



Training *Transformed*

The Skills Gap, AI, and the New Corporate Classroom



OC&C
Strategy consultants

uncommon sense™



WHAT WE COVER IN THIS REPORT

- **Sprinting to Keep Up with Moore's Law:** an in-depth look at the underlying drivers of the Learning and Development (L&D) industry, focusing on market growth, and the impetus provided by the growing skills gap.
- **The New Corporate Classroom:** how AI, personalised learning, and the shift from traditional to blended learning delivery is impacting corporate training.
- **Evolving to Excel - Competition and Innovation in L&D:** key considerations for both new entrants and existing players in the L&D space, focusing on customisation, blended delivery models, and technology integrations.

Insights come from a variety of sources, primarily an OC&C survey of 600 senior HR professionals in both the US and UK. This includes training buyers in both L&D functions and other business unit specific functions. This was supplemented by targeted interviews with key industry participants and providers.

Summary

THE LEARNING AND DEVELOPMENT INDUSTRY IS IN FLUX: WHILE THERE ARE STRONG UNDERLYING MARKET TAILWINDS PROMPTED BY A GROWING SKILLS GAP, AI AND CHANGING CUSTOMER NEEDS MEAN INCUMBENT PROVIDERS ARE EXPERIENCING DISRUPTION.

1. Sprinting to Keep Up with Moore's Law

A skills gap, particularly in digital skills, represents an existential threat to businesses. This skills gap is long-running, cross industry, and widening. Despite this, businesses have historically focused on a zero-sum war for talent focusing on hiring new talent rather than upskilling. However, change is on the horizon. Leaders are increasingly recognising the inherent challenges of hiring and are pivoting their focus towards training and upskilling existing employees.

2. The New Corporate Classroom

The long-term secular trends in training delivery have accelerated. Training has transitioned from in-person to virtual (both self-guided and instructor-led) with emphasis on more practical and engaging content (e.g. sandboxes, immediate feedback exercises), and increased sophistication of learning pathways.

This acceleration has been driven by three main factors:

- Covid as a catalyst for 'forced migrations' to virtual training.
- Increasing demand for cost effective solutions.
- Promises of greater pedagogical effectiveness of new technologies.

Going forwards, a few clear factors are emerging as increasingly critical:

- Blended training delivery: combining self-paced with instructor-led capabilities to serve a range of customer needs is increasingly viewed as the solution to balancing cost with pedagogical effectiveness.

The pace of change will vary by segment, with self-paced learning appropriate for more basic needs (e.g. compliance focused training, introductory level knowledge) and instructor-led training more suited to more complex learning.

- The AI paradigm shift: The rapid progress of AI is set to be a game changing in L&D driving personalised learner journeys, reducing content creation costs and allowing more interactive learning formats. While the L&D buyers surveyed generally agree that AI will lead to material change, many remain reluctant to adopt AI solutions due to concerns around cost and data privacy.
- Measuring and providing a return on investment (ROI) is becoming increasingly critical for L&D departments and will likely impact procurement decisions going forwards. This will be accelerated if the trend towards centralising L&D buying decisions continues.

3. Evolving to Excel: Competition and Innovation in L&D

This combination of factors is leading to upheaval in the competitive environment. At least two clear models have emerged:

- Single platforms aiming to consolidate a broad range of content, across different modalities, integrated with an learning platform playing the role of an Learning Management System (LMS) / Learning Experience Platform (LXP).
- Best of breed content creators managed through an independent LXP or LMS.

The obvious winners are yet to materialise but the direction of travel among leading players is clear.



1. Sprinting to keep up with *Moore's Law*

BUSINESSES TODAY FACE AN EXISTENTIAL PRODUCTIVITY CHALLENGE DUE TO HUMAN CAPITAL SKILL GAPS PARTICULARLY PERTAINING TO DIGITAL TECHNOLOGIES.

In the UK, government estimates indicate there are c.200k vacancies requiring digital skills which are predicted to rise to 2.5m by 2030, starkly contrasting with the c.10,000 graduates per year equipped with the skills required to fill these roles.

Moreover, digital disruption is poised to alter a huge number of existing roles in the workforce - the learning and work institute estimates 37% of job roles in the workplace are likely to change significantly due to digital disruption in the medium term.

Source: Learning and Work Institute: Exploring the Digital Skills Gap.

The skills gap problem is getting worse; four key trends are contributing to this:

1. A shortening technology cycle making it harder for workers' skills to remain relevant.
2. Remote work environments post-COVID complicating on the job learning.
3. An aging workforce and sluggish population growth leading to fewer younger, digitally fluent employees.
4. Long-term structural under-investment in employee upskilling at both government and corporate levels.

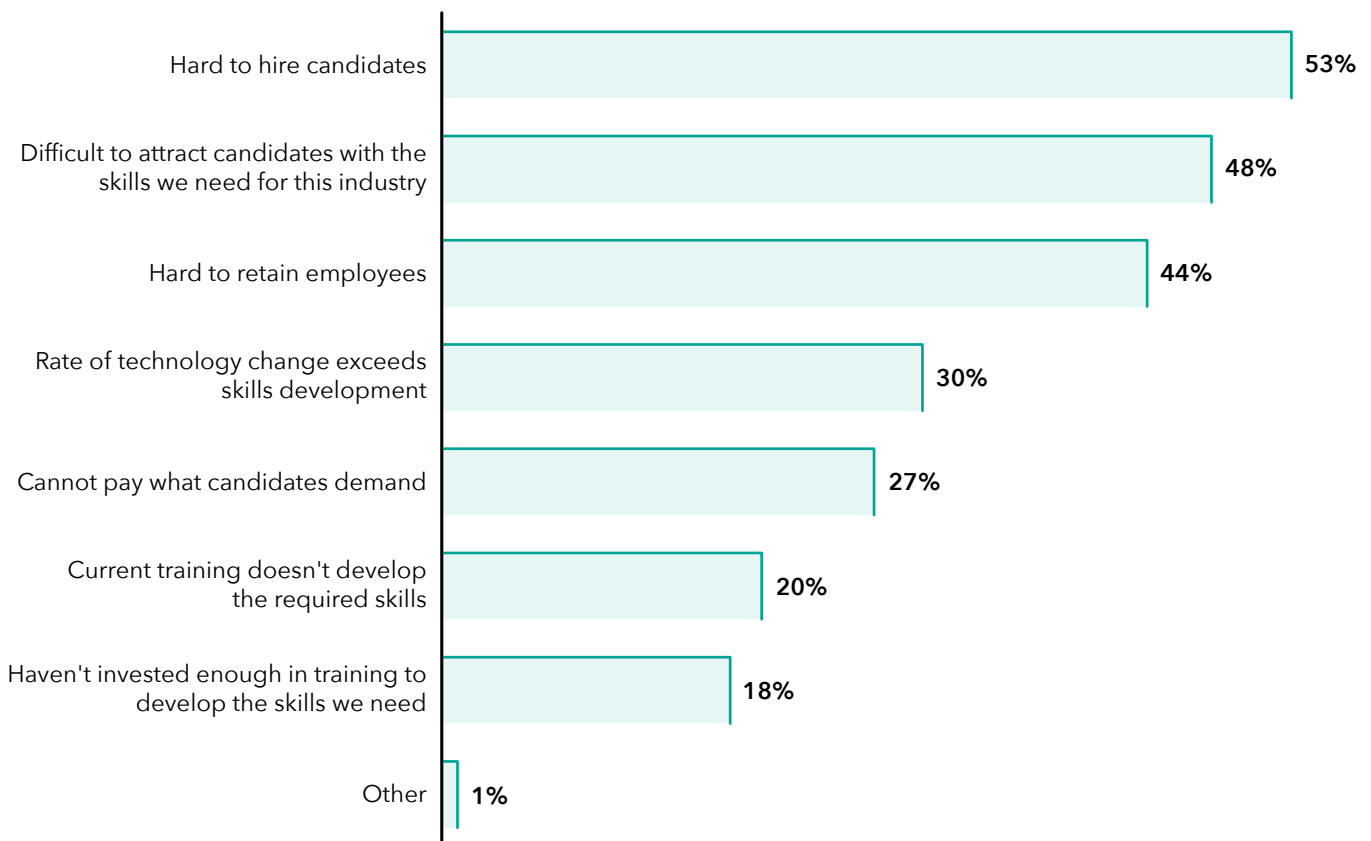
Against this backdrop, businesses broadly have three options:

- Recruit new talent with the right skills.
- Address immediate needs through contractors, staffing agencies, or outsourcing.
- Invest in upskilling their existing workforce.

The fundamental problem is clear: labour market supply is insufficient to fulfil demand; this is a system level problem. Despite this, business leaders have historically focused on a zero-sum war for talent focused on hiring rather than training and upskilling. ~50% of business leaders view difficulty in hiring the right skills as a key reason of the skills gap vs only ~20% for training.

REASONS BEHIND THE SKILLS GAPS¹

Percentage of respondents

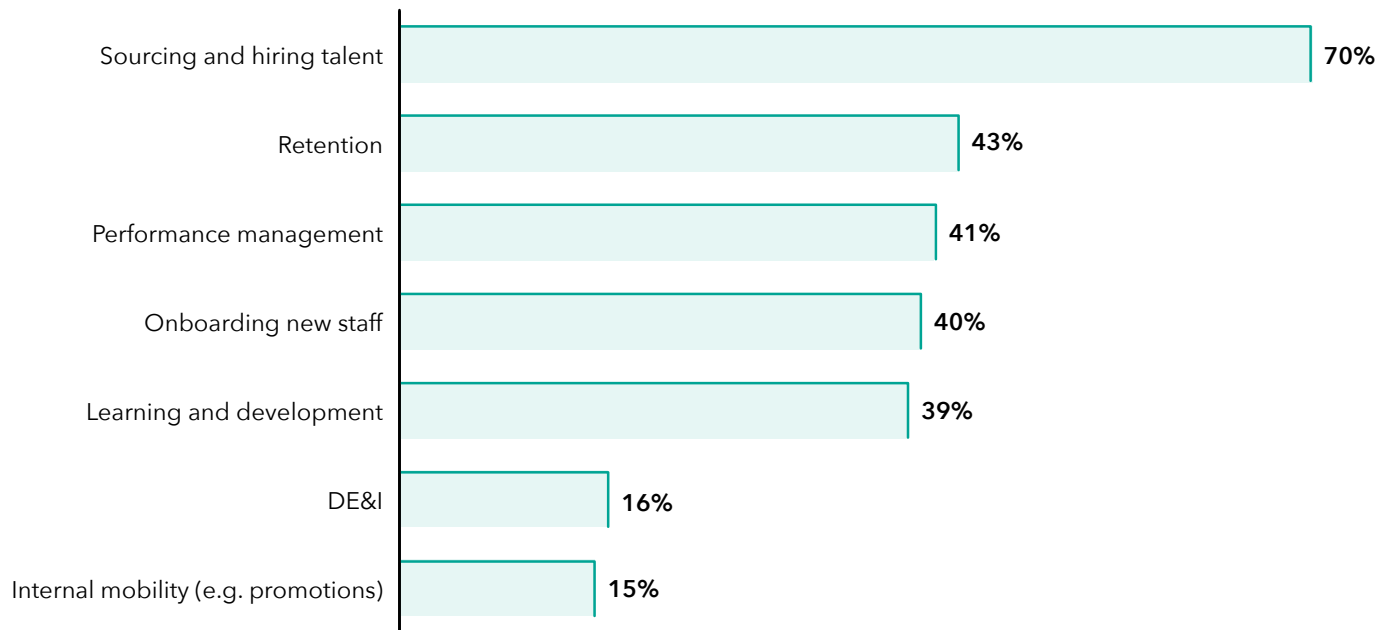


1. Q: What are the main reasons you are experiencing skills gaps in your company? N = 614.
Source: OC&C Survey, OC&C analysis.

Similarly, 70% say sourcing and hiring talent is a top 3 challenge in the talent lifecycle vs 40% for training and development.

BIGGEST CHALLENGES IN THE TALENT LIFECYCLE¹

Percentage of respondents ranking in top 3

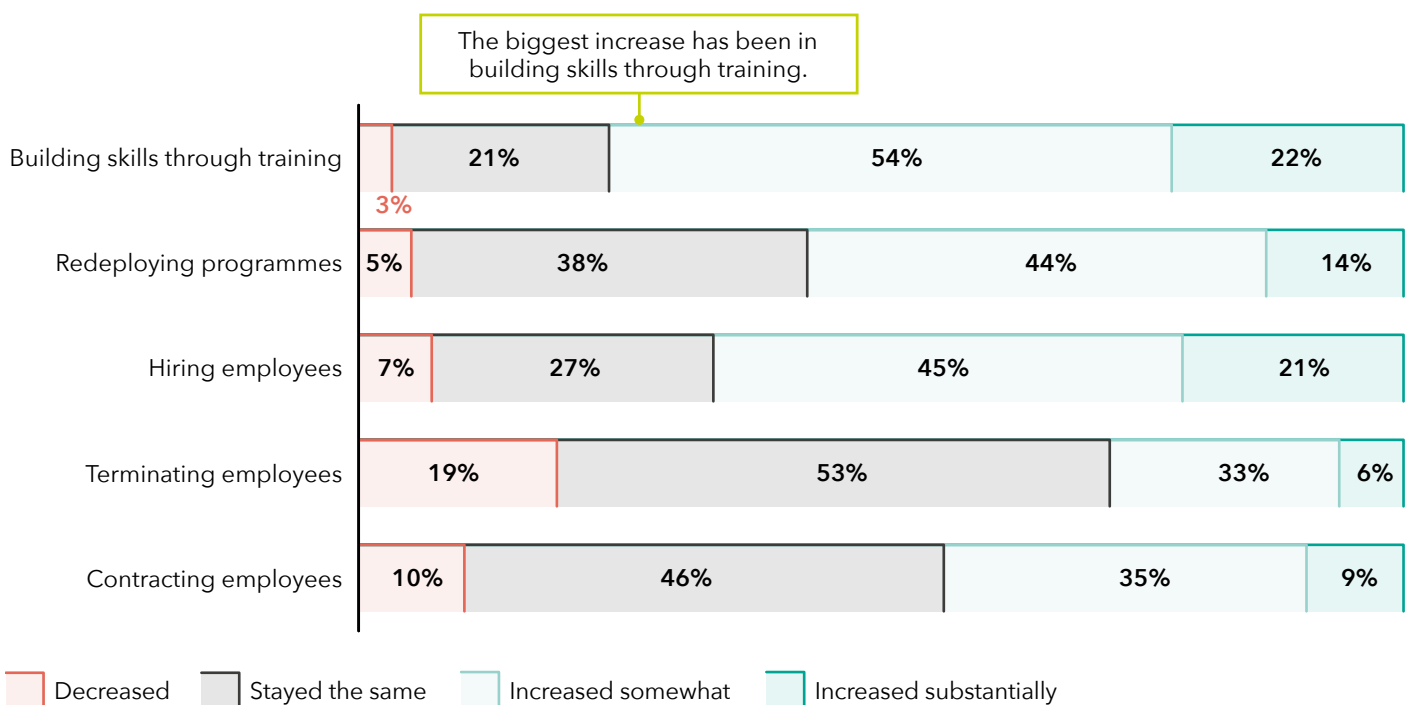


1. Q: Which areas of the talent management lifecycle are the biggest challenge for your organization? Rank up to 3. N = 614.
Source: OC&C Survey, OC&C analysis.

Despite limited results with a hiring focused approach, businesses have been slow to pivot their focus from hiring to upskilling, with actions to build skills through training growing only slightly ahead of actions to hire employees over the past few years.

ACTIONS TAKEN TO ADDRESS SKILLS GAP OVER THE LAST 5 YEARS¹

Percentage of respondents (excl. Don't Know)



1. Q: In the last 5 years, how have the actions you have taken to address skill gaps changed N = 614.
Source: OC&C Survey, OC&C analysis.



However, a significant change appears inevitable, as a greater portion of talent leaders pivot their focus from hiring to L&D recognizing that:

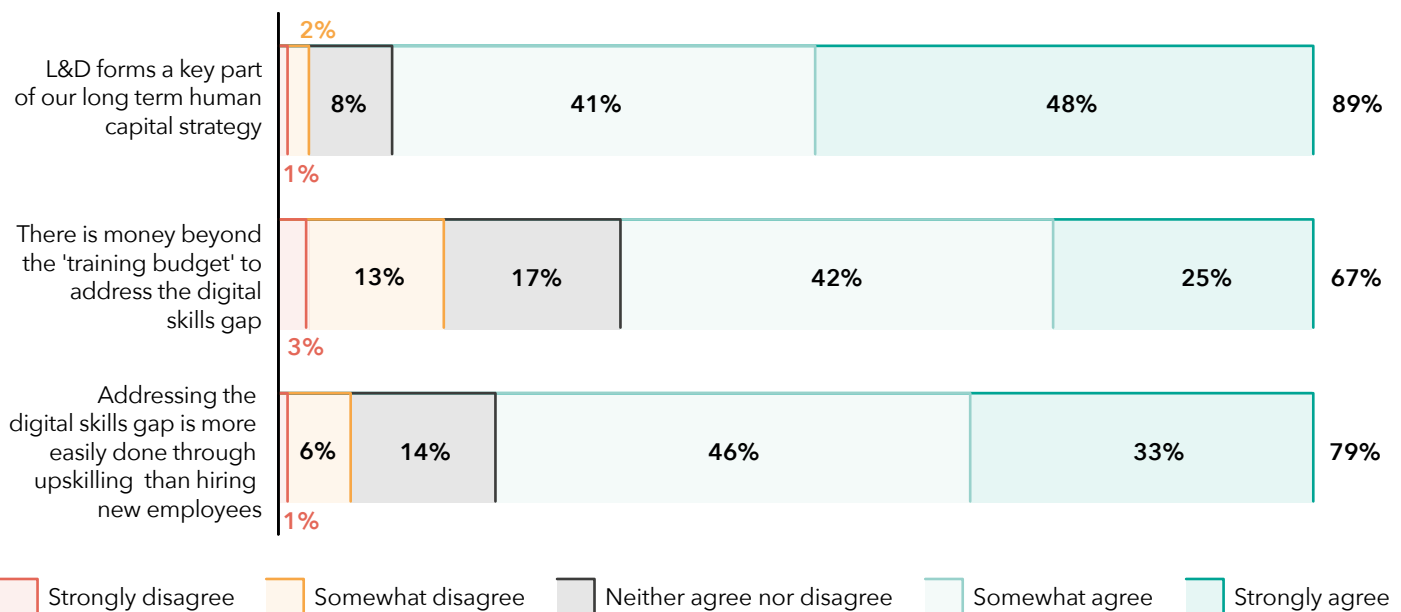
- The inherent and unavoidable challenges of hiring and the unacceptable costs of a zero-sum war for talent.
- The need for continuous skills development in the workforce: hiring new talent is a one-off solution, but technology and the skills required by the workforce are constantly evolving.

- L&D can bring wider benefits including increasing employee happiness and reducing churn.

As a result, today around 80% of leaders acknowledge that addressing digital skills gaps is more feasible through upskilling rather than hiring, and approximately 90% consider L&D a central element of their long-term human capital strategy.

RESPONDENTS' OPINIONS ON HOW TO ADDRESS SKILLS GAPS¹

Percentage of respondents



1. Q: To what extent do you agree with the following statements around latest developments in the talent acquisition & management market? N = 614. Source: OC&C Survey, OC&C analysis.



2. The New *Corporate Classroom*

**TRAINING DELIVERY METHODS HAVE EVOLVED
DRASTICALLY OVER THE PAST TWO DECADES.**

The journey began with traditional in-classroom and in-person training, evolving through stages of virtual training - both instructor-led and self-paced. Today, we are seeing a shift away from standardised and templated self-paced training towards models that blend

instructor-led content with self-paced content, the development of more engaging content (sandboxes, immediate feedback etc...) and the development of more sophisticated learner journeys.

THIS ACCELERATION HAS BEEN DRIVEN BY THREE KEY FACTORS:



COVID-19 as a Catalyst

The pandemic has served as a natural experiment, proving that virtual models can work at scale.



Increased Demand for Cost Effectiveness

As training programmes have scaled and increased in complexity - innovation to manage costs has become increasingly important.



Pedagogical Impact

Innovations in teaching methodologies have enhanced learning efficiency and retention.



LOOKING AHEAD, THE LANDSCAPE OF CORPORATE TRAINING IS BEING SHAPED BY THREE EMERGING TRENDS:



Blended Training Delivery

The shift to self-paced virtual training is stalling due lack of improvement in learning outcomes and learning engagement; new models combining traditional and digital learning methods are emerging to optimize cost effectiveness and pedagogical impact.



The AI paradigm Shift

AI will enable more personalised, interactive and lower cost learning journeys.



Emphasis on ROI

A growing focus on quantifying the benefits of training investments will force training providers to embrace data and measurement.





Blended Training Delivery

The gradual transition from in-person instructor-led training to virtual self-paced training was supercharged by covid when companies were forced to adopt virtual training models. Purely self-paced models are highly cost-effective but increasingly are not delivering the learning outcomes and behaviour changes required.

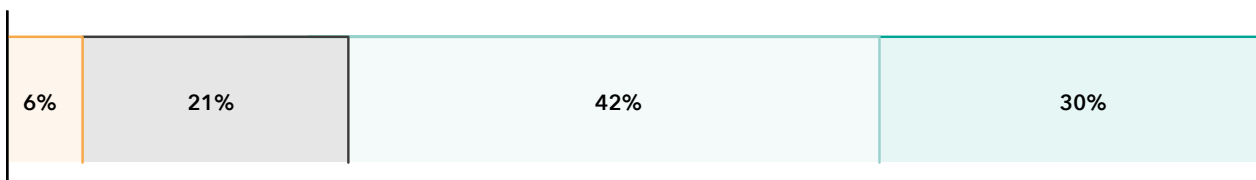
As such, learning buyers are adopting increasingly sophisticated strategies aiming to combine the pedagogical impact of instructor-led training with the cost effectiveness of digital self-paced training.

A clear consensus has emerged that 'hybrid' or 'blended' training is the most effective. According to our survey, 71% of respondents favour this modality.

In general, we expected instructor-led training, more costly but impactful, to be favored for advanced or transformative training. Whereas self-paced training, being more economical, will increasingly cater towards focused, provision-based needs.

HYBRID LEARNING

Percentage of respondents agreeing that "blended training¹ is the most effective type of training"²



Strongly disagree Somewhat disagree Neither agree nor disagree Somewhat agree Strongly agree

1. A mixture of self-paced and instructor-led training.

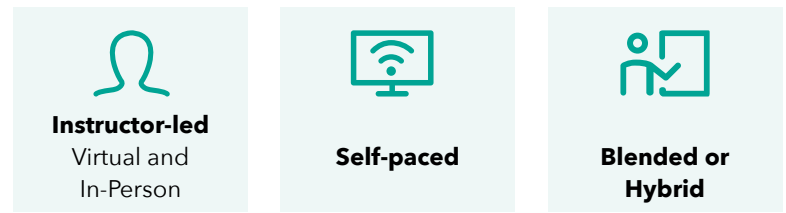
2. Q: To what extent do you agree with the following statements around your purchasing decision process? N = 614.

Source: OC&C Survey, OC&C analysis.

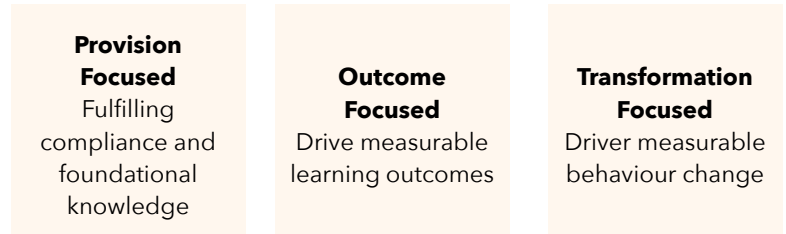
In practice however, there is a supply constraint in the market today: providers are largely unable to offer true blended or hybrid training. Propositions sold as 'blended' learning in practice can consist of standalone instructor-led or self-paced training with no integrated curriculum or learner journey. As a result, for more transformative or productivity oriented needs, providers today are moving back to instructor-led training despite believing that blended learning is more effective.

CORPORATE TRAINING TYPICALLY HAS THREE MODALITIES ADDRESSING THREE PRIMARY CUSTOMER NEEDS

Delivery Modality

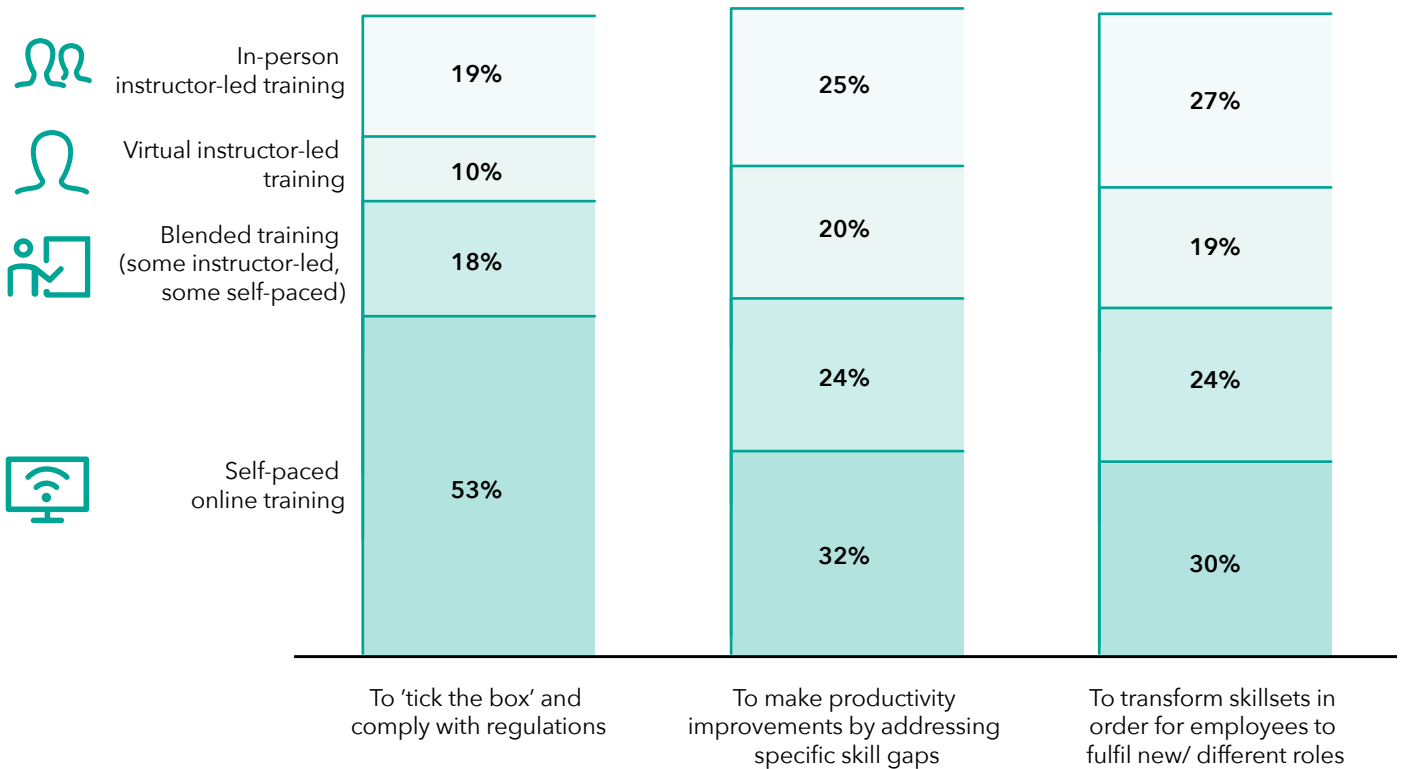


Customer Need



SPLIT OF TRAINING MODALITY BY OBJECTIVE TODAY¹

Average percentage split of training modes



1. Q: What is your primary objective for each type of training?, Q: How does your spend on 3rd party external providers for each of these training types divide across the following training modes? N = 602.
 Source: OC&C Survey, OC&C analysis.

The implications of this are clear: instructor-led training providers focused on more basic, provision focused needs will need to rapidly adapt their models. Self-paced players attempting to venture into more advanced learning types are likely to struggle without incorporating an instructor-led element.

The appetite in the market for blended learning is clear, if the supply constraints can be unblocked.



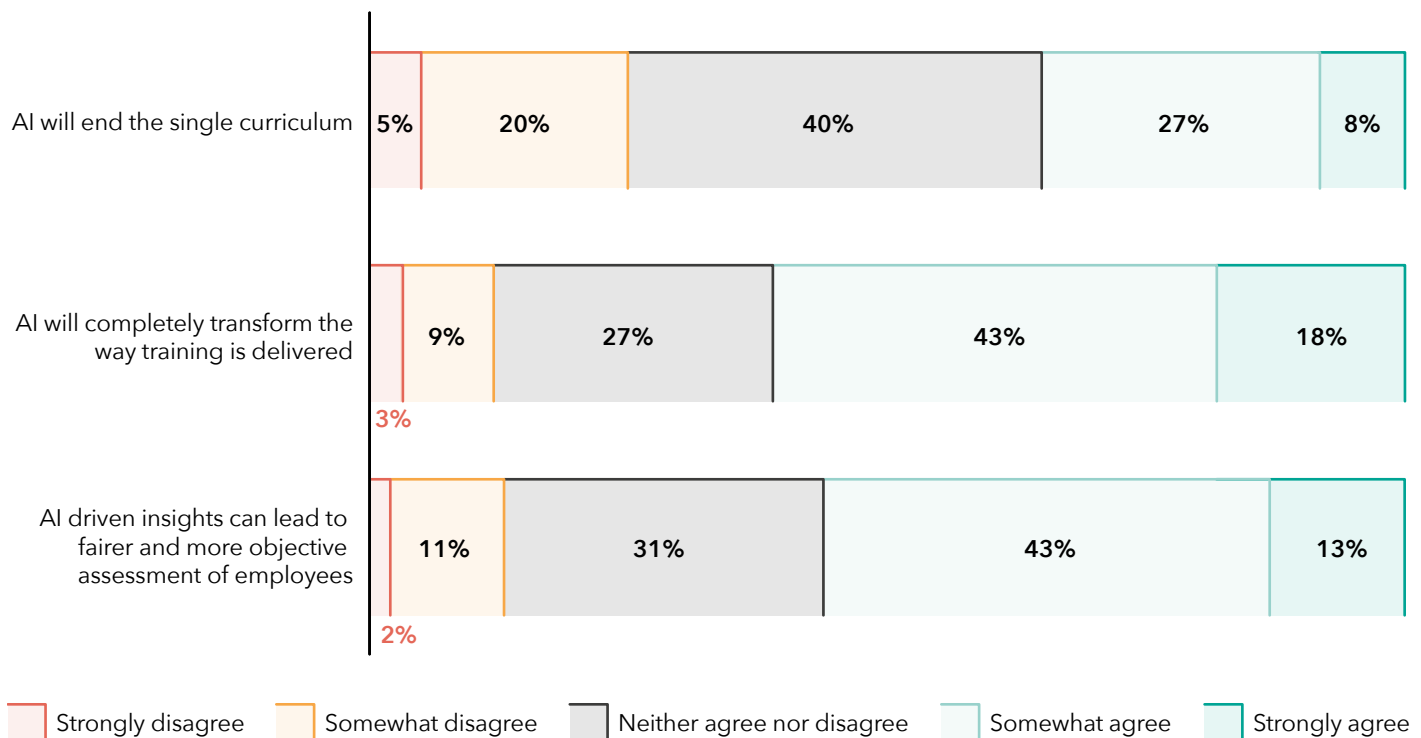
The AI Paradigm Shift

The advent of AI is set to be a game-changer in L&D, driving personalized learning journeys, reducing content creation costs, and enabling more interactive training formats.

While many L&D buyers agree that AI will usher a material change in how training is delivered - surprisingly large numbers remain sceptical about the level of disruptiveness AI will bring.

RESPONDENT OPINIONS ON AI DISRUPTIVENESS¹

Percentage of respondents



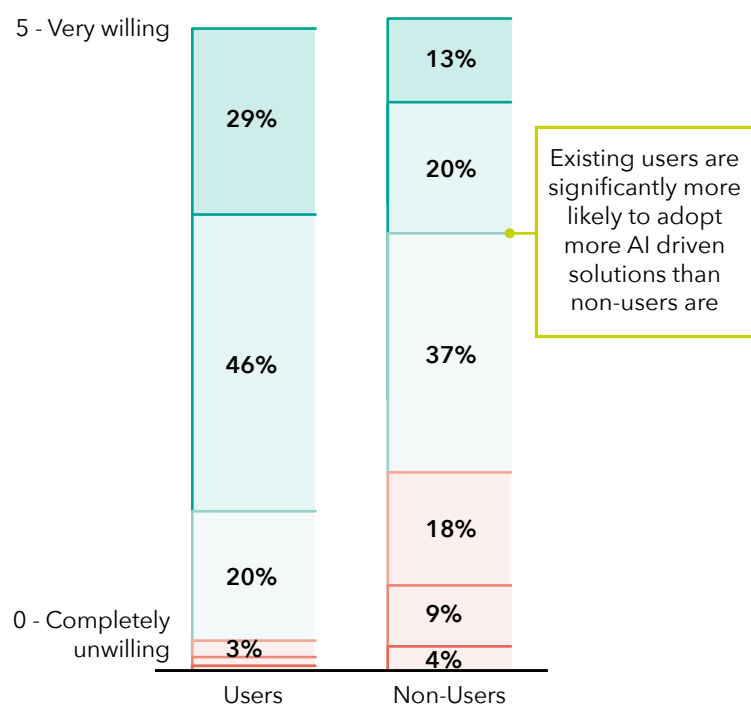
1. Q: To what extent do you agree with the following statements around AI? N = 614.
Source: OC&C Survey, OC&C analysis.



This skepticism often stems from a lack of direct experience with AI in L&D. Amongst those who have engaged with AI solutions, the willingness to adopt more such technologies is significantly higher, and the reported impact on organizations that have embraced AI is positive.

LIKELIHOOD OF FURTHER ADOPTION OF AI ENABLED TALENT MANAGEMENT SOLUTIONS IN THE NEXT 5 YEARS^{1,2}

Percentage of users and non-users



Amongst those who have engaged with AI solutions, the willingness to adopt more such technologies is significantly higher, and the reported impact on organizations that have embraced AI is positive.

1. Selected 3/5, 4/5 or 5/5 when asked how willing they would be to adopt new solutions.
 2. Q: How likely would you be to adopt more AI or machine learning enabled talent management solutions in the in the next 5 years? N= 614.
 Source: OC&C Survey, OC&C analysis.

The reasons for reluctance to try an AI solution remain concerns around data privacy and the potential costs of existing solutions today:

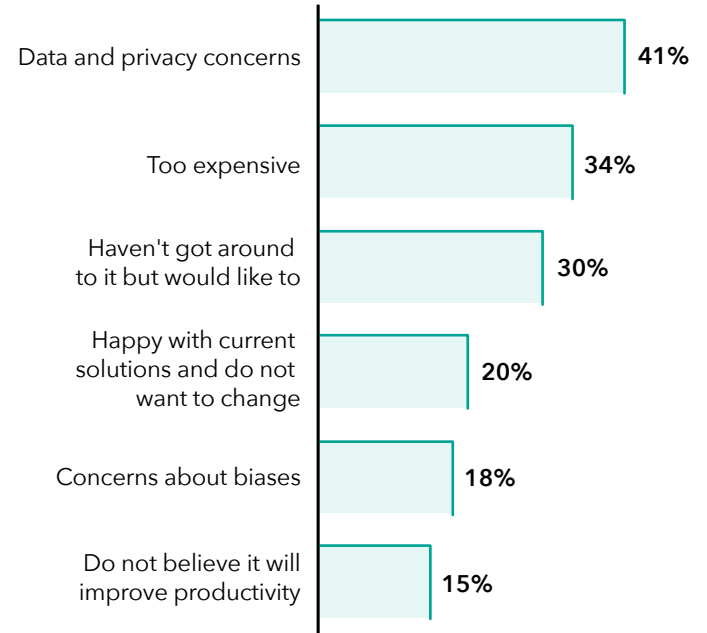
HOW AI HAS IMPACTED RESPONDENTS' ORGANISATIONS¹

Percentage of users



REASONS FOR NON-ADOPTION OF AI SOLUTIONS²

Percentage of non-users



1. Q: To what extent do you agree with the following statements around AI? N = 349.

2. Q: How likely would you be to adopt more AI or machine learning enabled talent management solutions in the next 5 years? N = 265.

Source: OC&C Survey, OC&C analysis.

We are seeing AI leveraged in L&D for a number of different use cases:

- **Virtual Coaching:** Real-time virtual tutors or chatbots enable interactive conversations with learning materials, enhancing engagement.
- **Content Tailoring:** AI's ability to sift through vast amounts of content and tailor it to individual learning preferences revolutionizes content generation, aggregation, and curation.
- **Personalized Learning Experiences:** AI quickly crafts learning experiences that are specifically tailored to individual or team needs, making learning more effective and engaging.

- **Aid in Content Authoring:** The integration of Large Language Models (LLMs) into everyday systems can assist L&D teams in rapidly developing curriculum outlines, implementation plans, and communications.
- **Data, Insight and Measurement:** By analyzing learning data and correlating it with business performance metrics, AI offers valuable insights into the impact of L&D initiatives on organizational goals.

In practice, evidence from buyers that any of these methods have gained traction is still opaque and the market still appears to be in a phase of exploration. But initial feedback is positive and the direction of travel is clear.

87% of L&D buyers in our survey agreed that the ability to measure and communicate the business impact of L&D is becoming critical.

Emphasis on ROI

The focus on measuring the impact and return on investment (ROI) of training programs is intensifying, especially for senior decision-makers.

87% of L&D buyers in our survey agreed that the ability to measure and communicate the business impact of L&D is becoming critical.

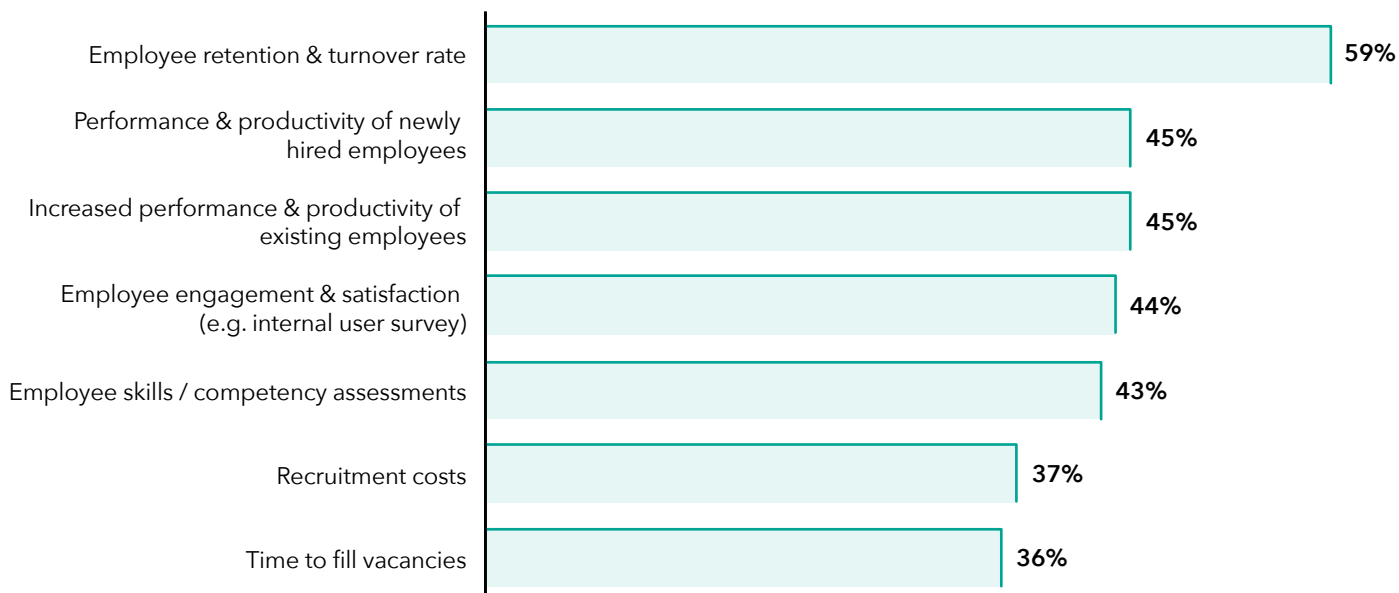
Training is increasingly centrally procured with dedicated teams managing an increasingly large share of spend - 75% of large firms (>5k employees) primarily use centralised L&D procurement structures already.

The need to demonstrate ROI means shifting away from completion rate as the primary success metric of training towards focusing on the development of new skills that measurably improve performance.

Despite this shift, the practice of measuring training ROI is still nascent - 61% of training leaders say they don't measure ROI (source: LearnUpon). Those who do, utilize a range of metrics, such as employee performance and productivity, retention rates, and employee engagement.

METHODS OF MEASURING ROI TODAY¹

Percentage of respondents using

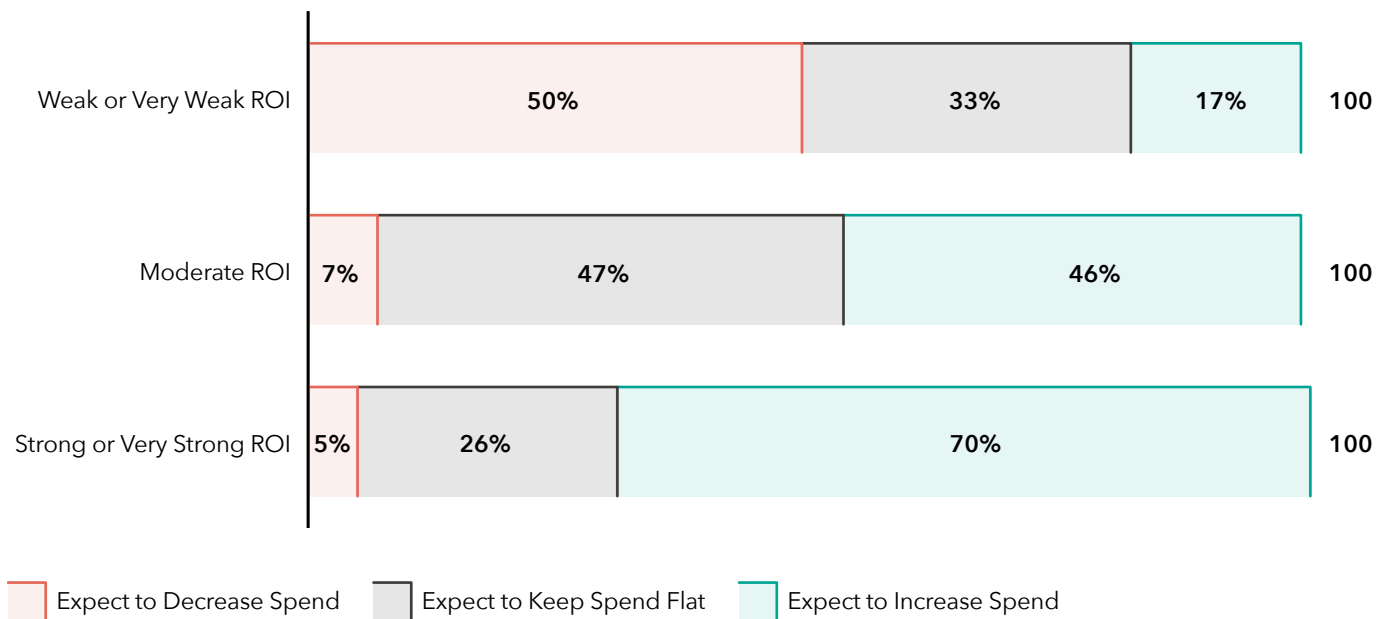


1. Q: In which ways do you measure ROI / benefits today? N = 614.
Source: OC&C Survey, OC&C analysis.

For organizations that do measure ROI, the results underscore the value of this approach. If external training is not perceived as delivering an ROI, buyers consistently expect flat or reducing spend. Where ROI is perceived as strong - 70% of buyers expect to increase spend.

Training providers who do not currently do so should investigate ways of demonstrating ROI to their customers.

EXPECTED CHANGE IN SPEND ON TRAINING PROVIDERS BY PERCEIVED STRENGTH OF ROI^{1,2}



1. Over the next 2-3 years, how do you expect the amount you spend on external training providers to change? n = 237.

2. How strong is the ROI from each external training providers" n = 237.

Source: OC&C Survey, OC&C analysis.

The implications are clear for training providers: to grow spend successfully, training needs to deliver measurable outcomes. Training providers who do not currently do so should investigate ways of demonstrating ROI to their customers.



3. Evolving to Excel:

Competition and Innovation in L&D

IN RESPONSE TO CHANGING CUSTOMER DEMANDS, TECHNOLOGICAL DISRUPTIONS, AND INCREASED SCRUTINY ON TRAINING SPEND, L&D PROVIDERS ARE RAPIDLY EVOLVING THEIR MODELS. THIS DYNAMIC LANDSCAPE HAS GIVEN RISE TO THREE KEY COMPETITIVE BATTLES:

The battle for control: Holistic solutions vs best of breed content

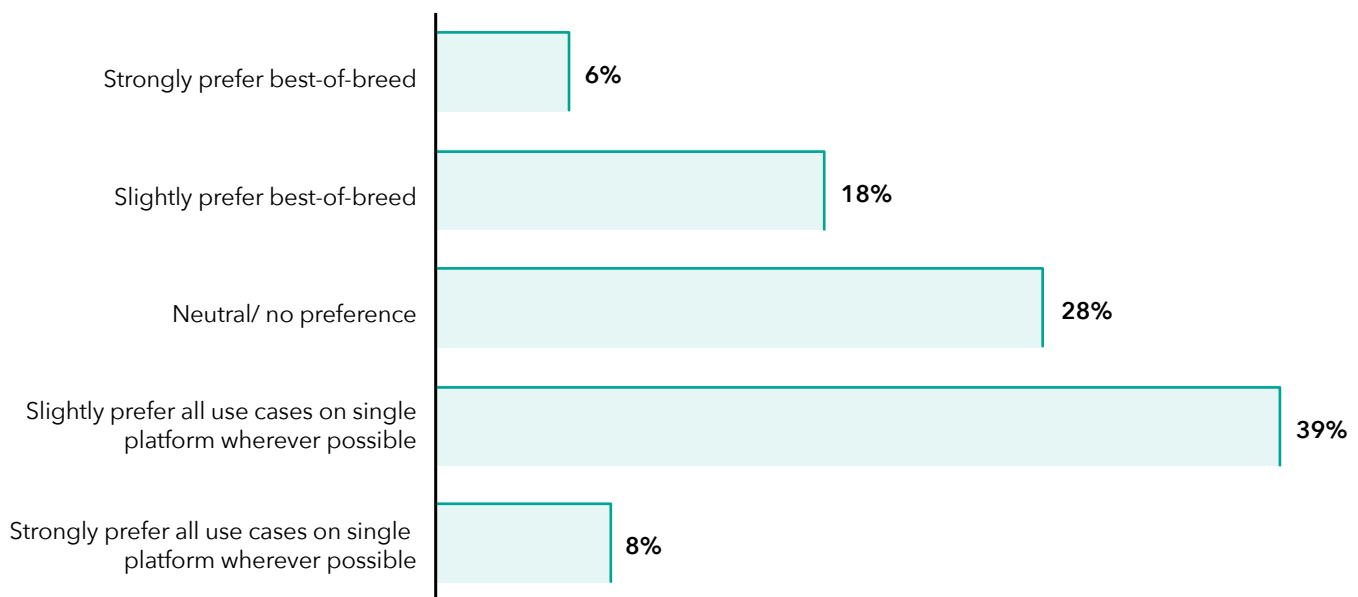
We are approaching an inflection point between two diverging models for training content provision:

- **Holistic solutions sold as end-to-end learner journeys:** Scale providers who design learner journeys, deliver training and track outcomes as part of scale contracts.
- **Best of breed content providers:** These are managed through independent Learning Experience Platforms (LXP) or Learning Management Systems (LMS), with learner journey design often taking place at the company level, likely driven by an LXP.

Today these models often compete for similar use cases and customer types, but we expect this to diverge as the market matures. Best of breed content is likely to be required for more advanced / sophisticated use cases whereas holistic solutions are likely to be lower cost and more convenient for everyday training requirements.

As expected, this was reflected in a mixed set of responses in our survey - albeit with a slight bias towards using one platform where possible.

WHAT IS YOUR PREFERENCE FOR MEETING YOUR TALENT MANAGEMENT REQUIREMENTS THROUGH BEST-OF-BREED VS ALL-IN-ONE USE CASES AS MUCH AS POSSIBLE WITHIN AN ALL-IN-ONE PLATFORM?¹

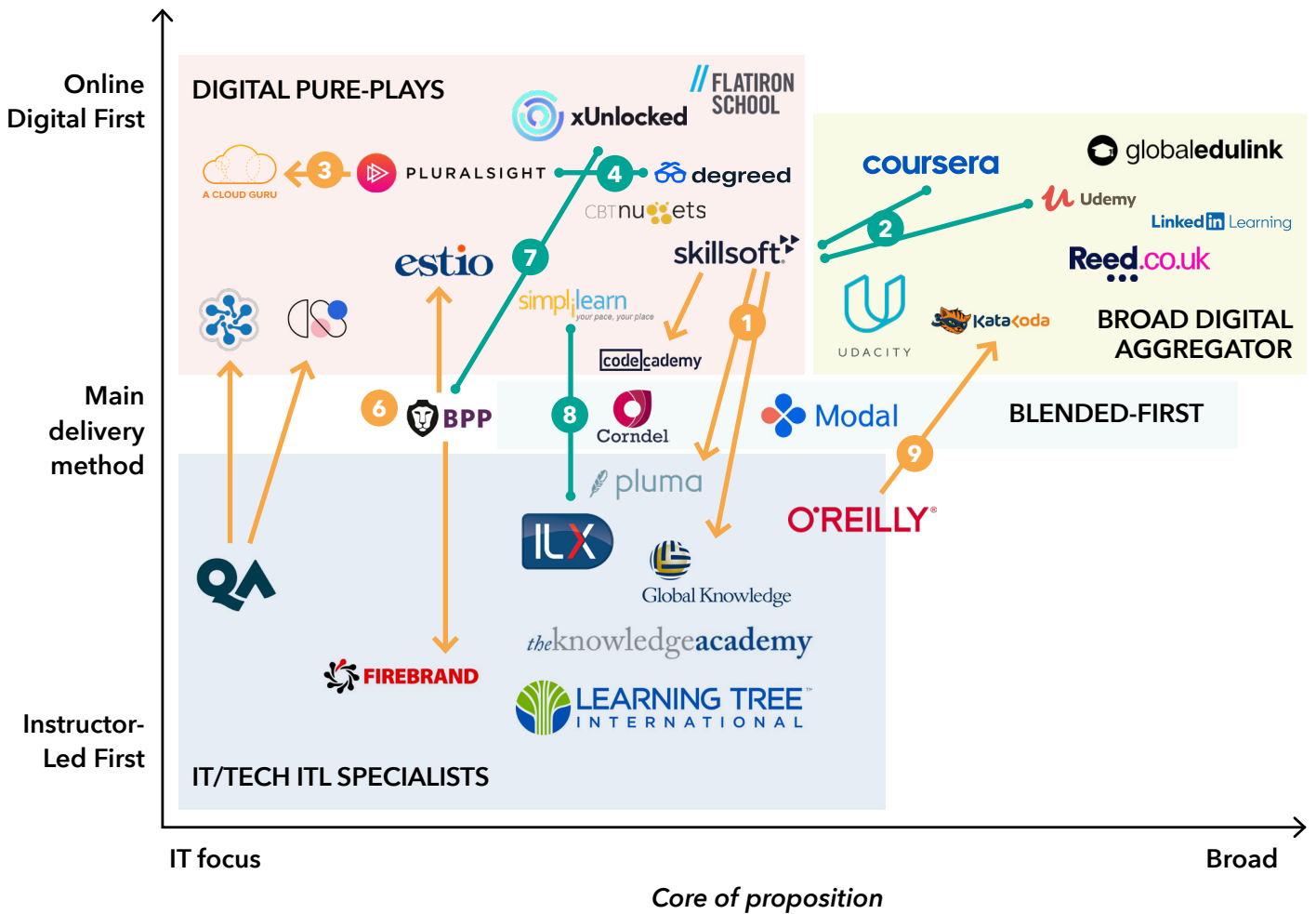


1. Q = What is your preference for meeting your talent management requirements through best of breed solutions for each use case or consolidating uses cases within an all-in-one platform? n = 614

The race to a unified blended learning offering

Most competitors in the industry originate from either an Instructor-Led Training (ILT) or self-paced background. A global player that can seamlessly offer both ILT and self-paced online capabilities in a cohesive and complementary manner remains elusive, yet is crucial to unlocking latent market demand. Consequently, acquisitions are underway as companies strive to enhance their blended learning capabilities and LMS integrations.

CORPORATE IT TRAINING PROVIDERS BY CORE PROPOSITION AND DELIVERY METHOD



X Acquisitions X Partnerships → Acquisitions — Strategic Partnerships









Key Acquisitions & Partnerships

- 1 Skillsoft** acquired **Pluma**, **Global Knowledge** and **CodeAcademy** in 2021 to add global scale and interactive courses to its technical IT training.
- Partnered with **Udemy Business** in 2021 and **Coursera** in 2022 to augment its LXP and blended learning paths.
- Pluralsight** acquired **A Cloud Guru** in 2021 to bolster its cloud skill development offering.
- Partnered with 4 additional digital pure play EdTech players between 2021-23.
- QA** acquired **Circus Street** in 2021 and **Cloud Academy** in 2019 to add global scale and expand its digital marketing and data analysis training offering.
- 6 BPP** (professional & vocational education) acquired **Firebrand** in 2022 and **Estio** in 2021.
- Partnered with **xUnlocked** in 2023 to introduce sustainability as a new vertical.
- 8 ILX** partnered with **SimpliLearn** in 2020 to exclusively provide their digital training programmes in the UK.
- 9 O'Reilly** acquired **Katacoda** in 2019 to integrate interactive learning and sandboxes into its online learning solution.

1. IT/Tech ITL Specialists.
Source: Bain "QA Learning Strategy Refresh" 11th October 2019, Desk Research, OC&C analysis.

The competitive edge in AI development

According to our survey, 56% of L&D buyers believe that AI will be a key differentiator amongst L&D providers in the future. To this end, players are exploring AI applications in several areas:

	Example	Use of AI
Virtual Coaching		The Cognii Virtual Learning Assistant uses AI to support instant assessment and qualitative feedback through personalized adaptive conversations.
		Duolingo's Explain My Answer and Roleplay functionalities use AI to enable interactive conversations, and receive live, tailored answers and explanations to questions.
Content Tailoring & Personalized Learning Experiences		Coursera's CourseMatch functionality uses AI to match in-person/live courses to the most relevant courses in its existing course catalogue.
		LinkedIn Learning uses AI to support course recommendation through using user interests and course metadata to predict course relevance; course recommendation is also offered by LinkedIn Learning's AI-powered chatbot.
		Realizeit uses AI to personalize learning paths and content based on continuous micro-assessments across key organizational L&D metrics.
Content Authoring		Go Skill's Genie tool uses AI to support course content development, including course plans and interactive quizzes from prompts.
	 PROF JIM	AI is used for Prof Jim's Reelbook and Creator Assistant functionalities, to generate interactive video content and lesson plans from prompts and textbooks, within the higher education space.
Data, insight and measurement		Axonify Impact is an AI-led learning attribution tool tracking learning outcomes to key business metrics, helping corporate L&D teams assess training course impact.

Source: Desk Research, OC&C analysis.

While the leaders are yet to emerge, the capabilities needed are increasingly clear: possession of extensive learner data, advanced technical prowess in AI, and robust expertise in content development and pedagogical strategies.

Develop a wide array of course content that can be personalised to individual learner profiles for better engagement and outcomes.

Implications for L&D Players

To capitalise on opportunities in the space companies should focus on developing their proposition with these trends in mind. Key considerations include:

Customer / Client Understanding

- Understand your market within L&D in terms of customer need and subject matter. Make sure your delivery modality and solution type are compatible with the learning preferences and needs in your segment.
- In the longer term leverage data to understand which skills are most in demand and focus on programmes that can address a broad range of digital transformation for businesses looking to upskill.

Content & Modality

- Develop a wide array of course content that can be **personalised** to individual learner profiles for better engagement and outcomes.
- Build an effective real **blended training** engine that can offer an integrated blended learning offering to clients meeting the clean unmet demand in the market.
- **AI** will dramatically change L&D: providers need AI teams set up to test and learn as new innovation comes to market. However, they must also recognise that L&D buyers are cautious and content generated via AI must be rigorously checked.

Platform & Product

- Ensure seamless compatibility with various Learning Management Systems (LMS) and Learning Experience Platforms (LXP) to deliver **personalised** content at scale.
- Design and implement metrics to track the effectiveness of L&D programmes, as this can be a key selling point for businesses **monitoring the ROI** of their upskilling investments.
- Data security is paramount, concerns around data and privacy are the most prominent stated reason for non-adoption of **AI** amongst professionals surveyed. Safeguards within model training and data handling and compliance with data protection laws must be in place and L&D businesses must demonstrate this to L&D buyers.

OFFICES

Belo Horizonte¹

Boston

Hong Kong

London

Melbourne

Milan

Munich

New York

Paris

Rotterdam

São Paulo¹

Shanghai

Sydney

Warsaw

uncommon sense™

occstrategy.com



Please get in touch to share your experience or continue the discussion:

Pedro Sanches

Pedro.Sanches@occstrategy.com

Ed Plummer

Ed.Plummer@occstrategy.com

Carl Evander

Carl.Evander@occstrategy.com

Tom Jackson

Tom.Jackson@occstrategy.com



OC&C
Strategy consultants

Certified



Corporation

1. The B Corp certification does not extend to our alliance with Advisia OC&C Strategy Consultants in Brazil.