

Upskilling Playbook: AI, Skill Development, and the Workforce

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Abstract

The *Upskilling Playbook* is a strategic guide for organizations to build, scale, and integrate skills-based workforce development initiatives that drive business performance and career growth. Despite rapid economic and technological shifts making upskilling a business imperative, many efforts struggle to gain traction and become embedded in business strategy.

This playbook cuts through the noise while preserving the depth needed to drive real change – integrating corporate best practices, academic research, and practical application. It helps organizations amplify the impact of existing initiatives or launch new efforts with clarity and measurable results. It provides a practical framework for navigating challenges, capitalizing on opportunities, and implementing upskilling at scale. Covering key areas such as workforce ecosystem development, program design, measurement strategies, and leadership alignment, it delivers actionable insights for HR professionals, business leaders, and decision-makers.

When organizations fully embed upskilling into their talent and business strategy, they create sustainable talent pipelines, improve retention, and future-proof their workforce against industry shifts and technological advancements.

Framing the Opportunity

Artificial Intelligence (AI) is reshaping how organizations think about the future of work, how work gets done, and how people and technology intersect.

At the same time, it remains a future conversation, as the full potential of its technological capabilities continues to unfold.

The challenge isn't whether AI will change jobs; it's *how organizations choose to change alongside it*.

History gives us the pattern: every major technological shift – from mechanization to automation to digitization – has followed the same arc.

Companies invest in technology first, and people later.

How leaders – especially talent and workforce leaders – plan for it now will profoundly shape what comes next.

Efficiency wins; capability waits.

As this new wave unfolds, that pattern is repeating. Some leaders see the potential of AI but are waiting to see how it plays out before acting.

Others are caught in the swirl of new AI-enabled tools, treating them as stand-alone solutions rather than part of a broader workforce strategy.

When disruption comes, the instinct is familiar: capture gains through job reduction, not reinvention.

It's the old playbook of fast efficiency and missed learning.

The cost is already visible. There are growing reports of companies planning large-scale reductions as technology replaces people.

That's not a moral judgment; it's a mirror showing how easily organizations can over-invest in technology for short-term financial gains while under-investing in the human systems that make transformation sustainable.

The goal isn't to resist technology or slow progress. The goal is to ensure that capability advances at the same pace as automation -- preparing for and executing the shifts of

groundbreaking technology in ways that help businesses thrive and support people as they grow within them.

When businesses fail to develop both technological and human capabilities in tandem, they often find themselves chasing talent later for roles they could have been preparing people for now.

[McKinsey's research](#) estimates that nearly “40% of all hours worked could be automated by 2030, yet 90% of organizations underestimate the reskilling needed to adapt”. At the same time, birth rates are declining, retirements are increasing, and competition for skilled workers is intensifying.

[Lightcast's 2025 Workforce Risk Outlook](#) underscores the point: “The labor market is at a critical inflection point, driven not just by AI and technology but by demographic shifts leading to a tidal wave of disruptive skills that will affect every job, and every business's ability to sustain a skilled workforce.” The report goes on to project a “shortage of 877,000 workers per year across 15 industries - culminating in a shortfall of 4.39 million workers by 2030.”

Compounding the challenge is that many of the roles and people most at risk of displacement are frontline workers. These are the very individuals who could be reskilled into new, higher-skilled jobs.

Absent development, they become sidelined, and organizations face rising vacancy rates, longer time-to-fill, and higher costs.

The ripple effects extend beyond the business: economies and communities are weakened by an underutilized workforce.

The risk isn't just displacement, it's the depletion of human capability and potential. Organizations that treat AI purely as an efficiency play will hollow out their capability base.

Those that treat it as a development opportunity will multiply it. That's the leadership moment in front of us. It's not simply about adopting AI - it's about directing it.

The opportunity is to use this transition to rethink how capability is built, not just how work is done, and to ensure that investments in technology are matched by investments in people.

Because it's the combination of both that drives performance, resilience, and long-term growth.

Shifts to Watch

To help influence and navigate the initial waves of AI change –as well as what comes after –it’s critical to pay attention not only to what is changing but also to how those changes are being interpreted and acted upon.

Many organizations find themselves at a critical juncture: the drive for efficiency and cost reduction on one side, and the need for thoughtful, long-term capability building on the other. The pressure to show progress is high. The discipline to shape it well, for the health of both the business and its people, is rare.

Across industries, three major shifts are already visible. Each represents a point where talent and workforce leaders can focus their attention and influence a better direction.

1. Automation Is Outpacing Imagination

AI, in its current form, has gravitated toward what’s easiest to automate: repetitive tasks, transactional workflows, and administrative decisions. These are the quick wins that promise efficiency, but not necessarily effectiveness.

In recent findings from [WorkTech](#), amplified by [Red Thread Research](#), the organization highlighted that the AI’s impact on HR domains is 70% retention & turnover mitigation, 40% recruitment & talent acquisition, and just 25% learning & development.

The issue isn’t that automation exists; it’s that it’s often implemented without a coherent plan for how people will evolve alongside it. When automation and skill development happen separately, the organization gains speed but loses capacity.

The real opportunity lies in redirecting the productivity gains of AI into capability gains using freed-up capacity to help people learn, adapt, and improve systems.

What This Means for Leaders

Mid-level talent and workforce leaders play a critical role in injecting imagination into the efficiency conversation. You may not decide which technologies are adopted, but you can shape how they’re used and what outcomes they support.

Here’s how to start:

- **Map the flow of work before mapping the automation.** Understand where handoffs fail, where human skills such as communication, judgment, or creativity matter most,

and where time is wasted. Share these observations along with perspective on how AI and skill development can meaningfully help.

- **Design “freed capacity” on purpose.** When automation reduces workload, decide in advance how to reinvest that capacity. Share how teams can use it to develop skills, solve problems, or improve quality. Provide the connection to business outcomes, so the intention is not just time gained.
- **Anchor the conversation in outcomes, not outputs.** Ask: What will this change enable us to do that we couldn’t before? This question keeps the focus on broad progress, rather than just the process.
- **Influence upward by connecting efficiency to growth.** Efficiency gets attention. Use it to open the door for capability conversations, show how investing in development turns automation into a sustained advantage.

Efficiency without imagination is acceleration without direction.

2. Capability Systems Are Lagging Behind

Technology budgets are growing faster than budgets for the development of people in learning, workforce development, and talent management.

Many organizations are investing heavily in systems that make work faster but not necessarily smarter. Their learning, career, and performance infrastructures are still built for existing hierarchies, not for continuous movement or adaptive growth.

The result is a slow-moving capability engine in a fast-moving world.

Displacement and shortages can happen simultaneously and without notice. The same workers being automated out of one role could fill another, but only if learning, workforce planning, and internal mobility systems are connected and forward-looking.

Lightcast data projects an annual shortage of more than 870,000 workers in the US through 2030 (totaling 4.56 million), a shortfall that will not be solved by external hiring alone. When systems fail to anticipate these shifts, organizations end up competing for talent they could have already been developing.

For leaders, this is the place to lead with foresight.

Consider:

- What future work is coming that people can prepare for now?

- Which roles are likely to change, and what adjacent skills could bridge that change?
- Are our learning systems connected to workforce planning, or are they operating in parallel?

Your influence as a leader:

- Surface where talent could move inside your organization before it moves out.
- Advocate for, and visibly describe how pairing automation investments with internal mobility and upskilling programs benefits the business.
- Help decision-makers see that reskilling is not a cost but a continuity plan.
- Use workforce data to start conversations about long-term capability risk, not just short-term headcount.

This is not about predicting every job that will change, it's about influencing the creation of systems that make change survivable and strategic.

3. Strategy Is Being Dictated by Technology

A quiet but dangerous shift is unfolding inside many organizations.

As vendors race to add “AI-powered” to their products, technology is starting to determine direction. Tools promise insight, automation, and personalization, but often without alignment to workforce strategy, values, or culture.

This has been called “technology-led drift.” When companies outsource judgment to algorithms, they don’t fully understand the implications. It happens gradually: AI becomes embedded in workflows, and before long, technology systems—not people—are defining how work is managed, measured, and rewarded.

[Red Thread Research](#) has reported on the learning technology space, which identifies over 400 vendors, with organizations averaging 11 learning systems each. This is a signal of rapid automation chasing opportunity, not always strategy.

This is not an IT problem. It’s a leadership problem.

For mid-level talent and workforce leaders, this is where your influence matters most. You may not write enterprise AI policy, but you can shape how decisions are made and how success is defined.

Ask and elevate these questions:

- What problem is this technology actually solving and for whom?
- How will this system affect learning, decision-making, and trust?

- Does it align with our values, or replace them with efficiency metrics?
- Who owns the outcomes and who is accountable for the unintended ones?

Actions to take:

- Influence AI projects to have clear business and people outcomes, not just technical goals.
- Advocate for transparency: leaders should understand how systems generate recommendations and what data they rely on.
- Connect with peers in the business, HR, and IT to establish review moments – times to ask, is this helping us do better work, or just faster work?

Leaders who bring these questions and actions into conversations help ensure that strategy remains human-led, even as technology advances.

A Leadership Moment in Motion

These three shifts are already underway. The decisions being made in meeting rooms today around what to automate, where to invest, which skills to prioritize, and more will determine whether AI becomes a driver of progress or a shortcut to depletion.

The leaders who succeed in this era will be those who guide their organizations to develop capability as fast as they develop technology.

Building Your Knowledge

Understanding AI, including how it works and what informs the outputs you work with, is essential for those designing or using it in workforce development. There are many resources that exist to help build your knowledge in a way that allows you to both use the technology and have conversations that shape its application. One example is [IBM's SkillsBuild AI Literacy Quiz](#). It's open to anyone and walks you through key topics such as ethics, bias, data sources, cultural representation, and the functioning of AI models. After a short set of questions, it provides a tailored learning path based on your responses and level of understanding.

Knowing how adoption is working for others can be an additional unlock for your organization. Harvard Business School's Project on Managing the Future of Work has created a [Generative AI Adoption Tracker](#). It is a market intelligence resource that tracks the uneven pace and patterns of enterprise generative AI adoption. It moves beyond anecdotal evidence by providing quantifiable data on usage, ROI, and where value is actually emerging across business functions. This tracker enables the critical shift from exploring AI to directing it. It

empowers leaders to transform capability discussions from an HR cost center to a strategic business risk, providing the data necessary to connect efficiency to long-term growth and secure sustained investment in the human systems that make transformation sustainable.

Tools like this matter because, as you look to use AI to shape learning or workforce systems, you need to know how the technology itself shapes access and opportunity. Legacy organizations, in particular, must be thoughtful about the data they feed into AI. This includes what was collected, what was ignored, and how those decisions reflect the people behind them. Questions of ethics, data privacy, and cultural context aren't side issues; they're core to responsible design. As millions of jobs shift or emerge because of AI, we have a chance to use it to open pathways for people, especially those in historically overlooked frontline roles. These workers often include underrepresented groups and bring real skill, knowledge, and the capacity to learn. Building our own AI literacy – through quizzes, courses, and ongoing learning – helps ensure you build your understanding and bring accountability to the table.

Navigating the Path Forward

A practical roadmap for mid-level talent and learning leaders

Too often, the role of a leader in workforce or learning development is defined by execution: building products, delivering training, or managing programs. The skill this moment calls for is something different: the ability to see patterns, name them, and hold a mirror to the organization so others can see where it is and redefine what is possible.

Use the insights and questions in this chapter not as a checklist to complete, but as a way to turn awareness into influence and action.

1. Explore and Frame

Explore the questions surfaced throughout this chapter.

- Which ones are most relevant to your organization's current context?

Use them to spark conversation with peers, business partners, or leaders above you. The goal isn't to have every answer, but to start bigger and more connected conversations.

Ask yourself:

- Which of these questions reveals something we haven't talked about yet?
- Where are decisions being made without clarity on their long-term impact on people?

2. Connect to Energy and Opportunity

Pay attention to where there's curiosity, momentum, or tension inside your organization.

These are signals. Use what you learn from conversations to connect with areas where others are already exploring or experimenting.

Your role is to amplify alignment:

- Where is there already movement toward capability building?
- Where is there a tension – current or future – that deserves conversation?
- How could AI, learning, and workforce planning be discussed together rather than separately?
- Who are the partners, inside or outside HR, who share your goals for people growth?

3. Bring Data and Evidence

Ground the conversation in insight. Pull together data, formal or informal, that illustrates both the risk of inaction and the opportunity for growth.

Examples include:

- Attrition data in areas most likely to be automated.
- Time-to-fill or skill-gap data to show where development could reduce pressure.
- External research to position your case as business-critical, not just people-focused.

Your aim is not to overwhelm with data but to connect it to a simple message: developing capability is a strategic hedge and a competitive advantage.

4. Move from Insight to Action

Turn insight into small, visible steps. You don't need to wait for permission to start showing what's possible.

Actions might include:

- Piloting a new approach to learning or workflow design with a small team.
- Partnering with IT or Operations to run a short, AI-enabled test project that pairs automation with skill development.

- Documenting and sharing results that demonstrate impact, including both productivity gains and human development benefits.

Each pilot builds shifts conversations, builds credibility, and credibility builds influence.

5. Keep Watching and Reframing

Finally, keep your perspective active. Don't just monitor what is changing, pay attention to how your organization is responding to it.

Where is capability being built, and where is it being lost?

Where is technology creating energy? Where is it creating anxiety?

Your leadership role is to notice, name, and influence.

The goal isn't to slow the pace of AI; it's to ensure the organization grows with it, not beneath it.

Closing Reflection

This is not a fixed plan; it's a navigation tool.

The path forward with AI will not be linear; the leaders who stay curious, connected, and courageous will help their organizations build systems that keep people and technology advancing together.

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2300 N Street NW #700
Washington DC 20037

upskillamerica.org

upskillamerica@aspeninstitute.org