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Building High-Performing Teams through Targeted Training

A playbook for tech, data, and IT leaders

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Foreword

The list of issues facing technical leaders is long: evolving cybersecurity threats, technical debt hindering progress, the need to broaden technical expertise, and the rapid pace of generative AI. But these challenges all point to the same conclusion: **We must proactively identify the skills needed to address these issues, invest in developing those skills in our teams, and foster a mindset that encourages continuous growth.**

As CTO of one the world's largest online learning and skills training platforms, I oversee a wide range of responsibilities, including overseeing a team of nearly 400 employees across Product Management, Engineering, Infrastructure Services, and Data Science. This scope gives me a comprehensive understanding of the challenges facing technical teams—and how a strategic approach to investing in training can help address them.

The stakes are high. It's estimated that more than half of CEOs anticipate that labor and skills shortages will significantly impact profitability in their industries over the next decade.[1] And within IT teams alone, a looming skills crisis may lead to trillions of dollars in losses due to product delays, impaired competitiveness, and business deficits.[2]

Inside this guide, you'll discover valuable best practices for investing in domain-specific training, accessing curated content recommendations, and measuring the impact of your training investments. You'll also hear from:

- **Schneider Electric**, sharing how a pilot training program for a small contingent of their Data and AI team scaled to a company-wide training initiative
- **imec**, providing tips for how centralized learning teams and technical leaders can better collaborate
- And **Microsoft** and **Amazon Web Services (AWS)**, unpacking trends shaping technical teams and best practices they've observed from working with thousands of customers and partners

The time to act is now. Discover how a strategic approach to targeted training can equip your technical teams with the skills they need to innovate in the face of increasingly more complex problems.

Sincerely,

Mustafa Furniturewala
CTO, Coursera

The urgency of the growing skills gap

Across industries, organizations are grappling with an unprecedented shift in the talent landscape. It's no longer enough to simply hire skilled individuals; companies must actively cultivate a workforce capable of adapting to constant change and capitalizing on emerging technologies. The World Economic Forum reports that 63% of employers recognize skills gaps as a major barrier for the next five years,[3] highlighting the urgent need for proactive workforce development strategies.

This urgency is fueled by a confluence of factors, most notably the rapid advancement of artificial intelligence. McKinsey & Company notes that AI's transformative impact has led half of all employers to reorient their business strategies, signaling a fundamental realignment of skills priorities. In response, 80% plan to upskill workers in AI, and 66% are seeking AI-ready talent.[4]

Navigating this period of rapid change requires more than just technical expertise; it demands a commitment to continuous learning and a proactive approach to skills development. As Jenni Troutman, Director of Amazon Web Services Training and Certification Products and Services, explains, "The greater investment in generative AI means CIOs will need more people with AI skills to execute on their strategies and roadmap, which in turn requires leaders to continue providing AI skills training for their employees."

Similarly, Microsoft's Geoff Hirsch emphasizes, "Skill gaps exacerbate the impact of AI developments by limiting the ability of teams to effectively leverage new technologies, leading to delays in product releases, reduced competitiveness, and ultimately, financial losses."

In essence, the skills gap is not just a talent shortage—it's a strategic imperative. As Coursera CTO Mustafa Furniturewala aptly summarizes, "The technology landscape is constantly changing. There was mobile, there was cloud, and now there's GenAI. It's essential to keep pace with training." Companies that don't prioritize skills development risk falling behind in this era of constant disruption.

63%

of employers report that skills gaps are the primary barrier to business transformation

The Future of Jobs Report 2025, World Economic Forum

The challenges technical leaders are up against

Factors like digitally native competitors, the breakneck speed of technological progress, and a lack of technical expertise to capitalize on these investments are placing pressure on technical teams to innovate.

Let's unpack the challenges that technical leaders face—and how targeted training can address them—by highlighting department-specific challenges.

Product development and engineering

As innovation drivers, product development and engineering teams build and launch new products and features that shape better experiences for users. However, the rapid pace of digital transformation presents significant hurdles. In fact, 43% of engineers feel their leadership is unaware of the challenges they face.[5]

To remain competitive, product development and engineering teams must tackle these key challenges:

Keeping pace with technology

Generative AI and other rapid advancements are outpacing product development workflows. For instance, a survey conducted by IBM and Morning Consult found that only one quarter (24%) of application developers surveyed ranked themselves as "experts" in generative AI.[6] Companies must adopt new technologies and agile methodologies to automate and speed up deployments. Upskilling teams is crucial to adopt these technologies, retain knowledge, and manage costs effectively. Failing to adapt risks being outpaced by more agile competitors.

Aligning product to business strategy

Effective product management requires a holistic understanding of the product's impact across the entire organization. Thus, developing cross-functional skills like data analysis, business acumen, and financial literacy is essential to grasp customer needs, analyze market dynamics, and foster effective cross-functional collaboration. As Mustafa Furniturewala notes, ensuring employees are "working on the right things" and are "the most productive they can be" hinges on their ability to align their work with overall business strategy.

Managing technical debt

The constant pressure to innovate quickly often leads to the accumulation of technical debt, which can provide short-term gains but ultimately hinder long-term progress. A global survey of CTOs found that technical debt is the number-one

> *"Over the next few years, we anticipate that AI and machine learning, cybersecurity, and cloud computing will continue to be major drivers of demand for engineering and product development skills.*

Geoff Hirsch
Head of Training Services Partner Channel, Worldwide Learning, Microsoft

challenge facing organizations.[7] Balancing the need for speed with sustainable practices is crucial for maintaining product quality and overall business agility.

Addressing these challenges requires a commitment to targeted training and development, ensuring product development and engineering teams have the skills they need to navigate this ever-changing landscape.

IT

IT teams are now at the forefront of digital transformation, with 87% of CIOs deeply involved in leading these initiatives.[8] Yet, they face immense pressure to maintain a secure, efficient, and cost-effective IT infrastructure in a rapidly evolving technological landscape. In fact, 62% of IT leaders attribute missed revenue growth to skills gaps within their teams.[9] To navigate these challenges effectively, IT teams must focus on three key areas:

Managing a complex IT infrastructure

IT teams must be proficient in maintaining diverse technology stacks across different environments and implementing automation where possible. Integrating legacy systems with new technologies requires specific technical skills and expertise in scalable architecture and predictive analytics to meet growing infrastructure demands. To increase productivity and streamline deployments, it's essential to implement DevOps and continuous integration/continuous delivery (CI/CD) practices. As the *Global CTO Survey 2024/2025 Report* indicates, cloud computing is a cornerstone of modern IT infrastructure, considered essential by 83.5% of CTOs.[10]

Optimizing cloud spend and IT budgets

Expanding technical expertise within IT teams is essential to optimize cloud spending and manage IT budgets effectively. Cloud costs can quickly spiral out of control without proper management, and inefficient allocation of underutilized tools, applications, and resources leads to overspending. Addressing the risks associated with "shadow IT"—the use of unapproved apps and services—is critical for controlling both security and costs.

Staying ahead of security threats

With the threat landscape evolving at an unprecedented pace and cyberattacks becoming increasingly sophisticated, IT teams face constant pressure to adapt and maintain organizational security. Integrating new technologies and systems introduces new security weaknesses that must be addressed, and the risk of accidental breaches poses a significant threat to data integrity. Risk management and cybersecurity skills are rapidly growing in importance, as evidenced by their surge in the Coursera's *Job Skills Report.*[11] Moreover, research from the World Economic Forum finds that networks and cybersecurity are projected to be the #2 "core skill" expected to rise in the next five years, second only to AI and big data.[12]

These challenges often happen in tandem, creating a difficult-to-remedy feedback loop that can set organizations back from their priorities and diminish their competitive advantage.

> *"Machine learning, artificial intelligence, and generative AI represent the most significant trend shaping the future of cloud computing. It is more than a trend; it's a seismic shift, similar to the introduction of the internet.*

Jenni Troutman
Director of AWS Training and Certification Products and Services, AWS

Data science

The demand for data science skills is skyrocketing, fueled by the rise of AI and the increasing recognition of data's importance in decision-making. Employees' use of data has doubled in the last year, with major increases in reading, interpreting, and overseeing data-driven systems.[13] This reflects a broader push to create data-centered organizations, particularly given the need for high-quality data to power large language models (LLMs). As the World Economic Forum reports, big data specialists, AI and machine learning specialists, data warehousing specialists, and data analysts and scientists are among the fastest-growing job roles.[14]

However, this increased reliance on data also presents significant challenges for data teams:

AI pressures data transformation

The rise of generative AI (GenAI) is placing pressure on organizations to make substantive shifts and build a truly data-driven environment. Emerging technologies—like AI-driven data integration, automated data cleaning tools, and data lakes—can streamline data management and accelerate insights, but require new expertise to implement and manage effectively. As Jenni Troutman, Director of AWS Training and Certification Products and Services, emphasizes, "AI and generative AI skills will continue to be paramount, with high-quality data and governance as key factors. Generative AI outcomes are only as good as your data."

Lack of standardization hinders AI adoption

Rapid data growth often leads to inconsistent data formats, creating time-consuming data cleaning tasks for data engineers. This lack of standardization can hinder the adoption of advanced tools like generative AI and potentially lead to inaccurate decisions.

Organization-wide literacy is a must

Over-reliance on the data team for all data-related issues delays decision-making and increases the risk of misinterpretations. Today's leaders require data skills to keep up with the evolving data landscape and foster a culture of data-driven decision-making, unlocking accurate, timely decisions, self-sufficiency, efficiency, and continuous innovation. "Data is no longer just the data team's responsibility," shares Jean-Côme Renaudin of Schneider Electric. "Whether you're in finance, marketing, or on the factory floor, you need a basic understanding of data to make informed decisions. That's why we're investing in data literacy for everyone at Schneider Electric."

By prioritizing data quality, fostering widespread data literacy, and equipping data teams with the latest AI tools and skills, organizations can enable them to drive impactful insights and informed decision-making across all levels.

> *"When I joined Schneider Electric 20 years ago, the tools we used had a lifespan of several years. But now, with tools like GenAI advancing so rapidly, it's incredibly challenging for both organizations and individuals to keep up. That's why having a continuous learning mindset and a willingness to experiment are critical skills today.*

Jean-Côme Renaudin
Global Data & AI Academy Director, Schneider Electric

Skills roadmap: How targeted training drives business result

By equipping teams with the skills needed for current roles and future growth, leaders can build a robust internal talent pipeline and position their organization for continued transformation.

The following sections outline specific high-priority skills for product, IT, and data teams, illustrating how these skills directly contribute to key business outcomes. This overview serves as a skills roadmap, complemented by curated Coursera content recommendations designed to support role-specific training programs.

Product development and engineering: Accelerating innovation and managing technical debt

To solve for the many challenges facing product development and engineering teams in the wake of technological advancement, common training needs to include key areas like:

1. **Product Strategy and Management**
   Focuses on defining, building, and launching successful products. Examples: Product Strategy, Product Management, and New Product Development.
2. **Software Development and Architecture**
   Encompasses the skills to design, build, and maintain high-quality software systems. Examples: Software Architecture, Software Development, and Solution Architecture.
3. **Data and AI Integration**
   Covers the skills to integrate data effectively into products and leverage AI for enhanced functionality. Examples: Data Architecture, Data Integration, and Artificial Intelligence.
4. **Continuous Delivery and Automation**
   Emphasizes the practices and tools to streamline software delivery and improve efficiency. Examples: CI/CD, DevOps, and Kubernetes.

GenAI is rapidly becoming a necessary player in many roles. Proficiency in prompt engineering and AI-powered tools like Microsoft Copilot will be key growth areas for both product development and engineering teams. But even as new technologies emerge, soft skills will remain integral. As Coursera's Mustafa Furniturewala emphasizes, "We can't underestimate the importance of soft skills. Clear communication, effective collaboration, and strong interpersonal skills are essential for technical teams."

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Mustafa Furniturewala
CTO, Coursera

Product learning paths*

Business outcome	Learning path name	Course name	University/industry partner	Skills
Bridge business and technology strategies for success	**Business Driven Product Management**	Introduction to Financial Analysis - The "Why?"	University of Illinois Urbana-Champaign	Business Strategy, Financial Analysis, Communication Strategies, Market Analysis
		Foundations of Business Strategy	University of Virginia	
		Communication Strategies for a Virtual Age	University of Toronto	
Deliver cutting-edge products faster with increased productivity and operational efficiency	**GenAI as Your Software Development Partner**	Team Software Engineering with AI	DeepLearning.AI	Generative AI, Software Development, Software Engineering, Test Automation, Test Engineering, Software Documentation, Technical Documentation
		GenAI for Front-End Developers	Coursera Instructor Network	
		Responsible AI for Developers: Interpretability & Transparency	Google Cloud	
Improve customer offerings by infusing generative AI	**Building Retrieval Augmented Generation (RAG) Applications**	Fundamentals of AI Agents Using RAG and LangChain	IBM	Software Architecture, Data Architecture, Data Integration Solution Design, Solution Architecture, Business Solutions
		Project: Generative AI Applications with RAG and LangChain	IBM	
		Knowledge Graphs for RAG	DeepLearning.AI	
		Building Multimodal Search and RAG	DeepLearning.AI	
Manage and reduce technical debt	**Manage and Reduce Technical Debt**	Introduction to DevOps	IBM	CI/CD, DevOps, Continuous Integration, Continuous Delivery, Kubernetes
		Continuous Integration and Continuous Delivery (CI/CD)	IBM	
		Kubernetes in AWS: Create Cluster in EKS in your own VPC	Coursera Project Network	
Leverage data for customer-driven innovation	**AI for Product Insights**	Product Analytics and AI	University of Virginia	Product Strategy, Product Management, Artificial Intelligence, New Product Development, Data Analysis
		Generative AI: Prompt Engineering Basics	IBM	
		Enhancing Customer Insights with Generative AI	Coursera Instructor Network	

*These learning paths are a small sample of the types of role-specific curation that are possible in Coursera. For more information about the learning paths available in Coursera, speak with your Customer Success Manager or Contact Sales.

IT: Building a secure, scalable, and future-ready IT infrastructure

IT teams looking to improve their system uptime and reliability, strengthen their security posture, optimize their IT infrastructure, and enhance team productivity and collaboration often focus on these skill areas within the digital transformation toolbox:

1. **Cloud and Infrastructure Engineering**

   Covers the core skills for building, managing, and maintaining modern IT infrastructure. Examples: Amazon Web Services, Microsoft Azure, and Configuration Management.

2. **Cybersecurity and Risk Management**

   Concentrates on protecting IT systems and data from threats, assessing vulnerabilities, and ensuring business continuity. Examples: Cybersecurity, Cyber Engineering, and Cyber Risk.

3. **Software Development and DevOps**

   Focuses on the skills needed to build and deploy secure and reliable software applications using modern development practices. Examples: Agile Software Development, Continuous Integration, and Continuous Delivery.

4. **Emerging Technologies and Automation**

   Highlights the importance of experimentation and skills development in areas poised for growth. This extends beyond just GenAI and can include infrastructure as code (IaC), advanced monitoring, etc. Examples: Generative AI and Scripting Languages (as applied to automation).

The growing investment in technologies like GenAI creates a corresponding need for skilled professionals to execute effectively. In 2024, AWS experienced significant demand from customers and partners seeking to equip their employees with AI fluency. Reflecting this need, AWS trained more than two million people globally with free AI skills training in just one year as part of Amazon's "AI Ready" commitment. This underscores the increasing importance of proactive skills development initiatives to fully realize the potential of digital transformation investments.

IT and Infrastructure learning paths*

Business outcome	Learning path name	Course name	University/industry partner	Skills
Safeguard data with a secure, compliant, and resilient infrastructure	**GenAI for Modern Cybersecurity**	Generative AI: Boost Your Cybersecurity Career	IBM	Cybersecurity, Cyber Engineering, Cyber Risk, Security Engineering, Cloud Security
		Cybersecurity Architecture	IBM	
		Copilot for Cybersecurity	Microsoft	
		GenAI for Cybersecurity Analysts	Coursera Instructor Network	
Drive innovation and scale through intelligence automation and cutting-edge technologies	**Performance Driven DevOps**	Continuous Delivery & DevOps	University of Virginia	Continuous Delivery, Continuous Integration, CI/CD, Cloud Infrastructure, Generative AI
		Monitoring and Observability for Development and DevOps	IBM	
		Gemini for DevOps Engineers	Google Cloud	

Accelerate project delivery and improve collaboration with modern methodologies	**Automate Software Development with DevOps on AWS**	Foundations of DevOps and Git	Packt	Agile Software Development, Continuous Integration and Continuous Delivery (CI/CD), Scripting Languages, Amazon Web Services
		Advanced Git and GitHub Practices	Packt	
		DevOps on AWS: Code, Build, and Test	Amazon Web Services	
		DevOps on AWS: Release and Deploy	Amazon Web Services	
Achieve greater efficiency and cost-effectiveness	**Mastering Cloud Migrations with Azure**	Introduction to Cloud Computing	IBM	Cloud Infrastructure, Computer Networking, Configuration Management, Microsoft Azure
		Networking and Migration in Azure	SkillUp EdTech	

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Data science: Transforming data into actionable insights and business value

Data science teams see countless downstream benefits from building targeted training programs: improved data quality and accessibility, data-driven decision-making, and demonstrable ROI from their data investments, for starters.

To drive toward these skills, technical leaders often focus on:

1. **Data Analysis and Modeling**
   Focuses on the core skills of extracting insights and building predictive models. Examples: Data Analysis, Statistical Modeling, and Statistical Inference.
2. **Business Intelligence and Strategy**
   Centers on translating data insights into actionable business strategies. Examples: Business Intelligence, Business Metrics, and Data-Driven Decision Making.
3. **Data Engineering and Management**
   Covers the skills required to handle and govern large datasets efficiently. Examples: Data Management, Data Governance, and ETL.
4. **Emerging Technologies**
   Emphasizes the importance of staying up-to-date with and leveraging cutting-edge technologies. Examples: Generative AI, ChatGPT, and Python.

According to Jean-Côme Renaudin, the data-AI intersection is shifting from employees performing specific tasks to handling multiple tasks in a coordinated manner. This highlights the growing importance of soft skills like communication in conjunction with role-specific training.

“Another critical aspect of emerging technology is trust and responsibility. When agents start performing multiple tasks and making decisions, determining who is responsible and accountable for their actions will become increasingly important,” he notes.

Data learning paths*

Business outcome	Learning path name	Course name	University/industry partner	Skills
Drive strategy and foster innovation with data-driven leadership and culture	**Data-Driven Decision Making for Leaders**	Agile Dashboards for Data-Driven Decision-Making	Duke University	Data-Driven Decision-Making, Business Intelligence, Business Metrics, Key Performance Indicators (KPIs), Agile Project Management, Organizational Leadership
		Data Science for Agile Decision-Making	Duke University	
		Agile Decision-Making Frameworks	Duke University	
Accelerate revenue with data-driven GTM strategies	**Data-Driven Revenue Strategies for Sales**	Customer Data, Analytics, and Segmentation	Microsoft	Customer and Client Support, Data-Driven Decision-Making
		Sales Analysis with Claude: Data Driven Sales Analytics	Coursera Project Network	
		GenAI for Sales Teams	Coursera Instructor Network	
Maximize ROI and drive customer loyalty with effective targeting and personalization	**Data-Driven Marketing Strategies**	Digital Marketing Analytics in Practice	University of Illinois Urbana-Champaign	Exploratory Data Analysis, Data Analysis Software, Marketing Strategy and Techniques, Market Analysis, Digital Marketing, Web Analytics, Data-Driven Decision-Making
		How to Identify Your Target Audience	Coursera Instructor Network	
		ChatGPT for Beginners: Using AI for Market Research	Coursera Project Network	
Reduce risk with data-driven forecasting and strategic planning	**Data-Driven Financial Analysis**	Applying Data Analytics in Finance	University of Illinois Urbana-Champaign	Financial Modeling, Statistical Modeling, Time Series Analysis and Forecasting, Python, Statistical Inference
		Python and Statistics for Financial Analysis	The Hong Kong University of Science and Technology	
		Python for Finance: Beta and Capital Asset Pricing Model	Coursera Project Network	
Standardize data to enhance data utilization and decision-making efficiency	**Optimizing Data Management and Analytics**	Introduction to Data Management	Meta	Data Management, Data Governance, Data Quality, Big Data, ETL (Extract, Transform, Load)
		Introduction to Data Engineering	IBM	
		Assessing Data Quality with Dataplex	Google Cloud	
Leverage data for customer-driven innovation	**GenAI for Data Analysis**	Ask Questions to Make Data-Driven Decisions	Google	Data Analysis, Generative AI, ChatGPT, Data-Driven Decision-Making
		ChatGPT Advanced Data Analysis	Vanderbilt University	
		GenAI for Business Analysts: Faster Insights	Coursera Instructor Network	

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Five best practices for driving impactful training initiatives

1. Align training with business objectives

The most impactful training initiatives are those directly tied to strategic goals. This ensures relevance and maximizes the return on investment. For example, training can equip data science leaders with the knowledge to understand shifts in the market. “Schneider Electric is becoming an industrial tech company,” notes Jean-Côme Renaudin of Schneider Electric, “and data and AI are at the heart of the business strategy. Since people in the company know this, they understand that developing skills in data and AI is essential for success.”

While technical leaders can undertake investments in training initiatives on their own, they’re at their most successful when they include strong partnerships between technical and L&D teams. As Geoff Hirsch of Microsoft notes, “Collaboration between L&D and functional leaders ensures that training is relevant, timely, and impactful.”

Finally, training should focus on building measurable skills. “Our customers are often looking for hands-on training experiences,” says Jenni Troutman of AWS, “that give their employees confidence with services and technologies, help accelerate development, minimize errors and downtime, and overall boost productivity of the team.”

Recommendations

- Directly link training programs to the organization’s key strategic goals to ensure relevance and impact.
- Foster strong collaboration between technical leadership and L&D teams to develop targeted and effective training initiatives.
- Prioritize building practical skills that can demonstrably improve productivity, reduce errors, and accelerate development.

Spotlight

Dow

Equipping IT with GenAI skills to catalyze professional growth

Like other organizations prioritizing digital transformation, Dow, a leading materials science company, sought a solution to bridge the GenAI skills gap within its workforce. A tailored skills approach would empower teams to innovate, build, and adapt in a constantly evolving technical landscape and future-proof Dow's employees.

Alison Klein, the Associate IT Director—Talent Management at Dow, saw an opportunity to deploy a company-wide technical skills training program centered on GenAI:

"We strongly believe that our IT organization should be leading the way in understanding what GenAI can and cannot do, so we can best help our 30,000+ colleagues. We wanted our employees to first learn the foundations of GenAI," notes Alison.

For its first GenAI initiative, Dow deployed Coursera's GenAI learning content alongside personal development plans. This move empowered employees to advance their careers using GenAI technologies while also future-proofing the workforce with soon-to-be essential skills:

- **80% of the IT workforce** learned responsible GenAI use
- **200 employees** earned an extra badge, demonstrating strong engagement that required up to eight hours of additional training
- **Dow reached 105% of its training goal** in the first 90 days, highlighting continuous learning as an organizational priority

Klein emphasized that Dow's learning pathway illuminated a cultural shift toward professional development and continuous learning opportunities:

"At the end, we had our CIO leadership team complete the course to lead by example. They showed the organization that taking one hour to invest in training is worth it."

Watch the webinar →

2. Prioritize high-potential learners

Different employees will have different relationships with learning. At least initially, focus your energy on those who are most receptive to learning and capable of driving significant impact. Jean-Côme Renaudin of Schneider Electric distinguishes three learner types: enthusiastic learners, directed learners, and hesitant learners.

Below is an overview of these three learner profiles and tactics for engaging them.

1. **Enthusiastic learners**

   These learners proactively seek out information and enjoy exploring new technologies independently. They don't need much encouragement to dive into new topics.

   How to engage: Make high-quality learning resources easily accessible. Offer challenging and complex content that allows for deep dives and exploration.

2. **Directed learners**

   This group benefits from clear learning paths, curated content recommendations, and a structured approach. They are willing to learn but need direction to get started and stay on track.

   How to engage: Provide clear learning paths, curated content suggestions, and regular communication to keep them engaged. Offer opportunities for interaction and community-building.

3. **Hesitant learners**

   They may need more convincing about the value of learning, require bite-sized content that fits into their busy schedules, or need to see a clear link to immediate job relevance.

   How to engage: Highlight the benefits of upskilling and connect learning directly to their role or career goals. Offer micro-learning opportunities and break down larger courses into smaller, manageable modules.

Renaudin's strategy began with targeting those already eager to learn, explaining, "My first focus was on people who were already willing to learn...with these eager learners, you can achieve a lot with minimal effort." Recognizing the hypergrowth in data and AI skills, he prioritized "capturing that market" of willing learners, noting that engaging hesitant individuals demands considerably more time and resources.

Recommendations

- → Recognize that employees require varying levels of support and engagement in their learning journeys.
- → Initially focus on employees who are enthusiastic about learning and actively seek new skills.
- → Once your learning program gains traction, consider engaging learners who are more reluctant.

Spotlight

Microsoft

Empowering Product teams with role-specific training

With more than 30 years at Microsoft, Geoff Hirsch leads the company's channel strategy and training partner engagement. Hirsch's team partners within the ecosystem to increase skills and adoption of Microsoft technologies globally, with a core focus on how Microsoft and training partners can help consumers and enterprises achieve their goals. He believes in synergy with centralized L&D teams, aligning their training initiatives with strategic organizational goals.

This approach is especially important in the wake of GenAI, which Hirsch notes makes it difficult to keep up with the latest advancements and integrate them into product development:

"To effectively leverage GenAI, Development teams need a strong foundation in data science, machine learning, and AI ethics. Skills in programming languages such as Python, experience with AI frameworks, and an understanding of cloud computing are also essential. Additionally, teams should be adept at working with large datasets and integrating AI solutions into existing systems."

Hirsch and his team are bringing GenAI to the forefront of Product at Microsoft by implementing training pathways and micro-credentials, both of which Hirsch believes provide a structured approach to skill development by nudging employees to gain expertise in specific areas.

"Through partners like Coursera, Microsoft provides role-based training and certification. We recently launched new verifiable credentials called Applied Skills that provide real-world skills for project readiness and fast time-to-market on key projects," he shares.

Learn more about Microsoft courses on Coursera →

3. Integrate learning into the flow of work

Learning should not be a separate activity, but rather a seamless part of the daily workflow. This means moving away from traditional classroom settings and embracing more flexible, accessible formats.

As Matthias Nauwelaers, Talent Business Partner at imec—a leading nanotechnology research facility active in the nanoelectronics and digital technologies fields—explains, “We’re trying to move away from just classroom training. For example, if a trainer is teaching technical knowledge, we can move the pure content portion to e-learning. This frees up classroom time for discussion and working on real skills.”

Integrating learning requires more than just moving online, though. You must truly personalize training to your teams’ needs. As Mustafa Furniturewala, CTO of Coursera, says, “It’s very important to not roll out something generic across your organization and ask employees to learn just for the sake of learning. You need to personalize it by understanding every team’s needs, every individual’s needs.”

Furniturewala emphasizes the importance of personalization by directly linking learning to career goals or current projects. For example, he notes that a product manager working to improve a search algorithm benefits from understanding the fundamentals of search, directly enhancing their productivity and career growth.

A successful program will also integrate different learning formats. A strong approach blends “foundational e-learning” with “classroom time for discussion,” and real-world application like on-the-job “shadowing to reinforce what they’ve learned,” as Nauwelaers says. This also could involve micro-credentials.

“Training pathways and micro-credentials provide a structured approach to skill development, allowing employees to gain expertise in specific areas,” shares Geoff Hirsch of Microsoft. “These credentials can help technical leaders identify and nurture talent within the organization, ensuring they have a pipeline of skilled professionals ready to take on new challenges.”

Recommendations

- Implement a variety of learning formats—including e-learning, on-the-job training, and blended approaches—to cater to diverse learning styles and preferences.
- Customize training content and delivery methods to align with individual roles, career aspirations, and team needs.
- Incorporate pathways that lead to micro-credentials and certifications to validate skills and provide tangible recognition for learners’ efforts.

Spotlight

AWS

Driving scalable cloud skills development with micro-credentials

Jenni Troutman leads Products and Services for Training and Certification at Amazon Web Services (AWS), equipping learners and organizations in over 200 countries with educational resources to build and validate in-demand cloud computing skills. AWS values its long-term collaboration with Coursera to extend the reach of AWS Training offerings, democratizing access to cloud careers and preparing the workforce for AI-enabled jobs.

A key component of this collaboration is the development of AWS training and certification preparation resources for the Coursera platform. These resources are designed to empower technical teams with skills and validated credentials, emphasizing the value of micro-credentials and Professional Certificates.

“AWS Certifications allow individuals to demonstrate their expertise across the most in-demand cloud domain,” explains Jenni Troutman, “and help employers identify skilled talent.” Learners can build skills on Coursera to prepare for an AWS Certification exam.

These learning pathways have proven highly effective: “A study by Enterprise Strategy Group found that employees who have an AWS Certification have improved interactions with their technical colleagues and customers. Eighty-eight percent of AWS Certified individuals say they are able to collaborate better with their technical teams, and 79% cited increased influence among coworkers.”

Learn more about AWS courses on Coursera →

4. Focus on learner adoption and engagement

A strong training culture is cultivated from the top down and relies on a strong community of practice. This starts by making courses widely accessible.

"The first priority was to make learning accessible and well-known," shares Jean-Côme Renaudin, "because there's a real appetite for it among employees—and you never know who might take an interest. What I quickly realized was how effective this approach was from the bottom up. We shared the news, and soon people across the organization began learning. They decided to grow their data and AI skills, independent from any learning mandates, with their personal growth in mind."

Just as critical as having accessible resources is a strong, engaged cohort of middle managers who can support and mentor their direct reports. "I think middle managers are crucial to creating a learning culture," explains Matthias Nauwelaers. "They have a direct line to their team's needs and can provide the support learners need to apply what they've learned. They really have their boots on the ground."

Of course, these managers must have a demonstrated interest in learning themselves. "One of the best ways to get middle managers on board with learning," Nauwelaers explains, "is to give them the same learning opportunities as their teams. When managers actively participate in their own development, it sets a powerful example."

Leadership should also actively show their interest and passion for learning, modeling the way forward for their team. As Mustafa Furniturewala of Coursera notes, "Leading by example is incredibly powerful. When leaders actively engage in learning—taking courses, listening to podcasts, sharing insights—it creates a ripple effect, inspiring their teams to embrace continuous development."

By sharing new ideas and championing learning, the culture shift begins, with employees at all levels championing new paths forward. Ultimately, success is a shared endeavor, and employees should feel comfortable sharing resources and supporting each other. Furniturewala highlights this collaborative spirit, noting, "Everyone is sharing things where they see either model improvements that are happening...Or they share interesting articles that they've read."

Just as critical to adoption is recognition. "People appreciate receiving certificates for completing Coursera courses," says Nauwelaers. "It gives them a sense of accomplishment and industry recognition."

Recommendations

- → Ensure broad access to learning resources and promote a bottom-up approach to encourage widespread participation.
- → Equip middle managers with the resources and opportunities to support their teams' learning and model a commitment to continuous development.
- → Foster a culture of learning by actively engaging in training and sharing knowledge from the top down.
- → Celebrate and recognize when employees achieve learning milestones.

> *"One of the best ways to get middle managers on board with learning is to give them the same learning opportunities as their teams. When managers actively participate in their own development, it sets a powerful example.*

Matthias Nauwelaers
Talent Business Partner, imec

Spotlight

Schneider Electric

Building a culture of continuous innovation among Data and AI professionals

To stay competitive, Jean-Côme Renaudin, Global Data & AI Academy Director at Schneider Electric, saw an opportunity to bridge the skills gap within his team. What began as technical training for a few hundred AI professionals quickly grew into organization-wide training.

In 2024, 48,000 Schneider Electric employees completed AI training, a nonmandatory learning initiative. In total, 138,000 courses were completed. These numbers demonstrate that employees want to learn new and essential skills—they just need support.

Schneider Electric champions functional training with a learner-centric framework called "Learn, Act, Advocate." Here's a summary of each phase and its impact:

Learn: Make quality learning resources readily accessible and build awareness. This stage focuses on equipping employees with foundational knowledge and skills. Schneider Electric segments learning journeys based into three groups: enthusiastic learners ("hackers"), directed learners, and hesitant learners.

During the "Learn" stage, Schneider Electric focused on specific technical training based on verified skills gaps, creating targeted curriculums and marketing them effectively: "We recommend Coursera courses on Data and AI...The name of the game here is to market our offers. We built a marketing machine to recommend and 'sell' the training," notes Renaudin.

Act: Once learning is accessible, Schneider Electric encourages the practical application of learned knowledge and skills through engagement initiatives. One key avenue is the monthly "Data & AI Talk" webinars focused on GenAI and value generation. Renaudin shared that these webinars, open to all employees and featuring customers and experts, "create a sense of urgency that we need for change to happen." Schneider also hosted AI leaders like Coursera founder Andrew Ng to further drive adoption.

Additionally, Schneider Electric organizes hundreds of hackathons and promptathons, allowing employees to experiment with GenAI technology in the context of their work. For instance, a marketing promptathon challenged employees to build the best prompt for a marketing use case, resulting in a first-of-its-kind prompt library. In 2024, 13,000 employees participated in these promptathons.

Advocate: This phase creates a ripple effect by empowering employees to champion their learning and share experiences, fostering a culture of continuous improvement. A key element is identifying and training AI Adoption Champions to build enthusiasm within their teams. Renaudin explains that this network of champions, acting as an extension of his team, ensures the adoption of AI use cases and generates new ideas. Today, Renaudin and his team have more than 200 AI Adoption Champions across the organization. As Renaudin shares, "Without the adoption of data and AI skills, we will not realize the promised value of AI transformation."

Training for in-demand skills doesn't stop once a course is complete. Schneider Electric inspires employees to keep talking about what they've learned and encourages employees to share certificates for completed credentials on the company's s internal social network. "It's not just about learning," says Renaudin. "It's about change management. You need to make the learning sticky."

138,000
course completions

48,000
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13,000
employees participated in promptathons

5. Measure impact and secure executive support

To prove the value of learning and maintain executive support, it's crucial to move beyond simply offering training and to actively track its impact. As Geoff Hirsch of Microsoft notes, it's important to "effectively assess skill gaps by conducting regular skills audits and leveraging data analytics to identify areas of weakness."

This assessment process should also involve the employees themselves, for valuable feedback and insights. While traditional metrics like course completion are a starting point, they don't tell the whole story. As Jean-Côme Renaudin of Schneider Electric says, "Everything we do, we track. The traditional learning metrics—the number of hours spent and completion rates—are only proxies to value. What matters to us is the percentage of upskilling on a set of critical skills for the company. If more and more employees invest in training, this shows that the training is of quality and that there is a need for us to invest more in it."

Therefore, it's important to consider the potential business impact of ongoing training. "Measuring the business impact of ongoing training comes down to what can be accomplished that was not possible without the skills development," says Jenni Troutman of AWS.

Despite different approaches to measurement, gauging the ROI of learning remains a challenge, and so several of the leaders we spoke with advised taking a long-term view of learning investments. As Mustafa Furniturewala explains, "It's sort of like investing in R&D. You might not always see an immediate return, but you need to have some objective and subjective signals about whether or not you're headed in the right direction."

Recommendations

- Implement regular skills audits and leverage data analytics to proactively identify skills gaps within your organization.
- Focus on engagement, application, and feedback to identify the need to invest in ongoing training.
- Understand that the value of learning often manifests in the long term, requiring sustained commitment and a mix of objective and subjective signals.

Discover more learning ROI best practices and customer stories in the *How to Evaluate the Business Impact of Learning* playbook.

Learn more

Equipping teams with the skills they need

With advancements in GenAI, data science, cybersecurity, and more, the old methodologies of learning programs are no longer sufficient. As an organizational priority, training needs to be delivered based on job function to truly resonate with learners and drive business outcomes.

As Jenni Troutman of AWS emphasizes, “L&D cannot be a one-and-done endeavor; technology is changing much too rapidly. Organizations must see training as a strategic business investment that equips employees with the cutting-edge skills to innovate each day in their work.”

> *“L&D cannot be a one-and-done endeavor; technology is changing much too rapidly.*

Jenni Troutman
Director of AWS Training and Certification Products and Services, AWS

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As a leading learning provider offering more than 10,000 courses, Professional Certificates, and degrees, Coursera partners with 350+ distinguished universities and companies to help organizations design and implement targeted training programs that drive results.

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Endnotes

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