *Harvard Business Review*, an analysis of 51 million job postings from 2017-2020 found that there has been a reduction in degree requirements for a wide variety of roles. Not surprisingly, this was most noticeable for middle-skill positions—defined as those requiring some post-secondary education or training but less than a four-year degree.

This change was triggered as the result of increased difficulty filling IT and managerial occupations during 2017-19; loosening requirements eased that burden. Another wave of change began in 2020 driven by the COVID-19 pandemic, as employers were under pressure to hire or replace workers in many roles.

That said, the change has been uneven across organizations. The researchers found that for the job of software quality-assurance engineer, “only 26% of Accenture’s postings for the position contained a degree requirement. Likewise, only 29% of IBM’s did. But the percentages were dramatically different at Oracle (100%), Intel (94%), HP (92%), and Apple (90%).”



PART 3

Skills in Context: Jobs, Roles, Capabilities, and Competencies

Skills in Context: Jobs, Roles, Capabilities, and Competencies



What are skills?

A **skill**, in short, is the ability to perform an activity.

Skills often leverage **attributes**, the inherent characteristics people have, and **knowledge**, the understanding of facts, concepts, principles, etc., they have acquired.

Skills can be learned via **training** and **experience**, and can be improved by **practice**.

Some skills are **binary** (you can either do something or you can't) but others have **levels of proficiency and expertise**.

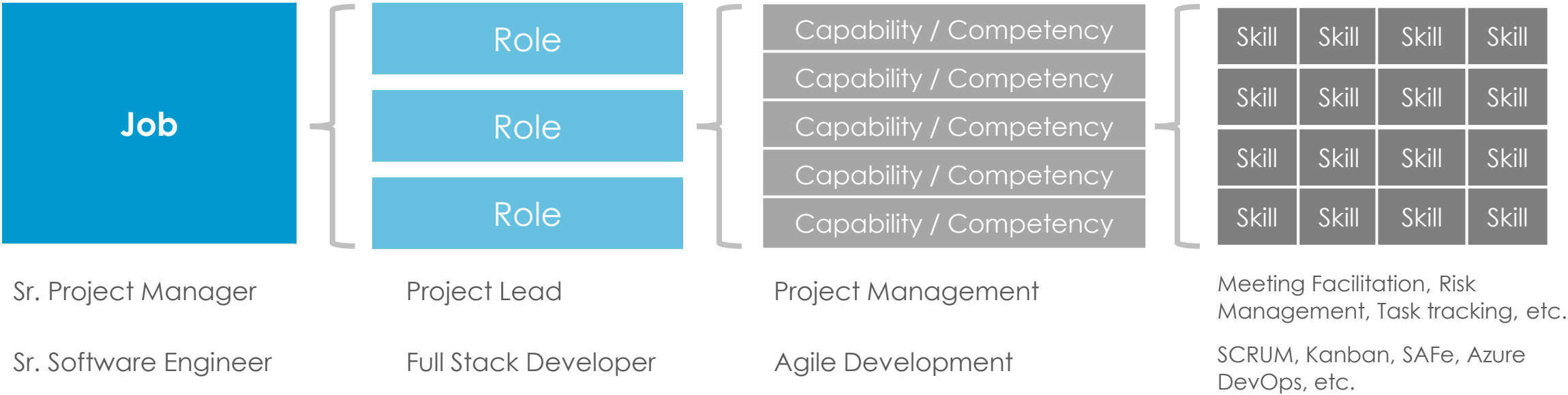
There are various **types** of skills, with common categories being:

- physical, mental, interpersonal
- hard/technical vs. soft/power

Connecting **jobs**, **roles**, **capabilities**, **competencies**, and **skills**

Careers have traditionally been viewed in discrete units called jobs. Many jobs involve a person performing one or more roles in the organization. Jobs and roles involve activity, the performance of tasks. Some are physical, some are mental, most are mix of both. Tasks require capabilities or competencies, which involve both knowledge and finer-grained skills, which can be gained by experiences or training, and improved through practice. Some skills have relationships with each other, such as prerequisite or adjacency.

EXAMPLES



A word about **competencies** and **capabilities**

As noted, skills are related to two other concepts frequently used in learning and development, organizational development, and across human resources: competencies and capabilities.

SHRM, the Society for Human Resources Management, defines a **competency** as a knowledge, skill, ability or other characteristic (e.g., trait, mindset, attitude), or a group of characteristics, which, when applied in the appropriate roles, help achieve desired results.

SHRM's HR competency model includes:

- Business acumen
- Communication
- Consultation
- Critical evaluation
- Global & cultural effectiveness
- HR expertise
- Leadership & navigation
- Relationship management
- Ethical practice



ATD, the Association for Talent Development, has recently shifted from a competency model to a **capability** model:

"Competence refers to a person's current state and their having the knowledge and skills necessary to perform a job. Capability is about integrating knowledge and skills and adapting and flexing to meet future needs. By shifting from a competency model to a capability model, ATD is helping talent development professionals put their knowledge and skills to work to create, innovate, lead, manage change, and demonstrate impact."



Skills as the **fundamental building block**

Skills are conceptually one level lower, and so can serve as foundational building blocks of competencies or capabilities, as well as other key concepts in our modern work world.

From an objective verification standpoint, a focus on skills is also useful because they are open to hands-on observation and assessment.

A lot of information can be captured at the skill level:

- **Skills are interrelated (e.g., some skills are similar to or adjacent to others)**
- **Some skills build upon others**
- **Many skills involve levels of proficiency for more nuanced precision.**

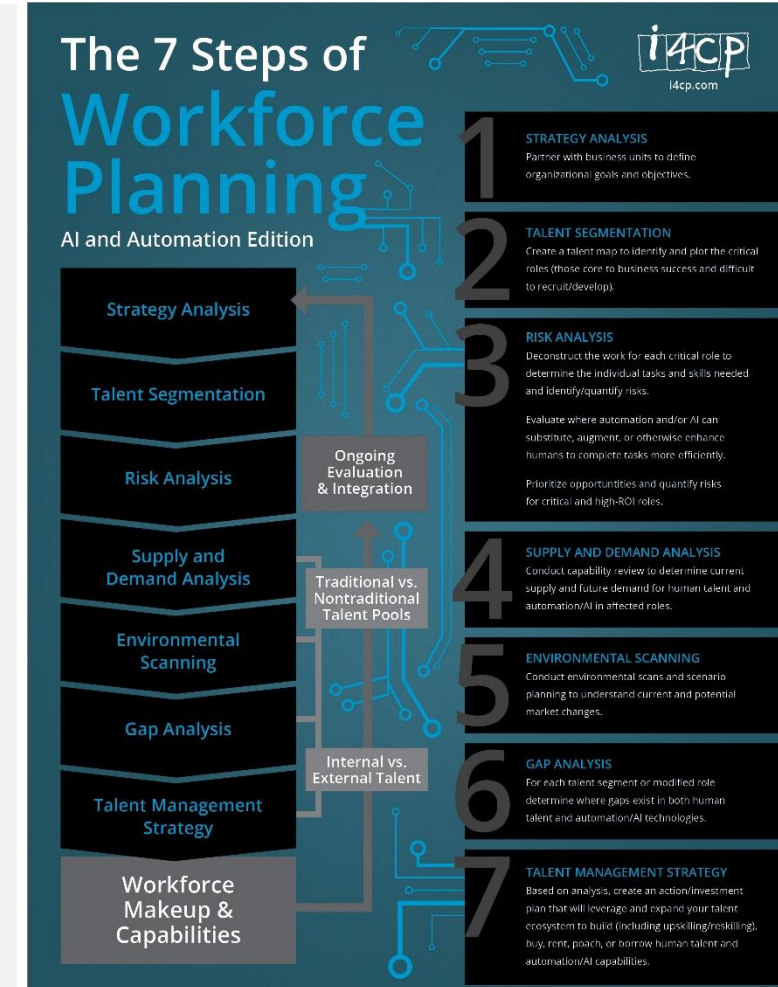


The 7 Steps of **Workforce Planning**

i4cp has created a simple 7-step process for modern, strategic workforce planning. These steps include:

- 1) **Strategy analysis**
- 2) **Talent segmentation**
- 3) **Risk analysis**
- 4) **Supply and demand analysis**
- 5) **Environmental scanning**
- 6) **Gap analysis**
- 7) **Developing a talent management strategy**

Understanding the skills of the current workforce is foundational to this entire process—without such information, workforce planning professionals don't have a clear picture of the current talent supply, nor can they accurately analyze risks and gaps.





PART 4

Building a Skills Database

How to **build a skills database** for success

Clearly there is no lack of benefits and goals for creating a skills database. But how do you do it successfully? Many organizations have created skills databases in the past, only to see them flounder in subsequent years due to poor planning, poor change management, and other preventable issues.

There are some guidelines for creating a skills database that are similar to other major enterprise initiatives. Make sure the CEO and senior leadership team more broadly back the move to a more skills-centric approach to talent and organizational practices—otherwise it will be seen as an HR project rather than a business project. You also need to determine early and how much funding will be needed for the project, where it will come from, and how solid it is.

Beyond those general guidelines, the following is the journey you will need to follow to successfully create a skills database, and to more broadly shift the culture of your organization to one that is more skills-centric:



Who are your skills **stakeholders**?

To begin planning for a robust and maintainable skills database, first ask:

Who (or what) will be the sources/key providers of skills data?

- Employees
- Skills feedback from managers, peers, or TA professionals/hiring managers as part of a hiring process
- Skills assessments as part of the learning and development process
- AI algorithms and machine learning models scraping of employee profiles, LinkedIn profiles, resumes, training activity, feedback, recognition, etc.
- Future employees (e.g., candidates, early-career talent, interns/co-ops/university programs)
- Educators in academia



Who are your skills **stakeholders**?

Who will be the key **consumers** of skills data? It will likely be a combination of HR, others in the organization, and beyond.



Create a **Skills Committee**, or even a **Skills Team**



There are many potential sources and consumers of skills data within an organization. If not intentionally organized, many skills taxonomies and databases could surface, causing duplication of efforts and confusion, if not chaos.

For the best long-term outcomes, it is critical to establish one skills taxonomy and one skills database—**a single language and a single source of truth**. If several already exist, there must be a consolidation exercise.

A **skills council or committee** can be created with representatives from all the relevant stakeholders. In this way, all voices can be heard and objectives for the initiative considered.

Larger organizations might find value in establishing a team to head up the effort. For example:

- **Accenture** has created a Skills and Specializations Team. This group owns and governs additions and deletions of skills to the taxonomy, working with business leaders and subject matter experts for critical input.
- **Target** has a Future of Work group whose responsibilities include the skills landscape and talent mobility, as well as hybrid work policies and more. The SVP of this team reports directly to the CHRO.

What is the **scope** of the **skills data**?

There are several key considerations regarding the scope of the data to be captured in employee profiles in a skills database. It is important to determine the appropriate scope for your organization.

- **Purpose.** What are you trying to accomplish? Organizations first need to define the purpose and applications of skills data before they start considering the scope of the data to be included, whether to involve proficiency levels, and what objects skills data will be mapped to (jobs, gigs, learning content, etc.).
- **Type of skills.** Technical/hard skills? Management and human relationship skills, sometimes called power or soft skills?
- **Roles.** For which roles in the organization will you catalog skills?
 - All roles or only critical roles? What is the definition of a critical role?
 - Strategic roles? High-volume roles? High-turnover roles?
 - Are some roles highly regulated or do they require licensing (e.g., medical doctors) such that breaking down the role to the skill level will not yield as many immediate benefits?
 - Are some areas of the organization requesting/pushing a more skills-centric approach? They will likely be your early champions.
- **Granularity of skills.** Do you anticipate a skills taxonomy with 1,000-2,000 identified skills, or far larger, e.g., 10,000+? Relative to roles, try to keep things simple: can you focus on just the 10-15 most important skills per role? Hiring managers need to recognize that they will rarely hire the perfect unicorn with all the skills needed. Many skills can and will be learned while doing the work.
- **# skills per employee.** Each individual is different; what is a reasonable target for the number of skills to expect, on average, per employee profile? Too few and the data won't be as useful. Too many and the extra data might not be the worth the effort.
- **Skill proficiency levels.** Will identified skills be binary (you either have the skill or you don't), or will there be levels of proficiency? Or some of both? If some skills will have levels, how many? 3-5 are most common, with descriptive text often needed to help clarify the differences between Level 1 of a skill through Level 5.



Data beyond skills data

Data from i4cp's *Accelerating Workforce Readiness* study (see right) make clear that a broad range of skills are typically included in a skills database.

Employee profiles can include related information as well, from job experience details, education records (degrees, certifications, etc.), and even language fluency, and countries lived in.

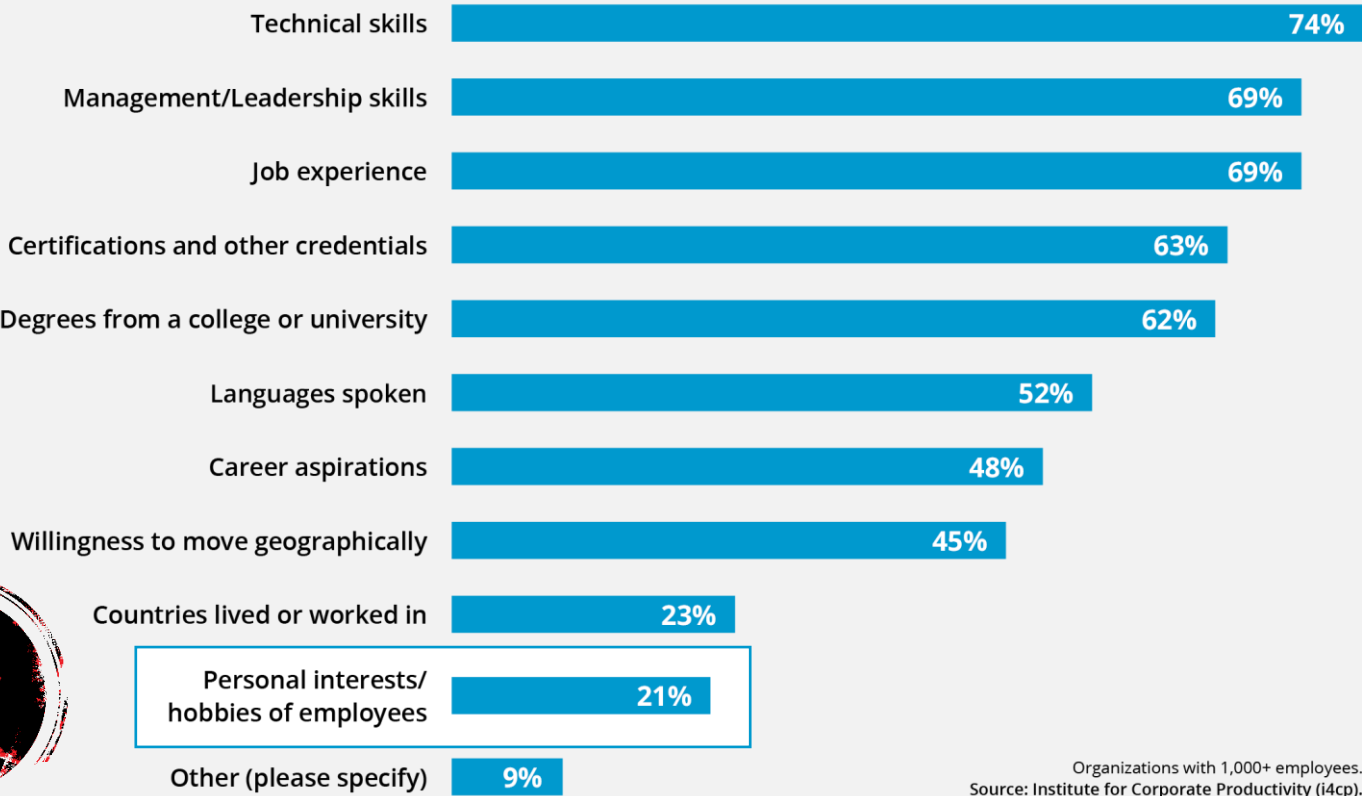
If having such information doesn't complicate the use of the core skills data, gathering this additional data can help with some benefits of having the database, such as job, gig, and project matching.

Of note, high-performance organizations are **2.5x** more likely to go beyond work skills, job experience, credentials, etc., and include personal interests/hobbies of employees in their workforce skills database.

Think of these as indicators of potential talent moves, adjacent skills, and ways to engage and retain employees.



Which of the following are included in your organization's skills database?
(Select all that apply)



Organizations with 1,000+ employees.
Source: Institute for Corporate Productivity (i4cp).

Key challenges and questions regarding **scope** of the **skills database**



- **Pilot.** Will a pilot be done first in a particular department, e.g., HR, IT, or elsewhere? If so, where and why? Recognizing the value of MVP (minimally viable product) approaches to get going fast and learn quickly, don't let the perfect become the enemy of the good. Using one or more pilot projects can help refine the scope of the information you need to store in the database, versus other information that is nice-to-have only.
- **Align scope to benefits.** Which of the many possible goals and benefits for creating a skills database make up the business case for doing so? Does the entire organization benefit from skills identification, or only certain functions, regions, or lines of business? For example, you could focus first (or only) on growth areas of the business, or areas/regions where you already know that gaps exist or that particular skills are hard to acquire.
- **Diminishing returns.** Where is the point of diminishing return in capturing more information? That is, what are the skills, or skill level differences, that are the most important (e.g., functional skills + power skills)? Cataloging all skills, or at detailed levels, could be wasting a lot of time.

What **technology platform** will house the skills data?

The next factor is the technology that will be used. Here are four key considerations:

- **One platform to rule them all.** The goal is to get to one single skills taxonomy, and that will mean one technology platform providing the skills list—not conflicting skill taxonomies across the HRIS, LMS/LXP, ATS, various Excel spreadsheets, and so on.
- **What is already available?** If a technology for a skills database currently exists in the organization, then using it can greatly reduce the business case required for this initiative. However, compare what you have versus what is available on the market in terms of your identified needs and goals. Skills taxonomies/data are often included in:
 - HRIS/HCM, e.g., Workday with its Skills Cloud functionality
 - Learning Management System (LMS)/Learning Experience Platform (LXP), e.g., Degreed or content providers such as LinkedIn, Skillsoft, etc.
 - Applicant Tracking System (ATS) or other recruiting related platform
 - Consider niche vendors that specialize in internal talent marketplaces or AI functionality, e.g., Gloat, Fuel50, Eightfold.ai, and others.
- **If you build it right, they will come.** The user interfaces for administrators, managers, and employees are all important. In particular, the user interface for employees and managers to input and update skills information needs to be clear and friendly—you want to eliminate as much friction as possible.
- **Reporting and dashboards.** Can you improve reporting/dashboard outputs for administrators, managers, and leaders by using a dedicated reporting and analytics tool (e.g., Tableau), or is the reporting/dashboard functionality in the system that houses the skills data good enough?



LUKAS JAKUBICKA

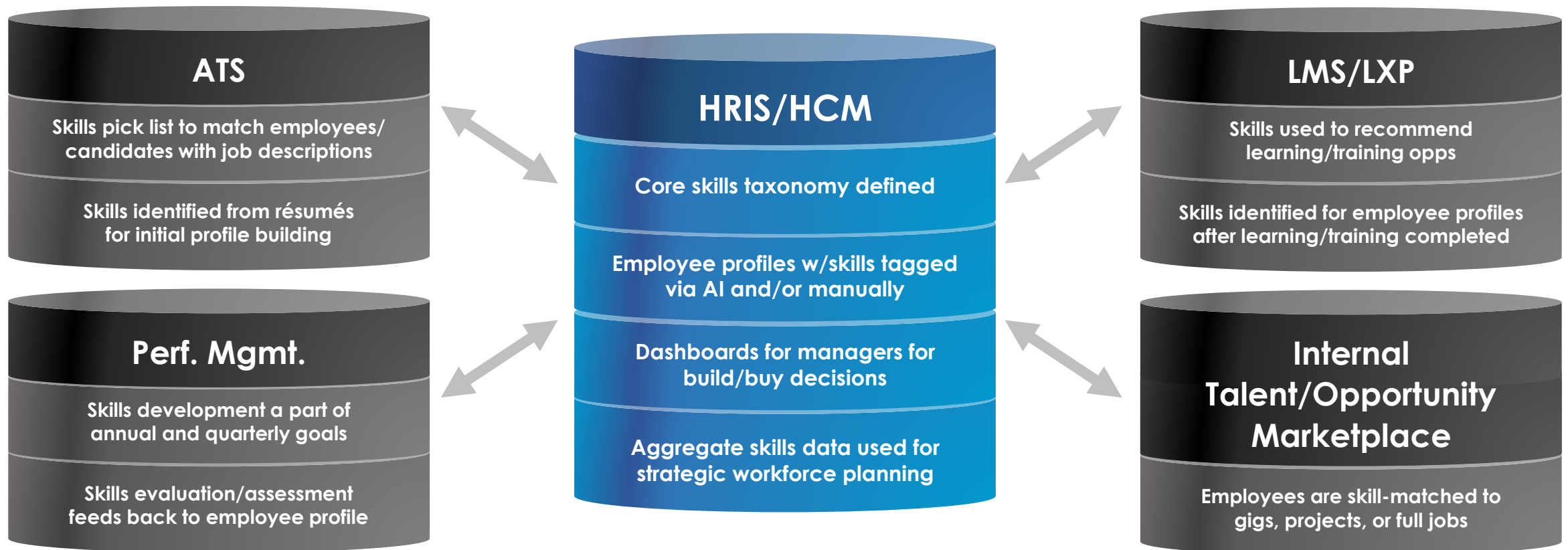
Associate Director,
Talent Architecture and
HR Tech Transformation



“One of the key decision factors regarding where to house the skills data is the ability of a platform to return a value back to employees for investing in building or updating their skill profiles. Multi-module HCM platforms are positioned well to do just that—employees can easily find new opportunities to engage in meaningful work, learn new skills, apply for a job, find a connection or a mentor—all of that in a single platform.”

Skills Technology Architecture: One Example

This visualization is an example of many possible architectures. In some scenarios, a single HRIS/HCM platform might include some or all of the features shown here, eliminating the need for using best of breed separate platforms for those areas.



What are the project **success metrics**?



How will you know if your skills database initiative is a success? There are many metrics that you can track as you build, maintain, and reap the benefits of having a skills database, including:

- % of relevant employees with skills identified (regardless of methods used)
- % of relevant employees with skills verified, for example:
 - % with skills reviewed by managers
 - % with skills assessed via testing, etc.
- Decrease in identified skill gaps in the organization
- # of employees taking on jobs/gigs matched in an internal talent/opportunity marketplace
- # of employees taking on learning opportunities driven by identified skill gaps
- Sentiment from stay interviews and performance feedback conversations that mention the various employee experiences enabled by having robust skills data (e.g., career pathways, targeted learning, targeting job/gig/project opportunities, etc.)
- Skills influence on development planning and career path trajectory
- Contribution to improvements (with appropriate lag time considered) in key metrics of revenue, profit, market share, customer satisfaction, etc.

How will skills/etc. data be **gathered**, **verified**, and **maintained**?

With planning of data scope, technology, and success metrics complete, what will the process be to actually gather, verify/validate, and then maintain the skills database over time? First, a single skills taxonomy must be established.

Taxonomy

Create a custom skills taxonomy or leverage and tweak one from a partner (e.g., Workday, IBM, Korn Ferry, Lexonis, Burning Glass, World Economic Forum, etc.)

Initial Skills Data

Employees manually enter data into their profile (in Workday, etc.). New joiners can do this as part of onboarding.

... and/or...

Pre-populate or supplement by using AI/automation to scrape from:

- Work history and other experience
- Formal education credentials
- E-learning and other training completed (as documented in the LMS)
- Job or role descriptions
- LinkedIn profiles
- Résumés (as documented in the ATS)
- Recognition and performance feedback

Review

Employees and their managers review and update what the AI found.

Verification

Where necessary, verify skills through some combination of assessments where appropriate: self, peer, manager, or formal testing.

Maintenance

Setup automation so that skill suggestions will be made after completion of training, gig assignments, job rotations, mentorship, volunteering, etc.

Key questions and challenges for **maintaining a skills database**



- **Frequency of updates.** What cadence of review or updates is expected? How often will the skills taxonomy be updated? How often will employees be nudged to review and update their skills profile?
- **Skill durability vs. deterioration.** Many skills have a half-life: they deteriorate over time if not used. Other skills are perishable, i.e., they will change or cease to be relevant in time due to automation, etc. Especially if skill levels are included in your database, how will skill deterioration and durability be dealt with?
- **Cascade updates.** What alerts or automation will be in place to trigger skill updates when job or role descriptions are updated? Jobs and roles with a greater number of perishable skills will need to be reviewed more frequently.
- **Skill proliferation.** At any point in time, the skills documented in your database are at best a current snapshot. The same is true for the skills taxonomy itself—the skills list and the relationships between them. New skills relevant to work are arising all the time, and they are being added faster than older skills are becoming irrelevant.

How can **emerging** and **future-needed** skills be determined?



Workforce planning and organizational design professionals use many means to identify what skills are trending, emerging, and will be most needed in the future. These include but are not limited to:

- Interview leaders of each business, geographical, or functional unit. Do root-cause analysis, What-If scenario exercises, etc. to get specifics.
- Interview all relevant employees and/or hold focus groups with employees and managers
- Use resources from i4cp and other human capital research/consulting firms, as well as World Economic Forum, BLS, EMSI BurningGlass, TalentNeuron, OECD, and other data sources
- Research relevant competitors and the skills of their employees
- Read books and articles from futurists and thought leaders
- Review LinkedIn data and reports to see what is trending
- Plan the desired future state of the organization (5-10 years in the future), and deduce the employee skills needed to get there
- Consider the impact on skills needed due to:
 - Likely future customer demand changes (e.g., privacy, personalization, social media, etc.)
 - Likely future regulatory changes
 - Likely future changes from AI/automation or other technology—which skills will be augmented, and which will be retired?

Key questions and challenges for determining **emerging** and **future-needed skills**



- What should be the scope of the exercise?
 - Which functions?
 - Which roles?
 - Which regions?
- How many years out are you focusing on? Short-term (1-3 years) or longer term (5-10 years)?
- Is the focus only on emerging and future-needed skills? Or also on waning skills, in order to determine where upskilling/reskilling would be most effective, where automation could be effective, where reductions in force might come into play, etc.?
- What current skills are adjacent or transferrable to a future-needed skill?
- What will you do with the information you produce on emerging and future needed skills?
Possibilities include:
 - Use in the workforce planning process to identify where skill gaps exist or are likely to develop.
 - Embed them in job descriptions to clarify the future path the role might take
 - Proactively build targeted upskilling and reskilling programs
 - Discuss them as part of coaching, mentoring, and the broader performance management process



MARIANA MANCINI

Global Talent Acquisition Center of
Expertise Director and Future of Work
Product Owner



“At Dow we strive to connect the skills-based approach to talent management to the 70:20:10 learning philosophy, i.e., by having clarity on the individual skills gaps and aspirations mapped to the work the company needs to get done, we can upskill and reskill while advancing business goals. In other words, we want to future-proof our people and make the organization more agile and resilient at the same time.”



PART 5

Challenges, Culture, and Other Considerations

Key challenges and questions for gathering and verifying **skills data** and **skill relationships**

- **Employee motivation.** Employees need to understand the WIIFM (What's In It For Me?) to create their profiles and consistently maintain them.
- **Standardization.** Settling on one skill taxonomy across the entire organization is a must. Skill definitions, wherever possible, should be agnostic across the organization—not specific to a particular department or role.
- **Validation.** Will skills be validated? If so, how? Possibilities include:
 - Self assessment
 - Peer assessment
 - Manager assessment
 - Assessment by subject matter experts
 - Formal, standardized testing

Note that balance needs to be considered between the value of validating skills versus the added complexity that this will introduce. The more validation, the slower the process will become, and the less agile the organization will be in using skills data for the various benefits desired.
- **Skill mapping.** How are skills mapped to current job and role descriptions, and how will they be mapped to gigs or project opportunities (e.g., in a talent marketplace)? What kinds of learning content and programs have mapped skills?
- **Biases.** What human biases might exist for employees or managers in cataloging skills? What biases might exist in the AI algorithms used to scrape internal or external data sources? What regional biases or patterns might arise in how people self-rate or rate others when verifying skill levels?
- **AI algorithms aren't perfect or magical.** AI algorithms suffer from GIGO: garbage in, garbage out. Make sure the input data, e.g., job or role descriptions, employee data, etc., are not outdated or otherwise flawed before setting the AI loose to identify skills.

Challenge: **Employee motivation**



Case Example:

At **Accenture**, they ran skill campaigns as change management efforts to encourage people to review their skills profiles and tweak to improve accuracy. Their pitch to employees was if you give Accenture the best representation of you—including your aspirations (they can include two)—the system will give you back the best employee experience. This information gets pulled into decision making processes, so it really does matter.

Further, people are invited to join professional communities and networks based on skill and aspiration data. Overall, skills are threaded across many talent practices, so the more accurate your skills data, the more customized related talent practices will be.

Challenge: **Employee motivation**



Case Example:

At **Vertex Pharmaceuticals**, they ran campaigns to promote the WIFM for employees to provide or review their skills data. This process was combined with other data, such as pronouns and gender for DE&I-related data collection goals.

Friction was addressed by adding an “Update My Skills” link that appears front and center on the first Career Hub page. The site also immediately shows how many open jobs match an employee’s skills, and it’s made very clear how to expand skills with additional training and through work experiences. This applies both to full role/job opportunities and gig or project opportunities employees can take on while maintaining their existing roles/jobs.

Challenge: **Standardization**

There will likely be as many standardized skills taxonomies as there are organizations, because the needs of each can vary so greatly.

- **What roles are most critical?**
- **What are the organization's areas of growth, focus, or opportunity?**
- **Where and for which roles is hiring the most challenging?**
- **Where might automation come into play?**

All these questions and more will create important and nuanced differences in how each organization chooses to standardize their skills data.

Case Example:

Accenture has identified approximately 8,000 relevant skills defined to be agnostic across the business. Skill proficiency is calculated based on use of the skills, recency of using it, adjacencies, and so on. A five-point scale is used, from beginner to master. All 8,000 skills use these five levels.

They have also introduced the concept of a specialization—collections of skills that are deemed important to Accenture's business. To date, there are nearly 375 specializations, which also appear on employee profiles, and are used across HR processes. These work especially well for technology and industry domains.

Challenge: **Validation of Skills**



Case Example:

AT&T began developing their current skills data system in 2013, when they first leveraged the massive IBM skills library. Their approach now includes some 1,200 identified skills, with four levels of proficiency/experience and robust descriptions for each.

Employees manage their skill profiles through self-assessment ratings. Machine learning is used to help suggest skills for users, and opt-in notifications are sent when a new skill is suggested for their profiles.

These same 1,200 skills with four levels each are mapped to learning and development content and opportunities. Again, AI is used to suggest skills for the tagging of each piece of content or learning event.

The same set of skills are mapped to all jobs (around 4,000), where the talent acquisition team has been involved in determining the skills that are core for each role.

Challenge: **Standardization**

Some organizations have chosen to rely on self- and manager assessments only to validate skills. They are comfortable with these results, and do not think that the added effort of leveraging knowledge, skill, or behavior-based assessment tests for some or all skills in their taxonomy will yield additional benefits at this time.

Other organizations start with self- and manager assessments, but then add a layer of standardized testing for some skills, for current employees and/or candidates. For example:

- At **Dow**, the Operations function wanted higher-level skills validation, particularly in critical areas such as safety.
- At **Dell**, all employees self-evaluate, and leaders can give feedback or endorse a skill for an employee—but can't change it. Their products and operations groups however leverage SkillsIQ for assessing some technical skills with testing.





What **mindset shifts** or **culture changes** might be needed?

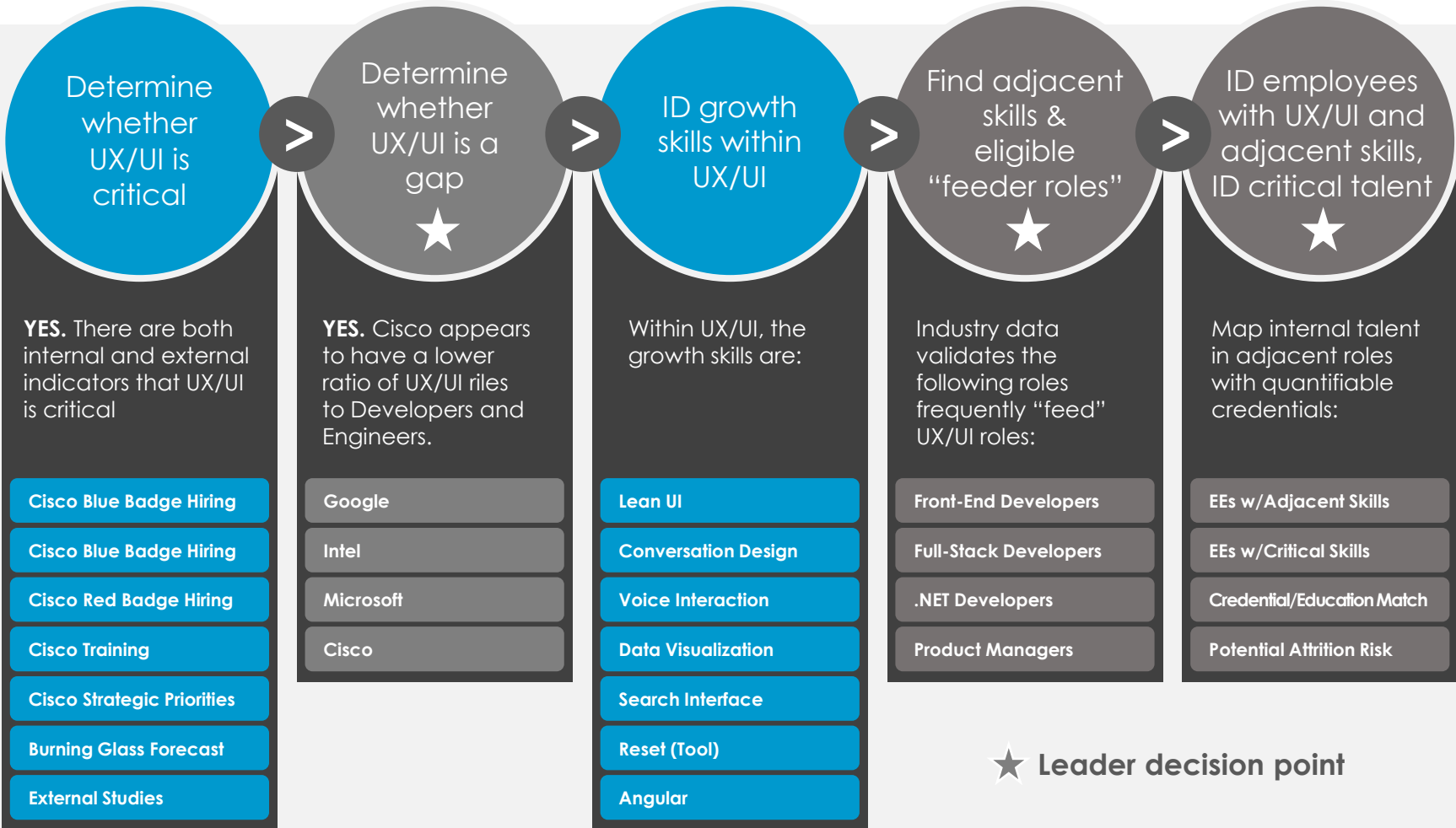
Organizations that have successfully created a skills database, and more broadly shifted their organization to a skills-centric approach to talent processes have gone through a series of mindset shifts and culture changes:

TODAY	SKILLS AS THE NEW CURRENCY
Heavy reliance on degrees for job requirements	More reliance on skills and experience
Compensation as job/role-centric	Skills-based or skills-influenced pay strategy
Talent hoarding by managers	Managers as developers and movers of talent
Weak learning culture ("know-it-alls")	Strong learning culture ("learn-it-alls")
Learning philosophy that emphasizes stopping work for formal training	Learning philosophy that emphasizes constant skill development via learning in the flow of work
Assumptions based on biases and proxies	Assessment and evidence-based culture
Focus only on specific skills required per job/role	More focus on developing adjacent skills to increase agility
Heavily siloed organization with little skill sharing	Elimination of silos with skill sharing where needed
Rewards/recognition for projects/productivity only	Rewards/recognition for skill building as well
Career conversations infrequent (e.g., once a year, at most)	Frequent skills development conversations and feedback
Little transparency around skills information	Greater transparency of skills data across the organization
Fear of automation/AI as largely replacing humans	Focus on automation/AI as mostly augmenting humans
TA professionals focus externally for skills needed for open jobs	TA professionals look internally as much or more as externally

Right Skilling **Use Case**

At right is an example from **Cisco** of how roles and skills can be assessed to determine if they are transferable. In this case, **Cisco** determined the adjacent skills and feeder roles to help them scale up user experience (UX) and user interface (UI) roles.

Source:
i4cp.com/interviews/how-cisco-uses-a-data-driven-approach-to-strategic-workforce-planning



★ Leader decision point

Recommendations for **mindset shifts** and **culture changes**



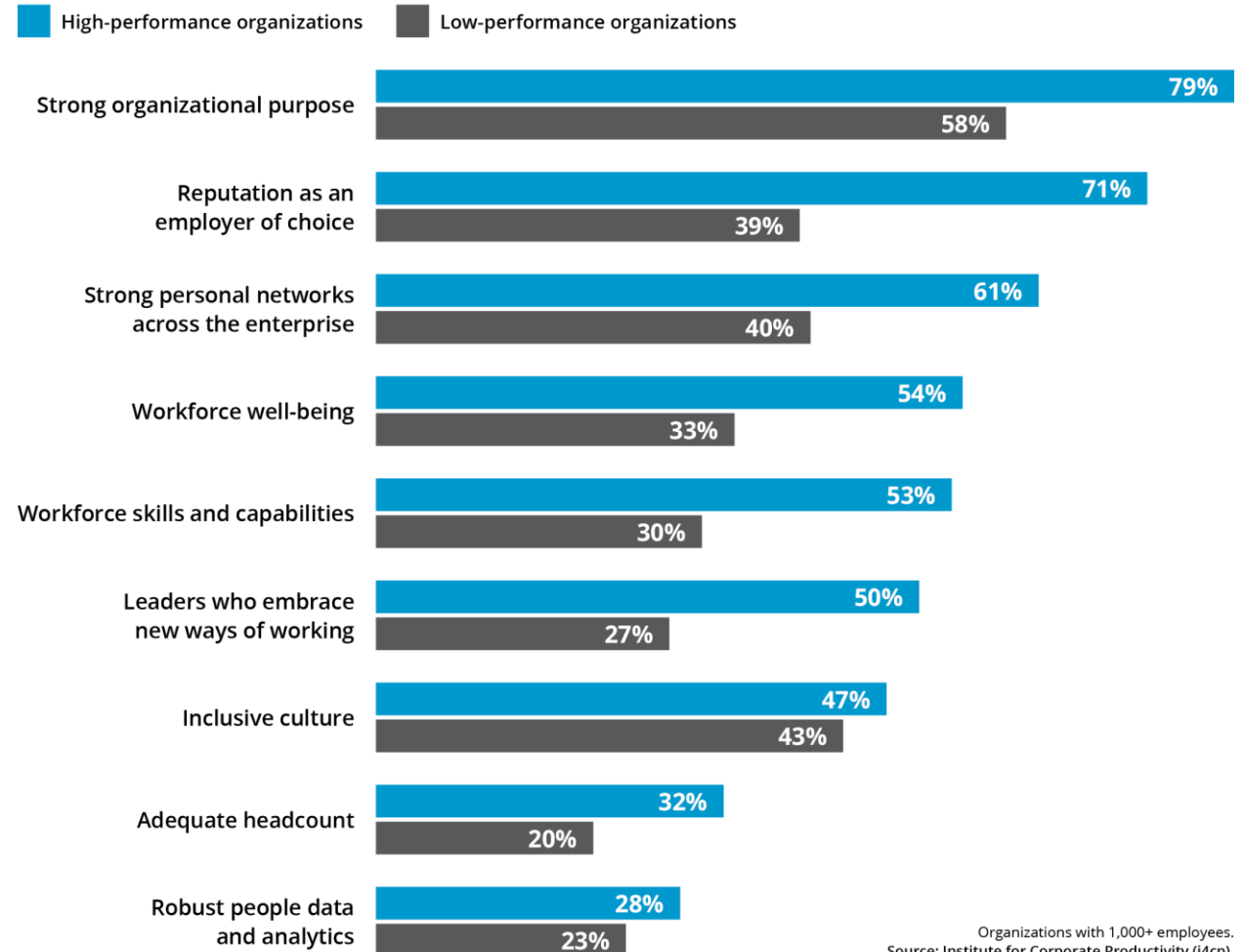
- Expect to spend as much or perhaps more time on the *art* as on the *architecture* of the change to a skills-centric approach, standing up an internal talent marketplace, and so on.
- HR professionals are the experts, the craftsmen—but business leaders need to feel ownership of this. It's important to light a fire under the business owners and other key leaders so that they see the value, and want and need this change.
- Trust is critical; it's built slowly over time, but missteps can damage it quickly. Establish the answers to these questions early in the process:
 - What will the skills data be used for? What will it *not* be used for?
 - What impact will skills data have on what matters most to them (e.g., project assignments, compensation, etc.)?
 - What security is in place for this data (who has access and why)?
 - How will this data be maintained and by whom?

Recognize the **limits of skills**

Skills aren't everything—it's possible to over-emphasize skills in an organization. After all, employees aren't just bundles of skills—they are unique individuals who vary across innumerable dimensions. And even after a strong skills database has been established, robust workforce readiness will only be achieved if you also have:

- **A strong organizational culture**
- **Diversity, equity, inclusion, and belonging**
- **Holistic well-being**
- **Purposeful collaboration without work overload or burnout**
- **Strong relationships and networks**
- **Motivation to work, learn, and improve**
- **Career opportunity and mobility**

When you think about having a workforce that is ready for the future, how do you rate the following in terms of current strengths for your organization?



Organizations with 1,000+ employees.
Source: Institute for Corporate Productivity (i4cp).



PART 6

Case Examples, Summary, and Additional Resources

How **Humana** Built Their **Skills-Based Talent System**

- The overarching goal for Humana was to have the right people with the right skills in the right jobs at the right time. This required:
 - A common skills language for the organization, across hiring, development, performance, mentoring, and more
 - Identification of which skills are required to do each job
 - Identification of which skills each of their 40,000 employee has
- External research-based skills data was used to align skills with their 3,000 job types and 350 job families
- Once each job and level had 15-20 key skills identified, the output was mapped to Workday Skills Cloud
- To gather employees' skills, a campaign was held across the company through town halls, communications, team meetings, and internal peer advocacy to encourage employees to add skills to their career profile.
- Primary messaging in 2020 focused on how skills data can be matched with more personalized learning and career development opportunities. In 2021, an additional push focused on how skills would support business transformation needs, e.g., removing network biases and finding hidden internal talent for critical growth areas.

Source: [How Humana Built their Skills-Based Talent System](#) by Mollie Bringhurst (August 13, 2021)

Reinventing the Nurse Job: Providence Health

This case example helps to illustrate a modern, strategic approach to workforce planning.

During the COVID-19 crisis, leaders at Providence Health faced a talent crunch for top-of-license nurses. So, they deconstructed the role into the core tasks and skills involved:



COVID Nurse Job Description

- Intubate patients
- Diagnose unresponsive patients
- Schedule shifts
- Administer medication
- Take temperatures
- Check on stable patients

They then considered who else at the organization could perform some of these tasks, either with current skills or minimal additional upskilling required. They asked: is there a relative surplus in these other roles, employees' whose time could be better used to relieve some of the stress on top-of-license nurses? Could any tasks be automated, further freeing time for these valuable and scarce nurses?

The answer was yes.

Reinventing the Nurse Job: Providence Health

A deconstructed understanding of the job, combined with an understanding of the skills required to perform each tasks and the current skills of the relevant employee population, allowed Providence Health to determine that receptionists could take on certain tasks, that administrators with prior nursing experience could perform some tasks (especially during peak times), and one task—scheduling shifts—could be automated.



COVID Nurse Job Description

1. Intubate patients
2. Diagnose unresponsive patients
3. Schedule shifts
4. Administer medication
5. Take temperatures
6. Check on stable patients

Top-of License Nurse

1. Intubate patients
4. Diagnose unresponsive patients
5. Administer medication

Receptionist

3. Take temperatures
6. Check on stable patients

Automation

2. Schedule shifts

Administrator

4. Diagnose unresponsive patients
5. Administer medication

Summary

Does your organization's workforce have the skills and capabilities needed now and for the future? Do you know? Most business and HR leaders admit they aren't sure or flat out don't know. This is because relatively few organizations have collected skill and related information about their employees into a database.

Going on a skills-centric journey takes planning. Both the current and desired future states of skills in the organization need to be identified. The value proposition for employees must be established and then kept front and center, even while the needs of managers, leaders, and the organization are also prioritized.

Along the way there will be technology decisions to make, and mindset and culture shifts required as processes and people evolve to leverage skills information more than they ever have before. But the journey will be worth it when employees have more personalized learning opportunities, vastly improved talent mobility, and more transparent and inclusive hiring and project assignment practices. And the organization will be more agile, better able to deploy capability where and when needed, and able to identify skill gaps that need to be filled before the next crisis arises.





KIMBERLY ROSE

Head of People Experience,
Analytics and Digital Innovation



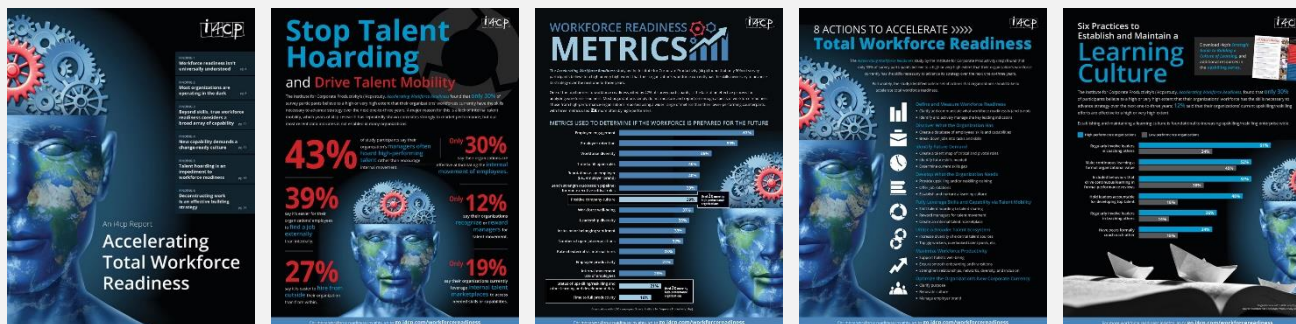
“As an organization, our people have thousands of skills, and we can now harness them in very powerful ways. Our skills database is truly fueling internal mobility and bringing greater transparency and equity to opportunities for our people than ever before.”

Acknowledgements

i4cp appreciates the insights gained for this guidebook via interviews and meetings with the following leaders, many of whom are members of i4cp's [Chief Learning and Talent Officer Board](#) or [Workforce Planning Exchange](#):

- **Allison Horn**, Executive Director, Global Head of Talent at Accenture
- **Nicole Colletta**, Director, Talent Insights at Accenture
- **Lukas Jakubicka**, Associate Director, Talent Architecture and HR Tech Transformation at AT&T
- **Gina Jeneroux**, Chief Learning Officer at BMO Financial Group
- **Cameron Hedrick**, Chief Learning Officer at Citi
- **Marla Oram**, Sr Consultant, Skills Enablement & Planning at Dell
- **Mariana Mancini**, Future of Work Product Owner at Dow
- **Ann Taylor**, Senior Director, Talent Management and Experience at Land O' Lakes
- **Brook Finlayson**, Chief Learning Officer at Mondelēz International
- **Mike Hughes**, Principal Consultant, Strategic Workforce Planning at Target
- **Erica Koenig**, SVP and Chief Talent Officer at UnitedHealthcare
- **Kimberly Rose**, Head of People Experience, Analytics and Digital Innovation at Vertex Pharmaceuticals

Additional Resources



Relevant i4cp content series:

- [Accelerating Workforce Readiness series](#)
– set of reports, infographics, articles, etc. from the Accelerating Workforce Readiness study.
- [Talent Mobility and Internal Talent Marketplaces series](#)
– set of case studies, articles, and more
- [Upskilling series](#)
– a set of guides on upskilling and reskilling

Additional i4cp case studies and resources:

- [The 7 Steps of Workforce Planning](#) (infographic)
- [How Cisco Uses a Data-Driven Approach to Strategic Workforce Planning](#)
- [How Humana Built Their Skills-Based Talent System](#)
- [Deconstruct to Reconstruct: How Providence Health Built an Internal Talent Marketplace](#)

For a more detailed look at the workforce planning process presented earlier, and examples of what leading-edge organizations are doing to reimagine how work gets done, see the latest book by **John Boudreau** and **Ravin Jesuthasan**, [**Work Without Jobs: How to Reboot Your Organization's Work Operating System**](#) (MIT Press, 2022).



Discover your next practice.

Learn more at **i4cp.com**

Copyright © 2022. Institute for Corporate Productivity (i4cp)