



Upskilling Playbook: Ecosystem

UpSkill America at the Aspen Institute

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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.

What's at Stake

Developing a workforce that meets the evolving demands of the 21st century requires more than launching isolated upskilling initiatives, standalone training programs, or even large-scale learning investments. It requires an intentional ecosystem approach—a strategic, integrated framework that connects talent development to business priorities, ensuring that skill-building efforts create long-term value for employees, organizations, and communities.

In recent years, there has been extensive discussion about the need for more effective workforce planning to address technological advancements, shifts in workforce dynamics, and emerging business challenges. These discussions consistently highlight the need for a new approach. MIT Sloan defines a workforce ecosystem as “a structure focused on value creation for an organization that consists of complementarities and interdependencies. This structure encompasses actors, from within the organization and beyond, working to pursue both individual and collective goals.” This definition reinforces why a piecemeal approach to upskilling is insufficient—true impact comes from designing an interconnected system that supports both business and workforce needs.

Yet, too often, upskilling efforts are developed in isolation, rather than as part of an integrated ecosystem. Instead, they are treated as a standalone initiative within the organization – disconnected from talent acquisition, job design, internal mobility, and business strategy. As a result, organizations experience inefficiencies, limited workforce agility, and a growing gap between business needs and the development of employee capabilities.

Key Trends Driving the Expansion of Upskilling

 **Upskilling as Business Imperative** – i4cp research shows that companies with workforces prepared for skill shifts in the next 3–5 years, and that embrace continuous learning, can achieve 2 times the market performance of their peers.

 **Breaking the Credential Barrier** – Historically, skills have been overshadowed by degrees or years of experience as indicators of job readiness. However, according to the World Economic Forum, 60 percent of employers expect digital transformation to reshape their business by 2030. To meet this shift, organizations must adopt a faster, more agile approach—leveraging targeted upskilling efforts, skills-first hiring, and internal mobility to successfully navigate these changes.

 **Expansion Across Industries** – While early employer-driven upskilling was concentrated in specific sectors such as technology and supply chain, it has now expanded to industries such as healthcare, retail, and manufacturing.

By taking a deliberate, ecosystem-based approach, organizations can:

-  Enable career mobility, reducing reliance on external hiring while increasing retention.
-  Improve organizational agility in response to technological and market shifts.
-  Ensure that upskilling efforts strategically align business needs with employee aspirations.
-  Strengthen business and employee resilience, ensuring that talent pipelines support long-term success.

The Problem Today

Despite growing investment in workforce development, organizations struggle to create a sustainable, scalable upskilling ecosystem. The result? Disjointed efforts, limited career mobility, and an inability to measure impact effectively.

 **Siloed HR and Business Functions** – Learning and workforce planning teams operate separately, leading to inefficiencies.

 **Limited Career Pathways** – Employees don't see how skills translate to career growth within the company.

 **Lack of Skills Data and Measurement** – Without data, organizations can't track skill development or workforce readiness.

 **Reactive Workforce Planning** – Companies struggle to anticipate future skill needs, leading to talent shortages.

The Solution

Building a Workforce Ecosystem

A thriving upskilling ecosystem consists of two fundamental components:

 **Business Needs** – Organizations must anticipate future job demands and align workforce development with evolving business priorities.

 **Employee Capabilities** – Workers must have access to opportunities to share career aspirations, acquire new skills, apply their learning, and see clear pathways for advancement.

At the intersection of business needs and employee capabilities are several key supporting elements:

 **Job Design** – Clearly defining skill expectations, career progression models, and internal mobility structures. This includes updating job descriptions to reflect evolving workforce needs.

 **Skills Mapping** – Identifying high-demand skills and ensuring alignment between workforce capabilities and business goals. Employees should also have visibility into their own skills and desired growth areas.

 **Continuous Role Evolution** – Designing adaptable job structures that support upskilling rather than relying solely on external hiring.

 **Career Pathways** – Transparently demonstrating career opportunities and skills required for progression, including transitions between functions.

✦ **Performance Management** – Ensuring leaders provide employees with actionable feedback and coaching to guide skill development.

Enablement: The Internal Infrastructure to Support Upskilling

Beyond foundational components, scaling upskilling requires embedding it into business operations. Four key enablers ensure that the ecosystem remains effective:

✦ **Leadership Commitment** – Upskilling must be championed by business leaders at the highest levels. This includes:

- Treating workforce development as a strategic priority essential to achieving business objectives.
- Holding executives and managers accountable for workforce outcomes, such as internal mobility and retention.
- Integrating upskilling into organizational KPIs and strategic planning.

✦ **Stakeholder Networks** – Breaking down silos ensures talent development efforts align with business needs. Effective ecosystems foster collaboration between:

- HR functions – Reviewing all talent acquisition and development efforts and aligning them toward shared metrics.
- HR and Finance – Treating upskilling as a long-term business investment, not just an expense.
- Business leaders – Involving department heads and frontline managers to integrate upskilling with operational realities.

✦ **Technology Integration** – Digital platforms play a critical role in scaling and sustaining upskilling programs by:

- Facilitating skills tracking through AI-driven workforce analytics.
- Supporting career mobility by actively matching employees with opportunities and mentors.
- Enhancing learning engagement through adaptive, user-friendly platforms.

✦ **Data & Insights** – Organizations must move beyond basic participation metrics and measure business and employee impact. This includes:

- Tracking promotion rates, retention, and productivity improvements rather than just training completion.
- Aligning learning investments with business performance outcomes such as innovation, efficiency, and customer satisfaction.
- Leveraging workforce analytics to continuously refine upskilling strategies.

The Broader Ecosystem: External Partnerships and Policy Alignment

While internal strategy forms the foundation of an upskilling ecosystem, true scale and sustainability require external connectivity. Organizations that leverage industry partnerships, community collaborations, and workforce policy initiatives can extend their impact, strengthen talent pipelines, and contribute to systemic change.

Three Key External Elements Needed to Enhance Upskilling Efforts:

✦ **Industry and Academic Partnerships** – Many organizations struggle to fill critical roles due to misalignment between traditional education pathways and employer skill demands. By forging stronger connections with education providers, businesses can:

- Work with universities, trade schools, and boot camps to develop industry-recognized credentials and targeted training programs.
- Collaborate with industry consortia and sector-specific alliances to address shared workforce challenges, such as digital transformation in manufacturing or AI adoption in healthcare.
- Ensure the adoption of skills-based hiring while reducing reliance on degree requirements that may unintentionally exclude diverse and capable talent.

✦ **Community Collaboration** – Sustainable workforce development requires engagement beyond corporate boundaries. Employers that actively participate in regional workforce initiatives, apprenticeship programs, and talent development coalitions help to:

- Strengthen local economies by investing in workforce readiness programs that support underserved populations, while enhancing employer branding.
- Build pipelines of skilled workers through partnerships with community colleges, nonprofit organizations, and government agencies.

- Design work-based learning experiences such as apprenticeships, internships, and employer-sponsored training that bridge education and employment.

✦ **Policy and Advocacy** – Government policies play a crucial role in shaping the funding, incentives, and infrastructure that support workforce development. Employers who engage in workforce policy discussions can:

- Advocate for reskilling incentives, tax credits, and funding that offset upskilling costs for businesses.
- Collaborate with policymakers to ensure that education systems evolve to match industry needs, reducing skill mismatches.
- Support initiatives that expand access to lifelong learning opportunities, particularly for workers in roles most impacted by automation and digital transformation.

These external connections amplify the effectiveness of internal upskilling strategies, creating a workforce ecosystem that is adaptable, resilient, and aligned with long-term business and economic needs.

The Personas in an Upskilling Ecosystem

The Business Executive: Balancing Strategy and Immediate Needs

“I know we need a stronger talent pipeline, but we can’t afford to get stuck in long-term planning while struggling with immediate workforce shortages. How do we move forward without slowing down the business?”

For business executives, workforce development must be more than an HR initiative—it needs to be a business driver that delivers tangible value. They want to see upskilling efforts aligned with growth, innovation, and financial performance, but they also need quick wins that demonstrate progress today while building a sustainable approach for the future.

What helps them move toward an ecosystem approach?

- ➡ Seeing direct links between workforce planning and business strategy, ensuring that skill-building efforts support innovation and competitive advantage.
- ➡ Metrics that show improved retention, mobility, and productivity, proving that upskilling efforts generate measurable returns.

➡ A phased approach that delivers immediate impact while ensuring long-term integration, preventing workforce transformation from disrupting business operations.

The HR/Talent Leader: Breaking Down Silos and Building Alignment

“We’re already investing in learning and development, but it’s not fully connected to workforce planning. How do we shift from standalone programs to an ecosystem approach without overwhelming our teams?”

HR and talent leaders often recognize the limitations of fragmented efforts and are eager to connect learning, internal mobility, and business strategy. However, they face organizational resistance, competing priorities, and the need for cross-functional collaboration to make an ecosystem approach work.

What helps them move toward an ecosystem approach?

- ➡ Leadership alignment—having business executives actively involved in workforce planning rather than treating upskilling as an HR-driven initiative.
- ➡ The ability to pull together a holistic view of all talent initiatives and measure and communicate impact, proving that upskilling is a business investment, not just an expense.
- ➡ Support in breaking down silos, ensuring alignment in HR and that finance, operations, and business leaders share ownership in workforce development.

The Frontline Manager: Seeing Upskilling as a Business Advantage

“I’m expected to deliver results every day. How do I make time for upskilling when I’m already stretched thin?”

Frontline managers are often caught between business demands and employee development needs. They see firsthand where skills gaps exist but may struggle with prioritizing upskilling when daily operational pressures take precedence. If the ecosystem isn’t designed with them in mind, they may see workforce planning as a top-down initiative with little practical application in their day-to-day work.

What helps them move toward an ecosystem approach?

- ➔ Making upskilling a tool for performance improvement, rather than an added burden—ensuring employees develop skills that directly enhance business outcomes.
- ➔ Clear career pathways and skill frameworks, so they can engage employees in meaningful conversations about development opportunities.
- ➔ Integrated tools and technology that make it easier to connect employees with learning opportunities without disrupting workflow.

The Employee: Connecting Upskilling to Career Growth

“I want to grow in my career, but I’m not sure what opportunities are available, or if they’re realistic for me.”

Employees are at the center of the ecosystem, but they need clear visibility into career pathways and confidence that investing in upskilling will lead to real opportunities. If upskilling is disconnected from job advancement, employees may disengage, seek external opportunities, or feel that development is only available to select groups of employees.

What helps them move toward an ecosystem approach?

- ➔ Transparency and communication—written and visual—about how skills connect to career growth and internal mobility opportunities.
- ➔ Access to diverse learning opportunities, including on-the-job training, mentorship, certifications, career skills, and leadership development.
- ➔ Support from leadership and managers, ensuring that upskilling is valued and encouraged, not just a personal responsibility.

The shift to an upskilling ecosystem isn’t just a structural change—it’s a cultural transformation that requires alignment across all levels of an organization. By understanding these perspectives and thinking about the problems each group faces, organizations can design ecosystems that are practical, scalable, and widely adopted—ensuring that upskilling efforts create real impact, not just another set of disconnected initiatives.

How to Execute

Design for Impact: The Power of an Ecosystem Approach

Building an upskilling ecosystem within a traditional organization is no small task. Workforce development has long been structured around individual programs and initiatives, often disconnected from broader business strategy. For HR and talent leaders, shifting toward an ecosystem approach can feel overwhelming—especially when existing structures, priorities, and ways of working weren't designed for it.

But you don't have to do everything at once. The key is understanding the full landscape of what an upskilling ecosystem entails while making strategic, incremental progress. The most effective approach is to zoom out to see the bigger picture and then zoom in where it matters most.

A true upskilling strategy is not about reacting to immediate skill gaps with a series of one-off training programs. Nor is it about attempting a sweeping transformation overnight. Instead, it's about creating a sustainable, integrated system—one where learning, workforce planning, and business needs work in concert. This requires a deliberate balance between broad strategic thinking and focused action.

Many organizations get stuck in one of two extremes:

- Focusing too narrowly on individual programs, without ensuring they connect to long-term workforce strategy.
- Trying to tackle everything at once, only for initiatives to stall under their own weight due to misalignment, lack of resources, or limited leadership support.

The most successful HR and talent leaders start by zooming out. They build a strategic blueprint that highlights the essential components of a thriving upskilling ecosystem—career pathways, leadership enablement, workforce planning, and business alignment. With this clarity, they then zoom in, identifying priority areas that will create momentum.

This could mean strengthening internal mobility pathways before expanding external partnerships or ensuring that upskilling efforts are fully integrated into leadership development before tackling broader workforce planning. The point is to go deep where and when it matters most.

Then, over time, you zoom back out. With ongoing assessment, refinement, and scaling, the ecosystem becomes stronger, more aligned, and more impactful. This iterative process ensures that upskilling remains dynamic, evolving alongside business needs and workforce trends.

Integrated Workforce Planning: Phases of Upskilling Success

A strong upskilling ecosystem doesn't just focus on today's needs—it must also be designed to support long-term workforce resilience. Just as businesses engage in strategic planning across different time horizons, workforce planning must take a phased approach to skill development.

Upskilling is most effective when it aligns with three key planning horizons:

✦ Immediate Needs (0-2 years)

- Addressing pressing skill gaps with targeted upskilling initiatives.
- Using job-specific training and role-based development to fill immediate needs.
- Enhancing internal mobility by moving employees into critical roles based on skills.

✦ Mid-Term Strategy (3-5 years)

- Developing structured career pathways that align with evolving business strategies.
- Refining job design to ensure role expectations are clear and skills are well-defined.
- Providing formal education opportunities, including certifications and partnerships with academic institutions, to create a sustainable pipeline of skilled employees.

✦ Future-Focused Planning (5+ years)

- Anticipating industry changes, emerging technologies, and demographic shifts to future-proof workforce strategies.
- Aligning upskilling efforts with broader economic trends, automation, and AI-driven transformation.
- Creating workforce scenarios that account for long-term shifts in job demand and evolving employee aspirations.

By embedding long-term, proactive workforce planning into upskilling strategies, organizations avoid reactionary approaches that leave them struggling to keep up with market demands. This approach also enhances financial planning by distributing investments over time, rather than adding unexpected costs as market conditions shift. Finally, it ensures that employees are continually developing relevant skills while businesses maintain the agility needed to stay competitive.

Case Study: Leveraging Community Partnerships for Workforce Growth

A manufacturing employer partnered with community-based organizations (CBOs) and local workforce boards to build a fast-track skills training program, designed to fill critical job vacancies while expanding access to career opportunities for underrepresented workers. By aligning employer needs with community-led training programs, the company created a sustainable pipeline of skilled talent.

The program focused on equipping participants with job-ready technical skills, including certifications in advanced manufacturing, supply chain logistics, and industrial technology. The CBOs provided wraparound support services, such as career coaching, financial assistance, and transportation solutions, ensuring that participants could complete training and transition into employment successfully.

Graduates of the program experienced an average wage increase of 30 percent, while the employer reduced hiring costs and time-to-fill for critical roles. The collaboration also strengthened the company's employer brand within the community, demonstrating its commitment to inclusive workforce development.

Assessing and Building Your Ecosystem: A Practical Worksheet

Use the following thought prompts to assess and strengthen your upskilling ecosystem:

1. Your Current State

-  Are upskilling efforts aligned with workforce planning, or are they disconnected initiatives?
-  Do leaders actively support and fund upskilling, or is it treated as an HR program?
-  Are employees aware of how upskilling connects to career growth?

2. Identify the Most Immediate Gaps to Address

- ⚡ Are career pathways clearly defined, and do employees have visibility into internal mobility opportunities?
- ⚡ Are there gaps in leadership buy-in, technology infrastructure, or cross-functional collaboration?
- ⚡ What are the biggest obstacles preventing upskilling from delivering business results?

3. Prioritize a Component to Focus On

- ⚡ Select one or two key areas, such as career pathways, leadership enablement, technology integration, or cross-functional alignment.
- ⚡ Build a targeted plan around these areas, ensuring they connect to business strategy.

4. Use the Ecosystem Framework to Stay Aligned

- ⚡ As you zoom in to build solutions, keep referencing the bigger picture to ensure alignment across stakeholders.
- ⚡ Maintain cross-functional conversations to ensure progress strengthens the broader ecosystem.

5. Reassess, Adjust, and Scale Over Time

- ⚡ Regularly step back to assess progress, measure impact, and ensure alignment with business and workforce needs.
- ⚡ Use data-driven insights to refine strategies, integrate new components, and scale workforce development.

Looking Ahead

The Long-Term Impact of an Ecosystem Approach

Building an upskilling ecosystem requires persistence, intentionality, and strategic execution. HR and talent leaders can drive this change by taking measured steps toward integration, continuously shifting between big-picture strategy and targeted action to create lasting impact.

A strong workforce ecosystem delivers:

 **Higher Workforce Engagement & Productivity** – Employees see real career growth, leading to increased motivation and performance.

 **Business Agility & Innovation** – Future-focused workforce planning ensures companies adapt proactively to industry shifts.

 **Sustainable Talent Pipelines** – A structured system ensures ongoing skills development, reducing reliance on external hiring.

 **Measurable Outcomes** – An ecosystem approach enables tracking, refinement, and continuous improvement of workforce initiatives.

Building an upskilling ecosystem is a journey, not a one-time initiative. It doesn't require perfection—it requires commitment, curiosity, and strategic action. By understanding the full system, identifying where to focus first, and steadily integrating key components, HR and talent leaders can create a resilient, adaptable workforce strategy.

Each step forward strengthens the foundation for long-term success, ensuring that upskilling efforts don't just address immediate gaps but also build a thriving, future-ready workforce. The work may be complex, but the rewards—for employees, businesses, and entire communities—make it worth the effort.

A thriving workforce ecosystem requires intentional strategy, leadership buy-in, and structured integration across HR and business functions. Organizations that commit to this approach will:

-  Reduce turnover and improve retention by making career mobility transparent.
-  Strengthen workforce agility through proactive planning and skills tracking.
-  Achieve business growth by ensuring employees are future-ready.

By embedding upskilling into workforce strategy, organizations future-proof their business, retain top talent, and sustain long-term success.

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About

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We seek to create a movement of employers, civic organizations, workforce intermediaries, and policymakers working collaboratively to implement education, training, and development strategies that result in better jobs and opportunities for frontline workers, more competitive businesses, and stronger communities. Follow us on [LinkedIn](#) and learn more at upskillamerica.org.



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