Building AI Skills at Scale:

A Comprehensive Look at Udemy's Journey towards AI Transformation

udemy

Executive Summary

In late 2022, when ChatGPT launched to the public, forward-thinking organizations recognized that artificial intelligence would not remain confined to engineering and product teams - it would become a critical capability across entire enterprises. This white paper chronicles Udemy's systematic three-year journey towards building AI skills at scale, exploring the steps and learnings along the way.

The results from this year (2025) speak for themselves: a 956% increase in AI tool usage, nearly 835 custom AI assistants created across the organization, and over 60 identified AI champions representing every business function. But beyond the metrics lies a replicable methodology that other organizations can adapt to drive their own AI transformation and inspire innovation in their companies.

This comprehensive case study examines Udemy's four-stage approach:

Stage 1: Build AI Fluency

Establishing foundational knowledge and active executive leadership support

Stage 2: Learn & Experiment Together

Structured experimentation on approved tools with measurable skill development and social learning

Stage 3: Identify Use cases

Systematic discovery of practical applications for AI across teams

Stage 4: Transform the way we work

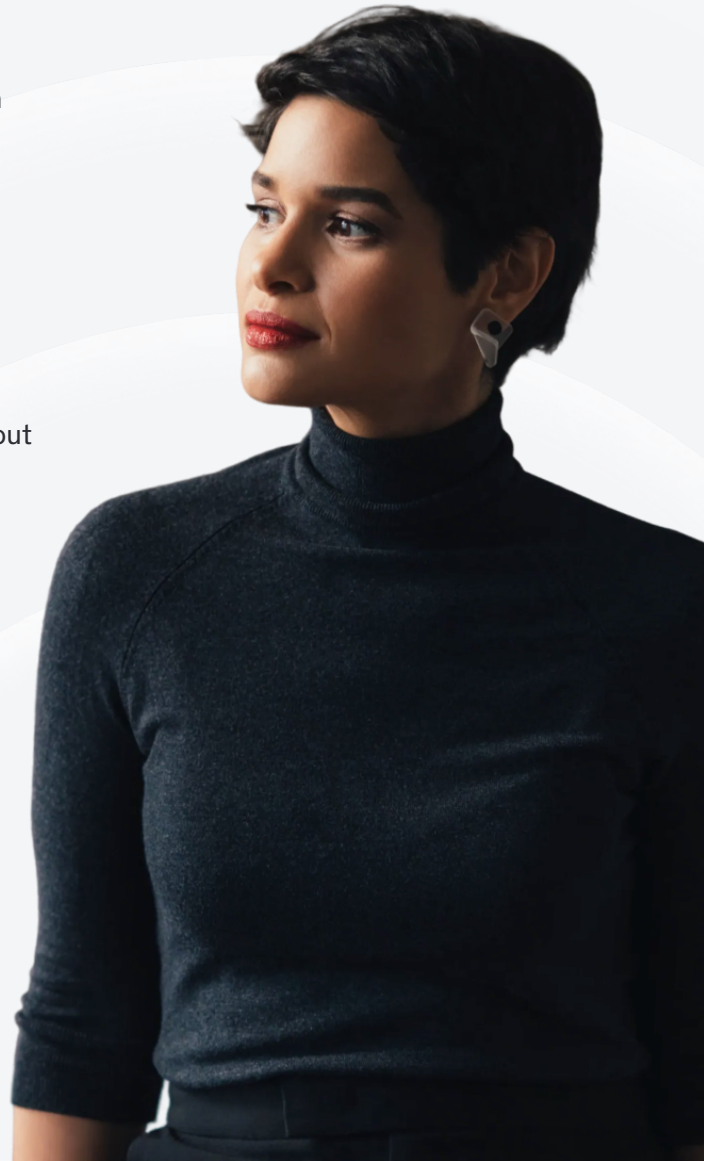
Reimagine and redesign workflows and enterprise processes

> People don't understand what AI is capable of. They've been told to use it, but not why. That gap is what we need to close.
>
> **James Young**
> Director of Corporate IT

Introduction: The Imperative for AI Skills at Scale

The release of ChatGPT in November 2022 marked an inflection point in the democratization of artificial intelligence with the demand for AI skills surging throughout 2023. Data from Udemy's 2024 Global Learning & Skills Trends Report[1] revealed a staggering 5,226% surge in ChatGPT-related learning consumption in Q1 2023 alone, while overall AI-related skills learning grew 60% year-over-year. With McKinsey[2] estimating that 30% of current work hours in the U.S. economy could be automated by 2030, and Wharton estimating that AI will increase productivity and GDP 1.5% by 2035[3], the strategic imperative became clear: organizations needed to move quickly from AI awareness to AI capability.

Udemy recognized early that this transformation required more than simply purchasing AI tools and hoping for adoption as we've learned from research on the productivity J-curve[4] and past technological advances such as the personal computer or telephone. As Microsoft's research[5] showed, 82% of global leaders acknowledged that their employees would need new skills to effectively adapt to generative AI. The challenge was not just technical - it was fundamentally about changing how work gets done.



[1] Udemy Business. (2024). 2024 global learning & skills trends report. Udemy Business.
[2] Chui, M., Hazan, E., Roberts, R., Singla, A., Smaje, K., Sukharevsky, A., Yee, L., & Zemmel, R. (2023). A new future of work: The race to deploy AI and raise skills in Europe and beyond. McKinsey Global Institute.
[3] Arnon, A. (2025, September 8). The projected impact of generative AI on future productivity growth. Penn Wharton Budget Model.
[4] Yee, L. (Host). (2024). Technology alone is never enough for true productivity [Audio podcast transcript]. In At the Edge. McKinsey & Company.
[5] Microsoft. (2023, May 9). Work Trend Index annual report: Will AI fix work? Microsoft WorkLab.

> AI isn't replacing you—but if you can't use it, then you don't have the skills needed to progress. It's table stakes now.
>
> **Xavier Buckley**
> Director of Sales Development

Stage 1: Build AI Fluency

Establishing Foundational Knowledge Across Udemy

Udemy's AI journey began with a critical insight: AI skills are essential across every function, not just technical teams. Udemy employees already had access to Udemy's full catalog of courses, including the freshest content available on AI; however, the real breakthrough came with the development of an enterprise-wide learning strategy designed to yield capability at scale.

In late 2023, Udemy created an enterprise-wide learning path and team learning experience[6] consisting of curated content from Udemy instructors and internal subject matter experts. This was paired with conversation guides for leaders and teams which helped get people talking about AI and taking steps together towards becoming more fluent.

This approach served multiple purposes:

> **Positioned** internal leaders as thought leaders both within the organization and in the broader AI field
>
> **Empowered** employees with confidence that the right expertise existed internally to guide the transformation
>
> **Demonstrated** executive commitment through visible participation and role modeling
>
> **Helped** employees learn foundations and build trust with AI as a tool

The impact of executive sponsorship cannot be overstated. When Udemy's CEO and executive team championed the learning initiative, completion rates reached 80% in just 6 weeks. This was accompanied by a 47% increase in enterprise ChatGPT activations, demonstrating that learning was translating into actual tool adoption.

"By focusing on driving real impact—internal tool activations—we designed learning with intent. Through executive stories, manager-led discussions, and actionable resources, this learning experience sparked an enterprise-wide cultural shift."

- Joshua Ehrenreich, Lead Learning Partner

Recognizing that effective AI usage requires more than technical proficiency, Udemy complemented AI tool learning with priority skills development. These areas included decision-making, coaching, and change leadership—capabilities critical to driving key business outcomes.

[6] Udemy. (2023). A Team Toolkit for Learning Essential Generative AI Skills. Udemy Learning Team.

Role Modeling from the Top

Heading into 2024, Udemy knew there was more work to be done with regards to building AI fluency. While the learning experience kick started adoption and usage, the organization still had a long way to go. Employees were largely open to learning and talking about AI, but weren't yet seeing applying skills to drive the transformation of work on an enterprise scale. Employees and leaders were talking about AI, but they weren't yet using it.

Udemy decided to invest in intensive AI skills development, starting with the executive team. Partnering with Helen Kupp and Ketaki Sodhi, innovative AI leaders, they designed a two-part workshop series:

Workshop 1

Focused on moving beyond basic AI usage to sophisticated prompt engineering, teaching executives to think critically about inputs and outputs rather than treating AI as "enhanced Google search."

Workshop 2

Centered on building custom AI assistants, with each executive creating a practical tool for their function. For example, the Chief Marketing Officer, Genefa Murphy built an OKR assistant that helped her team develop objectives and key results properly nested within functional and organizational goals, market and business context.

The vulnerability and collaborative learning demonstrated by executives proved transformational. When executives shared their newly-built assistants with broader teams, it sparked inspiration and role-modeled the kind of experimentation desired throughout the organization.

Now that our executives had a greater confidence and fluency in their own skills, they could build on the awareness and experimentation developed throughout the company and focus that energy towards leading tangible business transformation.

Key stage one outcomes:

80%

completion rate for enterprise-wide AI learning path

47%

increase in enterprise ChatGPT activations

100%

of executive team trained in building assistants using enterprise approved tools

Stage 2: Learn and Experiment Together

In 2024 Udemy introduced Toqan, an enterprise-grade AI tool made available to all employees as a second option to ChatGPT. Despite the positive experience with ChatGPT adoption following the enterprise-wide learning initiative to build AI fluency, initial Toqan usage was slower than expected. The assumption that employees would automatically migrate to the enterprise solution proved incorrect, revealing the need for more structured adoption strategies that would inform their approach for 2025.

A Cross-Functional Task Force

In preparation for 2025, Udemy formed a strategic cross-functional team helmed by the Senior Director of Learning and Leadership Development with the Chief Information and Security Officer (CISO) and members from their respective teams. This partnership proved crucial, aligning learning objectives with security requirements and tool governance - a combination essential for enterprise AI adoption.

> We mapped out the year: starting with general learning, building into strategy, and ending in community storytelling. That evolution was intentional.
>
> **Chad Kalmes**
> Chief Information Security Officer (CISO)

The “UDay” Opportunity

Udemy leveraged its existing monthly, company-wide learning days (UDays) to create a structured yet flexible approach to AI skill development. Historically on UDays, Udemy offered rotating skill focus areas to employees each month that tied back to strategic business initiatives. In 2025, they made the decision to dedicate all UDays to AI learning, creating organizational focus and momentum around the transformation initiative. The singular focus underscored the importance of learning and practicing AI skills which they believed were critical for the future of the company.

What is a UDay?

A UDay has been a cultural staple at Udemy over the years. The company dedicates 1 day per month to be focused on learning - a meeting free day to focus on building critical skills.

Each UDay employees experienced a three-pronged approach:

Curated Learning Paths

Employees followed a curated learning path through Udemy’s AI-powered skills acceleration platform, building foundations in large language models and prompt engineering.

Experiment Packs

Custom experiment packs guided learners to bridge the gap from knowledge to action and to test real use cases with company-approved tools, encouraging creativity and fun, hands-on practice.

Slack Community

Employees showcased their experiments across Slack, sparking organic peer-to-peer learning and even competing for monetary prizes.

Structured Experimentation

The experiment packs evolved strategically across multiple UDays:

1

Exploring Inputs & Outputs

Encouraging creative exploration of AI with using images and data as inputs/outputs. Similar to the executive team, while Udemy employees initially interacted with AI like “enhanced Google search,” creative image generation and data manipulation exercises helped build employee comfort and revealed AI’s broader capabilities.

2

Prompt Engineering essentials

Emphasis on prompt engineering skills using structured frameworks. This prompt improvement concept encouraged employees to rewrite prompts using systematic approaches, then evaluate before-and-after results. These UDays introduced incentivization, with a $500 reward system recognizing different categories such as greatest business impact through assistant creation, most improved prompt and best peer feedback and collaboration

3

Building Custom Assistants

Focus on assistant building using Helen Lee Kupp’s “AI for Business Leaders” course. Helen’s background as co-founder of Women Defining AI and former Slack strategy leader brought credibility and practical expertise to the skill journey.

Remarkable results

The structured experimentation approach yielded extraordinary results from January - September 2025:

Monthly active users increased

534%

from baseline

Questions asked per month increased

956%

from baseline

Adoption grew from less than

5% → 50%

of the organization

Organic Champions & Skill-Based Mobility

Perhaps most importantly, the experimentation phase surfaced over 60 AI champions representing every function in the organization.

What is an AI champion?

An AI champion someone who has shown AI skill proficiency and who promotes the adoption and usage by demonstrating skilled application of AI tools, sharing successful strategies, and inspiring others through visible results.

Rather than appointing champions, Udemy identified them organically through participation in UDays and demonstrated skill strength. When Udemy needed to make their first hire for the newly formed AI Innovation team, this skill-based approach enabled them to select an internal candidate - an AI champion, Carlos del Rio who had emerged through the learning experience itself.

This organic identification process addressed a critical challenge highlighted in Deloitte's[7] research:

> while 50% of employees find it easier to secure jobs outside their organizations than within them, and only 6% of organizations excel at moving people between roles.

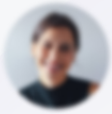
Udemy's systematic learning strategy created clear pathways for internal talent recognition and mobility. By making AI skills development visible and measurable through UDays, the organization provided transparency around who was developing advanced capabilities and readiness for expanded roles—solving another key barrier identified by Deloitte, where 45% of employees lack visibility into internal opportunities. The result was a pipeline for internal advancement that delivered value to both individuals and the organization. Udemy's revamped internal talent pipeline shows how strategic learning initiatives and skill-based approaches can transform employee mobility from a common organizational weakness into a competitive advantage.

[7] Deloitte. (2019). The social enterprise at work: Paradox as a path forward—2019 Deloitte Human Capital Trends. Deloitte Insights.

Stage 3: Identify Use Cases

Individuals Driving Innovation

While organizational strategy and structured learning provided the foundation, Udemy's transformation was ultimately driven by individual employees who embraced and used AI as a creative problem-solving tool. Across every function, employees began building custom assistants that addressed their specific challenges and workflows, demonstrating the power of democratized AI development. Additionally, as employees practiced building assistants we saw more complex solutions emerge. Specifically, user-built AI assistants with agentic capabilities (taking action on behalf of users) grew from 0% to 20%. Below are a few examples of individuals who sought to move from passive consumers to active creators who transformed the way they completed their work.



The AI-Driven SOX Compliance User Access Review Generator,
built by Moulika Bollinadi

An AI autopilot that streamlines quarterly User Access Reviews for Tapen to meet SOX requirements. It transforms a 25+ hour manual preparation process every quarter to about 5 minutes and delivers audit-ready review documents for control owners. The automated validation and completeness checks improve quality with full traceability and consistency allowing teams to focus on higher-value work.

The Job Description Auto-Builder,
built by Lisa Pham

An AI Agent that targets a tedious and arduous task. It generates first drafts of job descriptions in 10 minutes, down from 60. This agent uses Udemy's market- validated skills database, aligns with career levels, and integrates relevant skills to create consistent 1st draft versions of job descriptions for hiring manager review.

The AI-Powered Value Messaging Builder,
built by Tim Chin

A prompt-driven workflow designed to eliminate the repetitive, time-consuming task of drafting customer emails. It generates tailored, value-focused outreach in under a minute, down from 20 minutes. It combines structured prompts with TextExpander shortcuts. This has improved the quality and consistency of rote customer communications, freeing up time to focus on higher-impact, strategic conversations

The AI Address Normalizer,
built by Jing Chen

An intelligent data transformation tool that solves the challenge of calculating Florida's Communications Services Tax (CST) from messy, unstructured address data. It transforms complex manual address verification by applying an AI layer that "reads" each inconsistent address and normalizes it to USPS-style structured fields—NUMBER, PREDIR, STNAME, STSUFFIX, POSTDIR, plus unit, city, state, and ZIP. The structured output enables automated queries against authoritative address databases for accurate CST rate calculation and ERP posting, reducing exceptions, shortening billing cycle time, and providing a reusable framework for any process requiring transformation of unstructured inputs into decision-ready data.

Facilitated Team Conversations

Moving beyond individual experimentation, it was time to start looking at patterns and themes of usage across the organization. Udemy gathered insight into the common use cases through facilitated conversations with intact teams, led by AI Champions surfaced earlier in the year.

These sessions helped teams:

- Identify individual AI usage patterns
- Capture use cases systematically for organizational analysis
- Combine individual approaches to build team-level AI strategies
- Spot common themes and use cases within their teams

This approach generated comprehensive data across all functions, providing the AI innovation team with insights into common use cases and organizational needs.

Ongoing Support Structure

Following the use case identification, the next UDay experience focused on connecting employees with the growing support infrastructure. The AI innovation team began hosting open office hours for real-time consultation and roundtable sessions for peer learning and problem-solving. This support structure provided direct access to subject matter experts who could help employees execute their ideas. These sessions were well attended and reinforced the hypothesis that the organization was ready for more sophisticated AI applications.

Key stage one outcomes:

145 use cases identifiied

across 11 facilitated sessions

Systematic mapping of AI applications

across all business functions

Data-driven insights

informing tool selection and intervention strategies

Team-level alignment

on AI priorities and applications

Stage 4: Transform the Way We Work

Reflecting back to look forward

The Uday strategy produced tangible impacts to AI skill development. In addition to the metrics discussed thus far, we surveyed employees as part of the final UDay to explore additional insights:

> The majority of respondents reported saving between 1-5 hours per week, with the next largest group reporting saving between 5-10 hours per week.

We utilized the median time saved for each category (e.g., 3 hours for the "1-5 hours" category) and average salary per job level of respondents to estimate the monetary value of the time saved. We had 152 respondents which represents 11% of our total workforce.

For this sample, the total midpoint hours saved was 906 hours per week. We then calculated the financial impact if they continued to save that amount of time each week for a year which equated to $2,886,553.14 dollars in recaptured capacity for higher-value work.

This initial analysis along with the stories from our workforce demonstrates the multiplying effect possible when AI tools are enabled in an organization. It isn't simply about saving time and money, but rather enabling the organization to utilize AI so time spent on routine or rote tasks can be reinvested in high yield or innovative tasks.

0.66%
of respondents save more than 20 hours

1.97%
save 0 hours - no measurable time saved

12.50%
of respondents save 11-20 hours

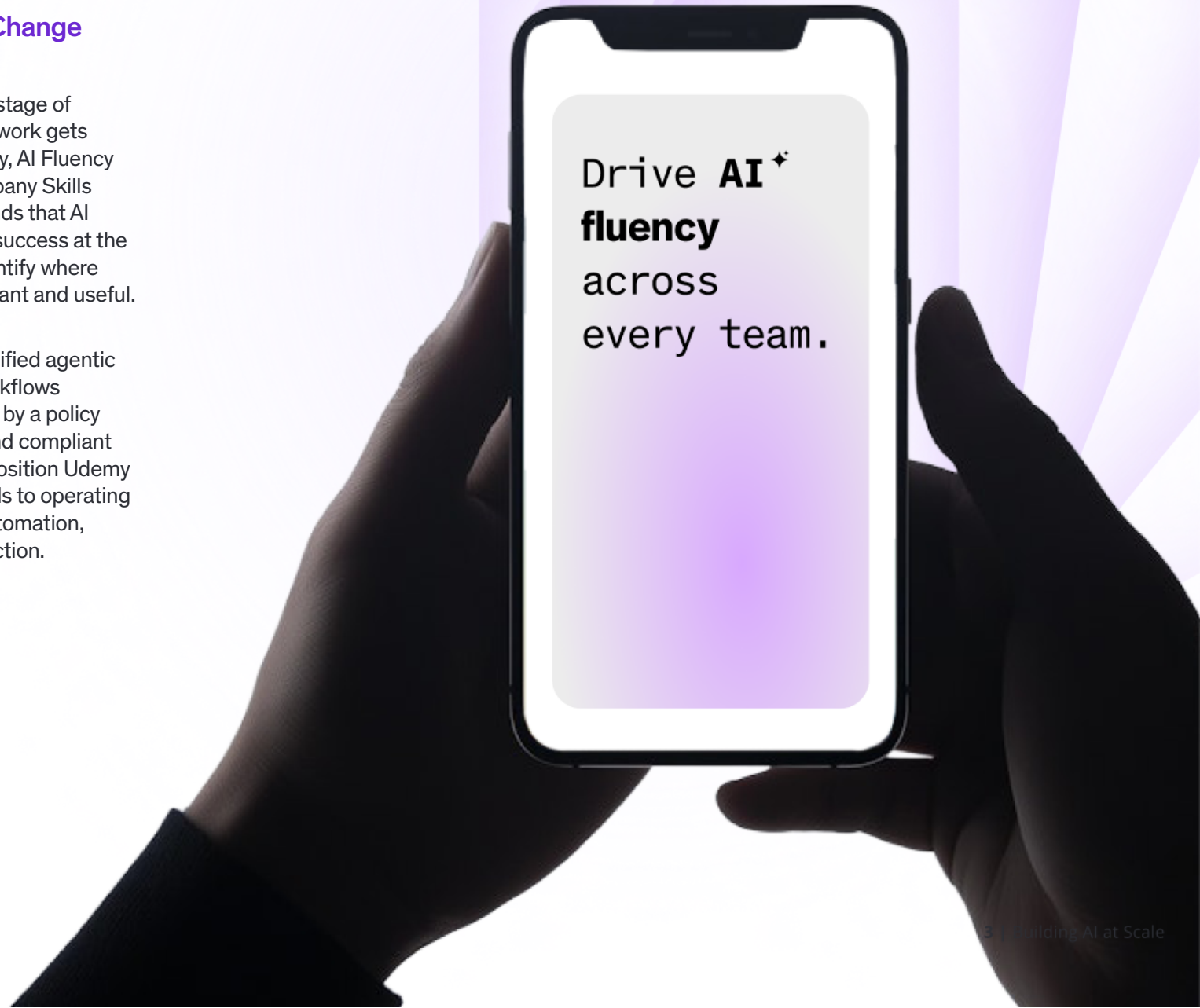
26.97%
of respondents save 6-10 hours

57.89%
of respondents save 1-5 hours

Preparing for Systems-Level Change

Udemy stands ready to enter the final stage of transformation - to transform the way work gets done. As a result of our learning journey, AI Fluency is now included in Udemy's Core Company Skills so that every new employee understands that AI Fluency is a baseline skill required for success at the company and our IT is equipped to identify where agent-based workflows are most relevant and useful.

Additionally, Udemy has deployed a unified agentic automation platform to streamline workflows across departments. This is supported by a policy framework ensuring ethical, secure, and compliant use of AI technologies. These efforts position Udemy to shift from ad-hoc adoption of AI tools to operating as an AI-native organization, where automation, insight, and innovation drive every function.



Conclusion

Udemy's journey from scattered AI tool usage to systematic enterprise transformation - culminating in nearly 835 custom assistants and a 956% increase in usage - demonstrates that successful AI adoption requires more than technology implementation.

It demands systematic skill development, cultural change, and strategic thinking about how work itself evolves. Through thoughtful strategy, leadership commitment, and a methodical four-stage approach, Udemy transformed from AI awareness to AI capability, creating sustainable competitive advantage through human-centered AI development.

As the organization prepares to enter Stage 4 - transform the way we work - the vision of employees thinking about "work as a system" rather than individual tasks represents the next frontier of organizational AI maturity. This progression from individual fluency to systems-level transformation provides a replicable roadmap that other organizations can adapt to unlock AI's full potential.

As AI advancements become more sophisticated, the pressure to transform and build skills will feel more urgent. Organizations that wait for 'perfect' strategies risk falling behind. Those who start small, learning AI themselves, building cross functional partnerships and creating safe spaces for experimentation will be positioned to lead into an AI-powered future. This white paper offers you more than Udemy's journey - it is a blueprint filled with methods, outcomes and practical lessons to accelerate your transformation journey. Your organization's AI capability starts with your commitment.

Will you begin modeling AI learning yourself or will you delegate your competitive advantage to chance?

This white paper is authored by Rebecca Stern, Sr. Director, Learning and Leadership Development at Udemy. It was based on lived experience, employee interviews and analysis of internal transformation data from 2023-2025. This work would not have been possible without the partnership from Chad Kalmes (Chief Information Security Officer), Core AI Enterprise Strategy team (Steve Cahill, Carlos del Rio, Joshua Ehrenrich, Benjamin Green, James Larcus, Lesley Martin, and Ashley Vasilovski) and the support from Karen Fascenda and the rest of Udemy's executive team. For organizations interested in implementing similar AI transformation initiatives, Udemy's experience provides both inspiration and practical guidance for building AI skills at scale. To learn more, visit udemybusiness.com/ai.

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