



Upskilling Playbook: Metrics

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

Upskilling is both a strategic business priority and a vital workforce investment. Yet, many organizations continue to rely on narrow, traditional metrics—such as participation rates, completion rates, and cost per learner—that offer only a partial view of impact. While these metrics provide a starting point, they do not fully capture how upskilling drives long-term business growth and workforce transformation.

At the same time, there is increasing pressure to demonstrate ROI, often with expectations for immediate results. However, the true value of upskilling unfolds over time. By adopting a thoughtful measurement approach, organizations can effectively track and showcase its impact—creating tangible benefits for both the business and its employees.

A well-structured measurement strategy does more than validate program effectiveness—it strengthens the case for upskilling as a core component of business success. When organizations can quantify its value, they are better positioned to expand their efforts, drive adoption, and reshape how they build their workforce.

The Problem Today

Many organizations fail to measure the true impact of upskilling, leading to challenges such as:

 **Overreliance on Traditional Metrics** – Many organizations focus only on participation rates and training completion rather than deeper measures like career mobility and business impact.

 **Difficulty Proving ROI** – Without a clear financial model, leadership may struggle to justify ongoing upskilling investments.

 **Fragmented Data & Siloed Systems** – HR, finance, and business units often track different metrics, making it difficult to get a comprehensive view of upskilling impact.

 **Lack of Longitudinal Tracking** – Organizations may measure short-term training participation but fail to track long-term employee career progression.

The Solution: Building a Value-Driven Metrics Framework

Accenture's Model for Measuring Upskilling ROI

Accenture's research, *Measuring Value: The ROI of Talent Programs*, provides a structured framework for assessing the impact of upskilling efforts. Their model underscores that upskilling generates value across three major dimensions:

- ✓ **Employer Benefits** – Business outcomes such as productivity gains, increased retention, innovation, and improved customer satisfaction.
- ✓ **Employee Benefits** – Career growth, skill acquisition, increased earnings potential, and internal mobility.
- ✓ **Societal Benefits** – Contributions to workforce development, economic mobility, and diversity, equity, and inclusion (DEI) advancements.

To effectively track and measure value, Accenture's model organizes metrics into four progressive levels. These levels do not function in isolation; rather, they build upon one another, creating a comprehensive structure for tracking impact. Level 1 captures the foundational costs and investments, while subsequent levels layer in workforce impact, business outcomes, and ultimately, financial ROI. This integrated approach ensures organizations can systematically connect learning investments to tangible business value over time.

Level	Measurement Focus
Level 1	Direct investment costs, including tuition, program expenses, and employee wages during training.
Level 2	Workforce impact, such as productivity improvements, internal mobility, and employee engagement.
Level 3	Business outcomes, including retention gains, innovation impact, and operational efficiencies.
Level 4	Financial ROI and workforce transformation, where upskilling contributes directly to long-term business growth and talent sustainability.

A key advantage of this structured approach is its adaptability. As organizations begin tracking and analyzing data, they uncover additional insights that refine their measurement strategy. Over time, this model reinforces the shift from simply tracking learning outcomes to

measuring the broader business and workforce impact—helping organizations not only validate ROI but also drive continuous improvement and long-term success, producing:

- ⚡ **Alignment with business priorities** – Linking upskilling to key drivers like retention, hiring costs, productivity, and customer satisfaction.
- ⚡ **Expanded workforce metrics** – Going beyond participation rates to measure career mobility, skill acquisition, and performance impact.
- ⚡ **Builds leadership commitment** – Establishing measurement frameworks that resonate with executive priorities and sustain long-term investment.

How To Execute

Building The Foundation

The Accenture model is particularly effective because it emphasizes a broad and diverse set of metric categories. Looking at metrics this way encourages curiosity and deeper conversations, helping organizations connect insights that might not have been previously linked. This approach leads to a more comprehensive understanding of workforce development impact.

The following key categories provide a foundation for evaluating and aligning metrics:

Category	Key Metrics	Why It Matters
Program Effectiveness	Participation rates, completion rates, skills acquired, % of eligible employees engaged in upskilling	Ensures program reach, accessibility, and relevance; tracks whether upskilling is available and utilized equitably across the workforce
Employee Growth & Mobility	Internal promotions, lateral moves, skills certification, career advancement, % of participants receiving recognition	Measures how upskilling contributes to career progression, internal mobility, and leadership pipeline development
Workforce Readiness	% of employees with future-ready skills, alignment with workforce planning, increased access to new roles	Demonstrates preparedness for industry shifts and business transformation, ensuring the workforce can adapt to evolving skills needs
Retention & Engagement	Turnover reduction, employee satisfaction scores, wage increases post-program completion, % of	Tracks upskilling's impact on engagement and retention, particularly among underrepresented groups;

	employees feeling valued and recognized	connects participation to career and financial growth
Business & Financial Impact	Cost savings from reduced external hiring, internal transfers, productivity gains, innovation output/creation, impact on product and service delivery	Links upskilling to business performance, reduced recruitment costs, and enhanced productivity by leveraging internal talent over external hiring
Employer Brand & DEI	% of diverse participants in programs, external brand recognition, applicants citing upskilling opportunities as a reason for applying	Demonstrates the role of upskilling in strengthening DEI efforts, enhancing employer reputation, and attracting high-quality talent
Community & Societal Impact	Number of participants earning degrees or industry credentials, career mobility outside the organization, local economic impact	Expands the lens beyond employer ROI to societal benefits, demonstrating how upskilling drives broader economic opportunity and community engagement

As you identify specific metrics within these categories, patterns emerge that highlight what matters most and the value being created. However, numbers alone don't capture the full impact. To truly understand and communicate success, it's essential to frame these insights in human terms—through stories, experiences, and the real-world impact on people.

The Human Impact: How Storytelling Strengthens the Business Case

The success of an upskilling program isn't just measured in numbers—it's measured in lives changed, careers advanced, and communities strengthened. While data provides critical insights, it's the real stories of employees who have transformed their futures through learning that bring the full impact to life. These narratives showcase not only the value of upskilling for the individual but also the ripple effects on their families, their workplaces, and the broader community. When people gain new skills and career opportunities, businesses benefit from a more engaged, capable workforce, and local economies grow as incomes rise and industries evolve.

For business leaders, communicators, Environmental, Social, and Governance (ESG) teams, and senior executives, these stories do more than highlight personal achievement—they make the return on investment undeniable. They demonstrate how upskilling fuels retention, strengthens brand reputation, drives economic mobility, and builds a future-ready workforce. When these successes are captured and shared, they create momentum—more employees feel inspired to participate, more leaders see the strategic advantage, and more stakeholders become invested in sustaining and expanding the program. The impact multiplies, ensuring that upskilling isn't just a benefit, but a competitive advantage that delivers long-term value for individuals, organizations, and the communities they serve.

Personas & Metrics

The Employee - “Can I Really Do This?”

For many employees upskilling feels exciting, but also intimidating. Some haven’t been in a formal learning environment for years. Others may doubt their ability to balance work, life, and learning. And some may simply not believe this opportunity is truly for them.

What They’re Thinking About:

-  *Am I capable of learning new skills—especially ones outside my current role?*
-  *Does my company really want me to grow, or is this just another HR initiative?*
-  *What happens if I struggle? Will I get support?*
-  *Will this actually lead to career growth, or am I wasting my time?*

The biggest factor in whether employees engage with upskilling isn’t just program availability—it’s belief. They need to see the company’s commitment, hear success stories, and feel confident that they can do it and that leadership supports them every step of the way.

How to Support Them:

-  Make learning feel accessible by offering flexible options like self-paced courses, on-the-job learning, and structured pathways that fit different work schedules.
-  Reinforce that growth is for everyone by highlighting employees at all levels who have successfully upskilled, especially those with non-traditional career paths.
-  Normalize challenges and provide support through coaching, peer networks, and mentorship so employees know they won’t be alone.
-  Communicate real career impact by showing how upskilling leads to new projects, promotions, and expanded responsibilities.

A key advantage of this structured approach is its adaptability. As organizations begin tracking and analyzing data, they uncover additional insights that refine their measurement strategy. Over time, this model reinforces the shift from simply tracking learning outcomes to measuring the broader business and workforce impact—helping organizations not only validate ROI but also drive continuous improvement and long-term success.

The Data & Analytics Leader - Making the Connection Between Upskilling & Business Impact

In large organizations, data & analytics department leaders manage vast amounts of existing workforce data, pulling from multiple sources to ensure accuracy and alignment with business goals. Shifting to a skills-based model is both exciting and disruptive, requiring collaboration to analyze data in new ways and apply structured frameworks like Accenture's to measure impact effectively. In mid-sized organizations, the challenge is different—without a dedicated data team, tracking and proving upskilling's value often falls across multiple roles, making integration and execution even more complex.

At the core, these leaders are asking:

-  *How do we connect participation and completion rates to business performance?*
-  *Do we have the right data infrastructure to support this shift?*
-  *What's the best way to analyze and report this information so it's meaningful to leadership?*
-  *How do we turn workforce metrics into actionable insights, not just reports?*

Internally, some stakeholders will want to measure participation as a way to track costs and assess early pipeline development for high demand roles. While understanding this data is valuable, the real opportunity lies in building a broader and more powerful measurement approach—one that connects upskilling to retention, internal mobility, workforce agility, and overall business impact. If a third-party provider is involved, it's also essential to align their data with internal HR, finance, and talent systems to create the most complete and actionable insights.

How To Support Them

-  Clarify the business questions first - Help them define which workforce and financial outcomes matter most to leadership, so data tracking is focused on impact, not just activity.
-  Prioritize data access & integration - If upskilling metrics being tracked are disconnected from HR, finance, and talent systems, collaboration is needed to ensure seamless data flow.
-  Bridge workforce and business analytics - Identify ways to combine upskilling data with core business KPIs (e.g. productivity, innovation, customer satisfaction) to tell a compelling, data-driven story.
-  Engage them early - Involve data leaders from the start to design the right measurement approach, rather than asking for insights after decisions have already been made.

When data and analytics leaders are fully engaged, they bring credibility to upskilling's impact—helping leadership see a clear, quantifiable return on workforce development.

Integrating Effective Measurement Into Upskilling Strategy

To build a robust measurement approach, organizations must align their objectives, engage key stakeholders, and integrate data-driven insights to track both business and workforce impact effectively.

1. Define Clear Measurement Objectives

Using the categories previously identified to serve as foundation, you can clearly define objectives for the impact outcomes you are out to achieve. Example objectives include:

-  Increasing internal mobility and reducing reliance on external hiring.
-  Strengthening workforce resilience and adaptability through skill development.
-  Enhancing employee engagement and career satisfaction.
-  Demonstrating cost efficiencies, retention improvements, and business impact.

2. Align Key Stakeholders on Data & Insights

Upskilling measurement requires collaboration across HR, business leaders, finance, analytics, and communications teams. Each function plays a role in defining success, ensuring that measurement efforts reflect both operational and strategic impact.

Function	Role in Upskilling Measurement
HR & Talent Leaders	Define workforce impact measures (e.g. skill attainment, career mobility, engagement).
Finance	Track cost efficiencies, retention savings, and ROI to justify ongoing investment.
Business Leaders	Align upskilling with business priorities such as innovation, productivity, and customer impact.
Analytics & Insights	Measure program performance, optimize strategy, and integrate upskilling data into broader workforce analytics.
Communications	Capture and share success stories, participation trends, and overall program visibility to build advocacy.
ESG & Community Impact	Assess how upskilling contributes to broader societal benefits, DEI objectives, and economic mobility.

Bringing these perspectives together helps organizations establish a more comprehensive view of impact, ensuring that upskilling efforts drive meaningful outcomes at every level.

3. Building the Right Measurement Team & Cross-Functional Collaboration

Measuring upskilling effectively is not a single-team effort—it requires collaboration across multiple groups, each playing a distinct role in finding, organizing, analyzing, and interpreting data. Depending on the size of the organization and the resources available, this collaboration may take different forms. In larger organizations, there may be dedicated teams for workforce analytics, technology, and communications, while in smaller or mid-sized companies, individuals may take on multiple roles across functions. Regardless of size, the key is ensuring that upskilling metrics are approached with both strategic insight and operational execution.

It is about assembling a cross-functional team, bringing together diverse expertise from different departments and levels. This collaboration ensures alignment between data, strategy, and execution, integrating perspectives from HR, finance, operations, and leadership to create a comprehensive measurement framework. This cross-functional team can include people with talent in the following areas of expertise:

-  **Data Analytics** – Help identify, structure, and integrate data sources across HR, finance, learning systems, and business functions. They support developing reliable metrics that connect learning investments to workforce and business outcomes.
-  **Strategic & Workforce Planning** – Work to ensure that upskilling data informs long-term workforce strategy, talent planning, and skills forecasting. They help organize data in new ways to connect learning outcomes to job mobility, hiring trends, and operational needs.
-  **Technology & Systems** – Ensure that data is captured, flows efficiently across platforms, and is visible for decision-making. They support integrating upskilling data with HRIS, talent platforms, and business intelligence tools.
-  **Storytelling & Communications** – Turn data into compelling insights that resonate with leadership, employees, and external stakeholders. They shape narratives that illustrate both the human impact and business value of upskilling.
-  **Leadership & Executive** – Regularly review data, discuss strategic insights, and guide decision-making. These discussions focus on tracking progress, refining strategy, and making upskilling a sustained business priority.

For some companies, these roles may be formalized into structured committees, while for others, it may be a cross-functional collaboration where teams come together periodically to align on insights. Regardless of how it is structured, the goal remains the same: building a

robust measurement infrastructure that enables continuous improvement, strategic workforce planning, and strong executive alignment. Effective measurement is not just about tracking progress; it is about shaping the future workforce, demonstrating value, and ensuring upskilling remains a core component of business success.

Case Study: Measuring Internal Mobility & Workforce Agility

PepsiCo has made great strides in measuring the impact of its upskilling efforts, ensuring employees can see clear career pathways while reducing external hiring costs. The company uses a structured internal skills marketplace where employees can track their existing skills, enroll in upskilling programs, and match with internal job openings based on verified competencies. Additionally, they integrate real-time workforce data, tracking internal mobility rates, the percentage of employees transitioning to new roles after training, and reductions in hiring costs as a result of filling roles internally.

To strengthen measurement, PepsiCo ties upskilling completion directly to business outcomes, assessing how training completion rates correlate with career progression and performance. Employees are also given personalized career roadmaps, helping them see the next steps in their professional growth based on both their current skill set and PepsiCo's future workforce needs. The system enables leaders to forecast talent gaps, ensuring the workforce remains agile and competitive.

As a result, PepsiCo has seen increased employee retention, a higher rate of internal promotions, and a measurable reduction in external hiring costs. Employees who participate in the upskilling program are more likely to advance into leadership positions, reinforcing the company's emphasis on developing talent from within.

4. Establish a Measurement Roadmap: Advancing Maturity Through Phased Implementation

Building a robust upskilling measurement approach does not happen overnight. Using a phased measurement roadmap allows organizations to build a strong foundation, refine based on insights, and scale their efforts toward long-term workforce transformation. Just as organizations progress through different levels of the Upskilling Maturity Model (forthcoming in the final chapter), measurement capabilities must evolve over time.

Each phase introduces key actions that not only track program effectiveness but also contribute to broader workforce planning and business strategy. This intentional progression ensures that metrics support decision-making, inform leadership discussions, and ultimately help advance the organization's upskilling ecosystem.

Governance and leadership engagement play a crucial role in ensuring that measurement efforts remain aligned with business needs. Leadership conversations serve multiple purposes:

-  **Building Understanding** – Educating leaders on the importance of measurement, what is being tracked, and how upskilling connects to workforce and financial outcomes.
-  **Providing Strategic Input** – Leaders help refine key metrics, ensuring that measurement efforts align with business priorities and workforce planning needs.
-  **Prompting New Hypotheses** – As data is gathered, leadership conversations often reveal new insights that lead to additional metrics or refinements of existing measures.
-  **Advancing the Ecosystem** – Metrics tracking is not static. As leadership engages in measurement discussions, they also gain a clearer picture of the broader workforce ecosystem, leading to more integrated talent strategies over time.

The roadmap below outlines the four key phases of building an upskilling measurement strategy, aligning with organizational maturity progression. Each phase builds upon the last—starting with a strong foundation, refining insights based on early results, and ultimately embedding upskilling measurement into core business operations:

Establish & Align (3-6 months pre-launch)

Define the minimum viable metrics for measurement, ensuring alignment with business goals and leadership expectations.

-  Solidify objectives that align with employer, employee, and societal benefits.
-  Identify key business metrics across financial impact, workforce readiness, employee growth, and retention, linking them to upskilling outcomes.
-  Establish a leadership and governance team to oversee measurement strategy.
-  Define a baseline dataset by integrating workforce, financial, and operational metrics.
-  Prioritize initial high-impact metrics to track early progress.
-  Gather employee input on their aspirations and expectations for the upskilling program.

Launch & Learn (First 12-18 months post-launch)

Track early program participation, business impact, and employee sentiment. Use real-time data for course correction.

- 📌 Monitor participation rates by different employee demographics and functions.
- 📌 Begin to map out skill acquisition such as the different skills that are being attained by which groups and how those relate to future job needs.
- 📌 Conduct ongoing feedback loops through surveys, roundtables, and leadership check-ins.
- 📌 Identify performance benchmarks and track progress against them.
- 📌 Connect upskilling outcomes with broader business measures, such as engagement, retention, and productivity.
- 📌 Collect and share the stories of the journeys that employees have begun.
- 📌 Integrate findings into governance discussions to refine strategy and address barriers.
- 📌 Begin testing financial impact hypotheses such as hiring cost savings.

Adapt & Optimize (12-24 months post-launch)

Use insights to refine measurement, deepen business impact tracking, and strengthen predictive analytics.

- 📌 Adjust program design, learning pathways, and upskilling investments based on data-driven insights.
- 📌 Strengthen alignment between skills tracking and internal mobility to maximize career advancement.
- 📌 Analyze financial impact, including cost savings (e.g. internal hiring vs. external recruitment).
- 📌 Collect and share the stories of the journeys that employees are on and the career aspirations that are being realized.
- 📌 Use insights to enhance workforce planning and anticipate future skill needs.

Advance & Integrate (24-36 months post-launch)

Expand the scope of measurement, integrating upskilling data into broader workforce and business reporting.

- Link upskilling metrics to ROI, including revenue impact, operational efficiencies, and cost avoidance.
- Expand measurement to include external workforce and community impact metrics (e.g. DEI progress, economic mobility).
- Collect and share the stories of the journeys that employees are on and the career aspirations that are being realized.
- Develop predictive insights to anticipate and proactively address skills gaps.
- Integrate upskilling data into enterprise-wide HR, finance, and business intelligence systems.
- Institutionalize upskilling measurement as a permanent driver of workforce strategy and business success.

Navigating Challenges in Measurement

Challenges in upskilling measurement are expected and part of the learning process. Some obstacles, such as data silos, inconsistent tracking, or difficulties in linking workforce metrics to business outcomes, can be anticipated and planned for. Others will emerge along the way, requiring organizations to adapt and refine their approach. Different teams may interpret success differently, making alignment across functions critical. The key is to stay flexible, learning from challenges as they arise while also proactively addressing known barriers. A responsive, iterative approach ensures that measurement efforts remain meaningful, actionable, and continuously improving.

Looking Ahead

Future Trends in Upskilling Measurement

The future of upskilling measurement is evolving rapidly, driven by advancements in technology, changing workforce dynamics, and the need for more holistic insights into talent development. Emerging trends will allow organizations to measure impact more precisely and strategically:

💡 **AI and Machine Learning (ML):** AI-driven analytics can synthesize vast amounts of workforce data—tracking skills development, career mobility, and performance impact in real-time. These insights will allow organizations to anticipate workforce shifts and personalize learning experiences at scale.

💡 **Big Data and Advanced Analytics:** The integration of diverse HR and business data will unlock new ways to connect upskilling to business outcomes. RedThread Research notes that advancements in workforce technology will increasingly allow organizations to harmonize disparate datasets, enabling more sophisticated workforce planning.

💡 **Measuring Durable Skills:** As job roles evolve, organizations will need to measure not just technical proficiency but also durable skills like adaptability, critical thinking, and collaboration. New tools and assessments will emerge to quantify and track the development of these transferable skills.

💡 **Community and Societal Impact:** Businesses will increasingly be evaluated not just on internal workforce development but also on their contributions to economic mobility and community workforce participation. Organizations that connect upskilling to broader social impact will strengthen both talent pipelines and employer brand.

Metrics are more than just validation tools—they shape the way organizations think about talent, workforce planning, and business success. By tracking not just participation but also career progression, financial returns, and long-term business outcomes, organizations can make more informed decisions about where and how to invest in their workforce.

More importantly, upskilling measurement is not static—it is an ongoing process of learning, adapting, and refining. Metrics provide a critical lens into both progress and outcomes, but their real power lies in how they inform decision-making. Organizations that continuously analyze and act on their upskilling data are better positioned to close skill gaps, enhance workforce agility, and drive business performance. The next step is ensuring that these insights directly shape the implementation of upskilling strategies—turning measurement into meaningful action that delivers long-term impact.

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2300 N Street NW #700
Washington DC 20037

upskillamerica.org

upskillamerica@aspeninstitute.org