

coursera for business

How to Lead through Generative AI Transformation: Insights from Industry Experts



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Foreword:

A letter from Coursera's CEO

On December 5, 2022, I received a Slack message from Coursera's VP of Product Management. It was a surprisingly precise recommendation outlining our approach to integrating generative AI (GenAI) into Coursera. To my astonishment, he was able to draft this blueprint within seconds by entering a few prompts into ChatGPT, which led me to wonder how else large language models (LLMs) could be used as a thought partner for innovation and productivity.

This was my GenAI awakening. I spent countless hours experimenting with ChatGPT. I was astounded by the many possibilities it could offer Coursera as an organization—and work as we know it.

Fast-forward to 2024 and the profound impact of GenAI is undeniable. Studies show that the technology has the potential to transform tasks for nearly half the workforce,¹ especially for those in knowledge-based roles. McKinsey's prediction of \$4.4 trillion in productivity gains due to GenAI highlights the scale of impact technology can have on organizations.²

The challenge now lies with us, the leaders, to harness the potential for our organizations. Yet, many business leaders lack the knowledge to do so. Despite the fact that 89% of executives rank AI and GenAI as a top-three tech priority for 2024, 59% of leaders say that they have limited or no confidence in their executive team's proficiency in GenAI.³ Before we can transform our organizations with a GenAI strategy, we first need to develop the talent and skills to work with GenAI ourselves

Earlier in January, just before Davos 2024, I launched [Navigating Generative AI for Leaders](#), a Coursera Specialization, to address this gap. This 4-course series, part of Coursera's Generative AI Academy, features several AI experts from institutions like Salesforce, Stanford University, Orange Telecom, and Upwork. A couple of Harvard business school professors took the course and decided to create an HBS case study on our approach called "Coursera's Foray into GenAI."⁴

The guide you are reading encapsulates the essence of what we've learned at Coursera, enriched with insights from other leaders who have been instrumental in our AI journey. I hope it will inform your strategies to harness GenAI's potential for your organization with greater confidence.

GenAI has already changed the way that I do my job as a leader. I'm excited for you to discover how it will change yours.



Jeff Maggioncalda
Chief Executive Officer, Coursera

The role of leadership in generative AI transformation

As the CEO of Upwork, the world’s largest freelance marketplace, Hayden Brown has seen firsthand how generative AI is transforming industries and jobs. **“AI was the fastest growing category of work in our ecosystem this year,”** says Brown, **“and that shows no signs of slowing down.”***

As Brown puts it, GenAI is a “now game.”

“This is not a time when executives can sit back, wait, and see how this plays out,” she notes. “I really believe this is a time when everyone needs to be leaning forward, leaning in, and figuring out how [GenAI] can impact their team and their business.”

However, many business leaders don’t know where to start. Research from Weber Shandwick finds that 75% of leaders who see GenAI as a priority say that they lack the tools to lead through GenAI transformation.⁵

In no time at all, GenAI will become an essential part of solving complex organizational problems. To enable GenAI transformation across their organizations, leaders must foster a work culture that cultivates growth, agility, and collaboration, setting the stage for employees to adapt to GenAI. Sustained customer success, shareholder value, and top-line growth are all on the line.

But in order to accomplish any of this, leaders must first obtain a strong grasp of GenAI themselves.

So, where should you begin?

That’s what we’ll explore in this guide. From hands-on experience to change management, we’ll cover the steps you need to take to align with your executive team and serve as a leader for GenAI transformation within your organization.

*Throughout this guide, quotes from leaders at Salesforce AI, DeepLearning.AI, Orange Telecom, Stanford University, and Upwork are directly sourced from Coursera’s [Navigating Generative AI for Leaders Specialization](#).

Getting practical: How to navigate GenAI transformation

Unlike more nuanced technological breakthroughs in the past, like cloud computing, GenAI impacts everyone within an organization. “Just like we all had to learn how to use Google Search and email 20 years ago, every employee today, in every department, has to learn how to use AI to fundamentally redefine their job,” says Clara Shih, CEO of Salesforce AI.

Successful GenAI transformation requires executives and business leaders to align on how they’ll integrate GenAI into every process across the business. If this doesn’t happen, your employees won’t connect GenAI to their roles, and you won’t be able to harness the productivity gains of the technology.

Here’s how business leaders can make meaningful investments in GenAI while still managing its risks.

Step #1: Think of GenAI as your thought partner

The first step in guiding your organization through GenAI transformation is understanding how to use the technology yourself.

While GenAI can help you complete tasks more quickly—with one study finding workers could complete some tasks 25% faster⁶—it also has the ability to help you think more effectively.

Consider the number of decisions you make every day. Wouldn’t it be great to have a thought partner examining the many angles of a situation from varying stakeholder perspectives?

Large language models (LLMs) unlock new ways to solve critical problems and provide the other business leaders around you with suggestions to strengthen your customer relationships and ultimately move the business forward.

Here are three progressively more advanced prompting styles to explore and master as a leader:

1. **Basic query mode:** These are your quick and general inquiries. You put a prompt together, make a request from the LLM, and then it gives you a response.
2. **Context-enhanced mode:** This approach enhances the knowledge of an LLM by providing additional context. There’s one word to remember here: “Consider.” Before prompting the LLM, add context by saying, “Consider XYZ…” and then tell the LLM what you need.

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Everyone in the company needs to become GenAI-literate. A top-down mandate illuminates the GenAI transformation and positions the technology as a major change driver for how we build products, serve our customers, and work internally.”



Mustafa Furniturewala
Chief Technology Officer

3. **Thought partner mode:** Once you’ve mastered basic queries and context-enhancing, you can take things one step further and use GenAI to support complex problem-solving, brainstorming, and strategic thinking. The context you provide the LLM should be your point of view or idea; you don’t start with information from somebody else. Then, add in some relevant company context and feed it all into the LLM. Now you’re asking your thought partner, the LLM, to work on, improve, challenge, and iterate on your point of view.

Sample Prompts for Using GenAI as a Thought Partner

Basic query mode	“Give me five effective ways to communicate the rollout of new GenAI training with my organization.”
Context-enhanced mode	“Consider that my remote organization is eagerly adopting GenAI on its own, but we want to offer some formal training for our employees around how to safely and ethically use GenAI at work. Give me five effective ways to communicate the rollout of new GenAI training with my organization.”
Thought partner mode	“Consider that my remote organization is eagerly adopting GenAI on its own, but we want to offer some formal training for our employees around how to safely and ethically use GenAI at work. I think there’s more of an advantage to rolling out training to the entire organization at once versus department by department. What are the pitfalls of an organization-wide rollout?”

In the words of Andrew Ng, Co-founder and Chairman at Coursera and instructor for one of Coursera’s [fastest-growing GenAI courses](#): “The most important thing that a CEO needs to do is understand this technology. And the only way to understand it is to use it.”

LLMs offer alternate views, provide additional context, and help leaders examine their biases. By considering its range of applications across disciplines, functions, and roles, this critical forethought around GenAI can help leaders and individual contributors alike strengthen their work and their decisions.

Course recommendations



Use Generative AI as Your Thought Partner



Generative AI for Leaders



Generative AI Essentials: Overview and Impact

Step #2: Assess ethical, data, and legal considerations

GenAI adoption moved quickly. Within ChatGPT's first two months of launch, it surpassed 100 million users.⁷ This growing interest in GenAI is reflected in enrollment trends on the Coursera platform. In 2023, someone enrolled in GenAI content on Coursera nearly every minute,⁸ and in 2024, this rate has quadrupled—four people enroll in GenAI content every minute. The rapid adoption brings many concerns for employees and business leaders alike:

- Will GenAI replace my job?
- Is my data safe when I use GenAI?
- How do I use GenAI tools ethically?
- Will GenAI misuse intellectual property?

Fear of GenAI risks often unnecessarily halt leaders from making progress. Research from McKinsey has found that “generative AI is likely to have the biggest impact on knowledge work, particularly activities involving decision making and collaboration, which previously had the lowest potential for automation.”⁹ Without the proper GenAI education, leaders may feel as though their jobs are at risk, along with their organizations' proprietary knowledge.

With the right information, it quickly becomes clear that ethical, data, and legal concerns are important to consider, but are also mitigable:

What do you need to know about GenAI ethics and risks?

Business model risk: Understand the risk that GenAI misuse could pose to these four entities: your business, competitors, suppliers, and customers.

Responsible use: Learn the limitations and guardrails around LLMs so employees can ethically engage with them.

Data security and privacy: When used improperly, GenAI can expose vulnerable data. Know that information can also be manipulated and augmented through exploitation and phishing attacks.

Intellectual property risk: When machines can manipulate language, intellectual property might be infused into answers. Be aware of how this can bring data ownership into question.

“The CEO must have a distinct GenAI strategy that becomes part of the overall company culture,” shares Trena Minudri, VP & Chief Learning Officer at Coursera. “The executive team should consider, ‘How does this align with our culture and our people? What is the most appropriate way to proceed?’”

A wait-and-see approach won't work for GenAI; employees will start using GenAI on their own regardless of company strategy or policy because they want to keep up with skill trends and improve their job outputs. Business leaders need to grapple with GenAI's range of implications before rolling it out to their larger teams—but they need to start now.

Course recommendations

 Fractal Analytics

Responsible AI in the Generative AI Era

 IBM

Generative AI: Impact, Considerations, and Ethical Issues

 Coursera Instructor Network

Navigating Generative AI Risks for Leaders

Within your leadership team, CEOs and CLOs need to partner closely with the developers and technology leaders who'll actually bring GenAI initiatives into existing tech stacks and workflows for large-scale projects—while also making sure that all employees have access to low-code or no-code solutions that can drive productivity gains. They also should connect with their chief data officer to mitigate security risks. The overall GenAI strategy will inform broader L&D initiatives for upskilling, as well.

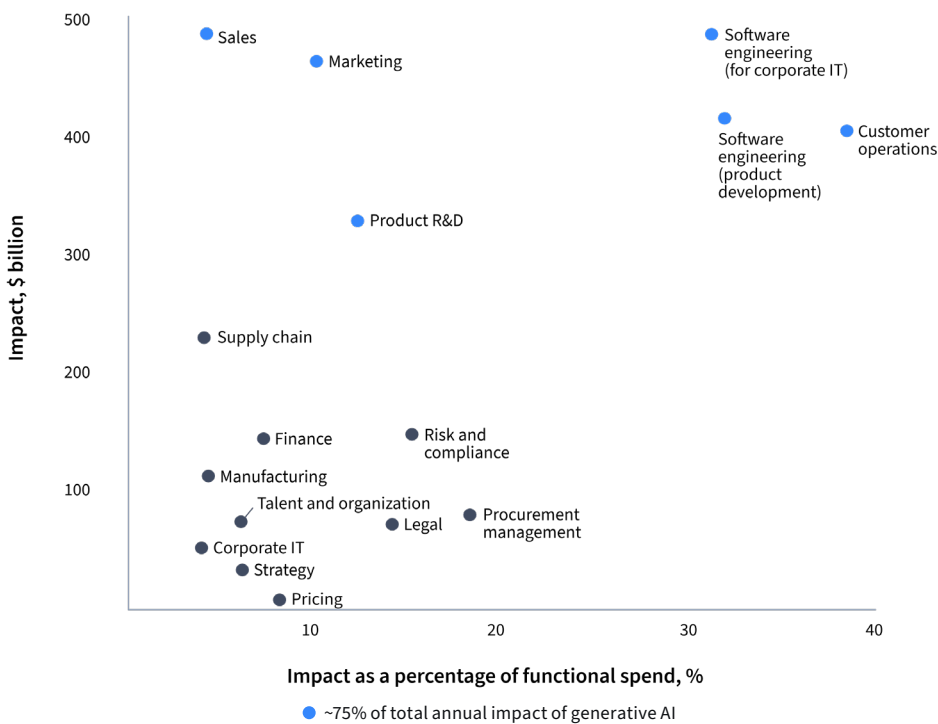
This web of connections ensures that GenAI is embedded throughout the organization and not solely an experiment.

Step #3: Champion key GenAI use cases

As Principal Content Development Manager - Data and AI at Microsoft, Graeme Malcolm has followed trends in AI for many years and currently oversees the development of skilling content programs. In Graeme's words, one of the most important components for a GenAI program is context. "I think people don't go to work and say, 'I'm going to do AI today,'" says Graeme. "They go to work to do their job, to do whatever it is that they were paid to do. And so I think part of the approach to getting AI adopted—and to training people to make use of it—is to put it into context."¹⁰

As a business leader, providing contextualized training is one of the key ways that you can empower employees to embrace GenAI following the establishing of a baseline understanding of the technology.

McKinsey identified five specific functional areas—including sales, marketing, software engineering (both development and IT), customer operations, and product R&D—that hold roughly 75% of the total annual impact of GenAI.¹¹



A data protection to-do list

Make data security and privacy a priority.

Establish guardrails for which company data is shareable and reflect how to do so in company guidelines. Use discretion when inputting data into LLMs.

Before adding data to a prompt, pause. Where does this data come from, and how will it be used? Are there any intellectual property implications?

Implement data usage oversight by connecting with your chief data officer and chief information security officer.

Sales: BCG anticipates that GenAI will lead to a doubling of productivity for sales reps.¹² LLMs can assist with many sales-oriented tasks—from quickly crafting tailored messages for prospects and customers to updating the CRM with notes from their latest calls. This frees up time for sellers to focus on higher-touch, white-glove treatments for their accounts.

Marketing: Research from Gartner finds that marketing is the most mature use case for AI augmentation, but remains nascent in market value and adoption.¹³ Marketers can use GenAI to cut time and increase productivity through multi-channel content marketing and SEO.

Customer success and operations: The fintech company Klarna has reported early positive results from their rollout of an AI-powered support assistant.¹⁴ Beyond virtual assistant and chatbot use cases, GenAI has the potential to enable support representatives to serve a greater variety of customers through GenAI-powered multi-language support and rapid translation.

Software development: GenAI is already helping software developers write and review code more efficiently. A joint 2023 study from Microsoft Research, GitHub, and MIT found that software developers who use Microsoft’s GitHub Copilot can complete their work 56% faster than those who don’t.¹⁵

Product R&D: Research and development teams are using GenAI to help rapidly iterate and test products. For instance, researchers at the biotech company Insilico Medicine were able to halve the amount of time needed to bring a drug to market by using a GenAI-powered platform.¹⁶

The diffusion of GenAI throughout different disciplines and functions within your organization will surface new opportunities to learn and iterate. As Steve Jarrett, Chief AI Officer at Orange, puts it: “Encourage your team, from your executives to the working level, to work in concert with one another and to continually improve their operating procedures based on what they’re learning.”

Step #4: Manage the change for your organization

“The biggest changes that came with generative AI,” says Dr. Robert Brunner, Associate Dean for Innovation and Chief Disruption Officer at the Gies College of Business at the University of Illinois Urbana-Champaign, “were simply the pace at which change was happening and the scale of the impact of these changes.”

Business leaders will always pay close attention to key goals like increasing revenue and boosting customer value. Moving forward, generative AI and the skills needed to work with it will be key to achieving these goals.

As Trena Minudri, VP & Chief Learning Officer at Coursera, puts it: “How do we boost productivity and improve the bottom line? Now, the key to doing all of that is creating a culture and using GenAI in our companies. And that means equipping our teams with both the mindset and the skill set they need to be successful.”

Course recommendations



London Business School

New Ways of Working in an AI World



Generative AI: Business Transformation and Career Growth



Coursera Instructor Network

Setting a Generative AI Strategy

Here are some ways to manage the GenAI organizational change with finesse:

- **Address GenAI early and often:** Most GenAI change management and communication should come from the CEO and other business leaders to punctuate the technology's importance. Similarly, business leaders should take the lead in any company-wide discourse to show other leaders and functional teams the potential GenAI brings to the broader organization.
- **Assess the landscape:** Keep up with industry discourse, emerging trends, competitor use cases, and evolving capabilities, so you understand what's happening in the GenAI conversation.
- **Stay ahead of change:** Familiarize yourself with the roles that GenAI will affect. Then, identify tasks that can be completed using GenAI, and work with business leaders and middle managers to form learning initiatives tailored to these roles.
- **Understand GenAI's impact:** GenAI isn't shaping the future; it's shaping the present. Leaders must understand how GenAI can and will impact their organizations by seeking counsel from peers, the board, and employees. In the words of Dr. Brunner: "Step out of your comfort zone, and talk to people that are different, that are new. Reach out to people in your company and understand what they're seeing."

To get more granular, be sure your learning initiatives are tailored to tangible skills that map to functional roles. Start by looking at necessary GenAI skills for each job, then provide training content to upskill those specific employees (we share an example of how to do this in the next section).

Mid-size to large organizations should even consider appointing a change management leader to handle the entire process. This GenAI champion can support the executive team's alignment and execution of their strategy.

"The change management or transformation role doesn't exist in larger companies yet," notes Mustafa Furniturewala. "Consider facets of a chief AI officer role and how they might facilitate training and development with L&D. This person can work with the cross-functional executive team or functional leaders to ensure they're participating in educational design that's relevant to various job functions."

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We had all of our CIO leadership team complete a GenAI course as a way to lead by example. They were really showing the organization that taking that one hour to invest in the training was worth it.”

Alison Klein

Information Systems Talent Manager, Dow¹⁷

Course recommendations

 Amazon Web Services

Building a Generative AI-Ready Organization

 Microsoft

Voice of Change: Communicate with Teams for GenAI Adoption

 Coursera Instructor Network

Empowering and Transforming Your Organization with GenAI

A look at Coursera's GenAI transformation

GenAI's promise of productivity and innovation has captivated Coursera's leadership team, resulting in a variety of GenAI initiatives throughout the organization.

In the spirit of providing you with more concrete examples as you navigate your own organizational transformation, we'd like to share our lessons and learnings.

Here is a brief overview of three GenAI exercises supported by Coursera's leadership team:

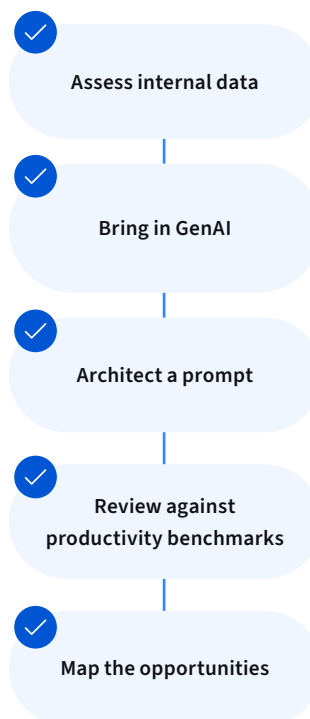
GenAI Exercise 1: Prioritizing areas of opportunity

Our initial research was inspired by foundational learnings from the International Labor Organization, which determined skills or outputs that could be enhanced by GenAI per job function.¹⁸

Here's how we studied productivity's impact and set GenAI benchmarks by team:

- **Assess internal data:** First, our team reviewed our workforce vision data to understand the results, deliverables, and decisions that members of our team perform. This provided a view of how individuals across product management, engineering, research, finance, and HR teams were leveraging resources to drive impact.
- **Bring in GenAI:** The team then reviewed research OpenAI, OpenResearch, and the University of Pennsylvania to understand the intersection of skills, outputs, and capabilities needed for each role. This paper notably includes a breakdown of how different LLM modalities—such as text, hearing, and image generation—can boost different skills for a forward-looking understanding of the potential of GenAI.¹⁹
- **Architect a prompt:** The team entered a detailed prompt into an LLM to find the intersection between job capabilities and the time needed to complete tasks. In brief, the model was asked to determine which group a certain occupation would fall within:
 - **GROUP 1:** An LLM transforms more than 50% of daily activities for these roles.
 - **GROUP 2:** Opportunity is less than 50% for these roles.
 - **GROUP 3:** All other roles not represented previously.

Prioritizing areas of opportunity



- **Review against productivity benchmarks:** The team consolidated productivity research around GenAI from industry leaders, banks, research organizations, and consultancies. They next connected data points to every team and job function.
- **Map the opportunities:** For the last step, the team aggregated company-wide benchmarks in productivity, then applied them across every role in that function. This helped map GenAI opportunities by team.

Outcomes: This study helped our leaders understand where to apply the most focus for the most impact through GenAI. Engineering was one of the top areas. We provided each engineer a pair programmer, an LLM designed to generate code. **Most engineers used these tools multiple times per day and recommended them to their coworkers.**

GenAI Exercise 2: Accelerating the development lifecycle

Coursera recently completed a study with the support of an external consultant where software engineers identified which tasks in their development lifecycle could be improved or automated with GenAI. We sought to find out if the highest level of impact was in the design, architect, build, test, or iterate phase.

This study was in part made possible because the engineering team already had at their disposal GenAI tools like ChatGPT and GitHub Copilot that made it feasible to incorporate GenAI into processes. “We can break down every single job role by tasks that can potentially be improved with GenAI and we can look at the impact,” says Mustafa Furniturewala, Coursera’s Chief Technology Officer. “But you also need to have a tool that can make it possible.”

Outcomes: The study concluded that ChatGPT and GitHub Copilot were most useful for seeding ideas and generating code within the build and test phases. Since then, GenAI has decreased the time the average Coursera developer spends on repetitive tasks in favor of high-value work.

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We can break down every single job role by tasks that can potentially be improved with GenAI and we can look at the impact, but you also need to have a tool that can make it possible.

Mustafa Furniturewala
Chief Technology Officer, Coursera

GenAI Exercise 3: Improving how managers conduct annual reviews

Coursera's People Operations team hypothesized that ChatGPT could lead to stronger 360 reviews and coaching feedback. The team also anticipated that some managers would use Coursera's secure LLM environment to streamline the review process.

To get ahead of this, the HR team tested a variety of prompts and developed a recommended process to help managers provide better tailored feedback to their direct reports. This whole process was so successful that it's already been embedded into training for annual review cycles in 2024.

Steps that Coursera's HR team took:

- Architect a range of prompts for managers to use in employee reviews and incorporate these prompts into manager training resources.
- Input feedback from managers, peers, and self-assessments into ChatGPT, utilizing Coursera's safe and secure Playground environment.
- Ask specific questions that lead to coaching summaries centered around three to five key points.
- Compare feedback to prior (non-AI-enhanced) reviews.

Outcomes: This process enabled managers to gain a wealth of data to strengthen and reduce bias in employee reviews based on feedback from their coworkers and self-reflection.

"The challenge with GenAI," says Trena Minudri, VP & Chief Learning Officer, "is it's not a piece of your job, it's how you do your entire job in a different way."



Enroll in the course **Setting a Generative AI Strategy** for a more in-depth look at this Coursera case study.

[Enroll Now](#)

Conclusion:

Setting the bar for excellent GenAI leadership

GenAI has shaken up how business leaders think about the future of work and their role in leading their organizations through the change.

In response, top leaders are leaning into the unknowns of AI and:

- Thinking of GenAI as a thought partner
- Assessing ethical, data, and legal considerations
- Championing key GenAI use cases
- Managing the change for their organizations

As you embark on your GenAI leadership journey, remember this: Adoption won't happen unless GenAI is a part of your overall business strategy and company culture. The overall business strategy starts with you and your fellow leaders, so take the initiative to experiment with GenAI yourselves and champion it within your organization. With intention and dedication, you can guide your organization through this necessary and exciting transformation.

Empower business leaders in your entire organization to identify, develop, and execute impactful GenAI business strategies with Generative AI Academy.

[Start here](#)



Endnotes

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