



Prompted Learning
Leveraging the L&D Experience through GenAI



01 Introduction

The transformative power of GenAI in the workplace is undisputable, with the impact being felt in virtually every sector. Corporate learning and development is no exception: In fact, the potential for improvement in this area—everything from content generation and translation to mentoring and knowledge management—is huge. And it could not come at a better time. Businesses are finally recognizing L&D as a performance driver rather than a necessary evil in this age of skill shortages, high churn and digital transformation. However,

if L&D leaders are serious about harnessing the power of GenAI, it will require a serious mindset shift and a rethinking of the operating model. Deloitte experts have compiled a list of promising use cases for GenAI in the learning and development space, recommendations for embracing the GenAI revolution as well as possible pitfalls to consider. The potential benefits are clear: Simplifying complex learning processes for the users, streamlining operations for the practitioners and optimizing resource utilization for the business.

How can GenAI help to become more efficient in strategizing, designing and developing L&D tools and achieve a better return on our investment?

Can GenAI help design and deliver a more engaging and therefore more effective learning experience?

What will it take for L&D professionals to become GenAI-ready?

Are there ethical implications to consider with GenAI-powered learning?



02 The challenges facing L&D today

We have seen learning and development become more and more important in recent years. Today's businesses are struggling with talent retention and a rapidly changing competitive and industry environment. New technologies, digital transformation and sustainability objectives are also disrupting the way we work and do business. This increases pressure on companies to equip their staff with the right skills to thrive in this increasingly complex world. It has finally become clear to business leaders that investments in learning solutions are not only the key to staying competitive; they are also an essential investment that directly impact business performance.

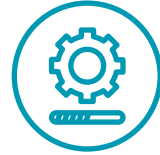
Adopting an enterprise-wide L&D strategy does have its challenges, however, these issues have profound implications for time and cost efficiency as well as the quality and effectiveness of learning initiatives. Based on Deloitte's research and experience, we see different key challenges L&D departments are facing today (see next page).





Generating engaging content

One critical task for L&D departments is creating training materials and content. This can be challenging as it requires a lot of time and resources to generate content that is engaging and relevant to users. Learners are more motivated to participate and more likely to retain information when they have appealing, high quality materials. But how do L&D departments ensure that they have the right information in the right format to achieve the training outcomes their internal customers wish for? Ideally, this involves dynamic feedback loops with a variety of stakeholders, from internal specialized departments to the external content creators.



Adapting content to the audience

Once the training material is in place, L&D leaders face the complex challenge of personalizing that material for specific and/or diverse target groups. They may have to adapt the context in addition to the content, and possibly also to translate it into multiple languages, which requires additional effort and—particularly with translation—often high costs.



Managing and scaling training initiatives

In addition to creating and personalizing training material, L&D departments often find it challenging to facilitate trainings, particularly in-person sessions, and ensure adequate care, mentoring or coaching for the participants. And the more people they need to train, the more complex and resource-intensive it is to scale L&D solutions, particularly using the typical methods of the past.

03 Potential GenAI use cases for L&D

Based on our market experience, Deloitte has compiled a set of possible GenAI use cases to tackle the challenges L&D is facing today. This is not an exhaustive or complete lists, as both GenAI and the L&D field are constantly evolving.





Content generation

One of the most important use cases of GenAI in L&D is (semi-)automated content creation, which is faster—and easier to scale—than traditional methods. Whether L&D departments need interactive modules and quizzes, assessments or any other type of training material, GenAI can generate questions, answers and explanations based on specified learning objectives or course material. The same applies to images, videos or 3D models to include in e-learning modules or handouts. Simply put, this technology allows to produce content faster and more efficiently, allowing L&D initiatives to adapt and grow according to evolving educational demands.



Interactive learning

GenAI makes the learning experience more engaging and enjoyable by including game elements and interactive simulations. With such a wide variety of virtual scenarios, dynamic characters and stimulating challenges available with the technology, users are more motivated to participate and more likely to retain the curriculum. The more immersive, playful and stimulating L&D experts make their learning approach, the less likely it is for users to see it as a chore and the more effective the overall L&D strategy will be.



Multilingual content

GenAI enables significant advances in L&D through the seamless translation of educational content into multiple languages. With translated versions of text, audio and video content available on demand, training materials will be accessible to learners from different language backgrounds. This not only promotes inclusivity more broadly; it ensures L&D initiatives are available in a format that all learners can understand and benefit from.



Intelligent tutoring

GenAI can simulate intelligent tutoring systems that offer personalized guidance and feedback for learners. From engaging in conversation and answering questions to offering detailed step-by-step explanations, L&D departments can essentially offer learners personalized interactions with an AI tutor. Learners thus have a deeper understanding of and interaction with the curriculum as a result of these simulated one-on-one tutoring sessions and ultimately a more focused and effective learning experience.



Interactive Knowledge Management

Knowledge Management, a discipline closely linked to L&D, involves capturing externalized information for employees to access when they need answers to specific questions (e.g., about company processes or policies). To find this information, which is generally provided in the form of articles, users have to enter keywords into a search mask or navigate through a series of folders and subfolders. GenAI has the potential to significantly improve the user experience here by offering an interactive chat agent to replace the manual database search. Once the underlying GenAI model is fed with a range of company data, presentations, documents, etc., a simple question such as: "What do I need to know about travel expenses?" would be enough to obtain a tailored and accurate answer, with the option to ask further questions if necessary.



04 How to begin?

Embrace a mindset shift

To implement an effective GenAI strategy, companies need to shift from an approach focused on traditional training methods to a mindset that recognizes the full potential of GenAI and harnesses that potential to drive improvement and innovation in L&D practices.

For L&D leaders, this mindset shift also means being open to new possibilities and seeking innovative ways to incorporate GenAI into the broader L&D strategy. They must be willing to invest in the necessary resources, infrastructure and expertise, in addition to becoming vocal advocates for GenAI adoption and change drivers within the company.

For L&D practitioners, a big part of the mindset shift is understanding that GenAI technologies are not intended to replace or overshadow their roles, but rather to augment and support them. The more repetitive and administrative tasks can be automated with GenAI, the more time they will have for more strategic, high-value activities. Therefore, it is vital for practitioners to be open to learning and adapting to new GenAI tools and platforms as well as acquiring new skills in the management and analysis of AI-generated data. They should view GenAI as a valuable tool in their arsenal and actively explore ways to integrate it into the design and delivery of L&D initiatives.

Once the foundations have been laid, L&D departments can embark on the GenAI journey.

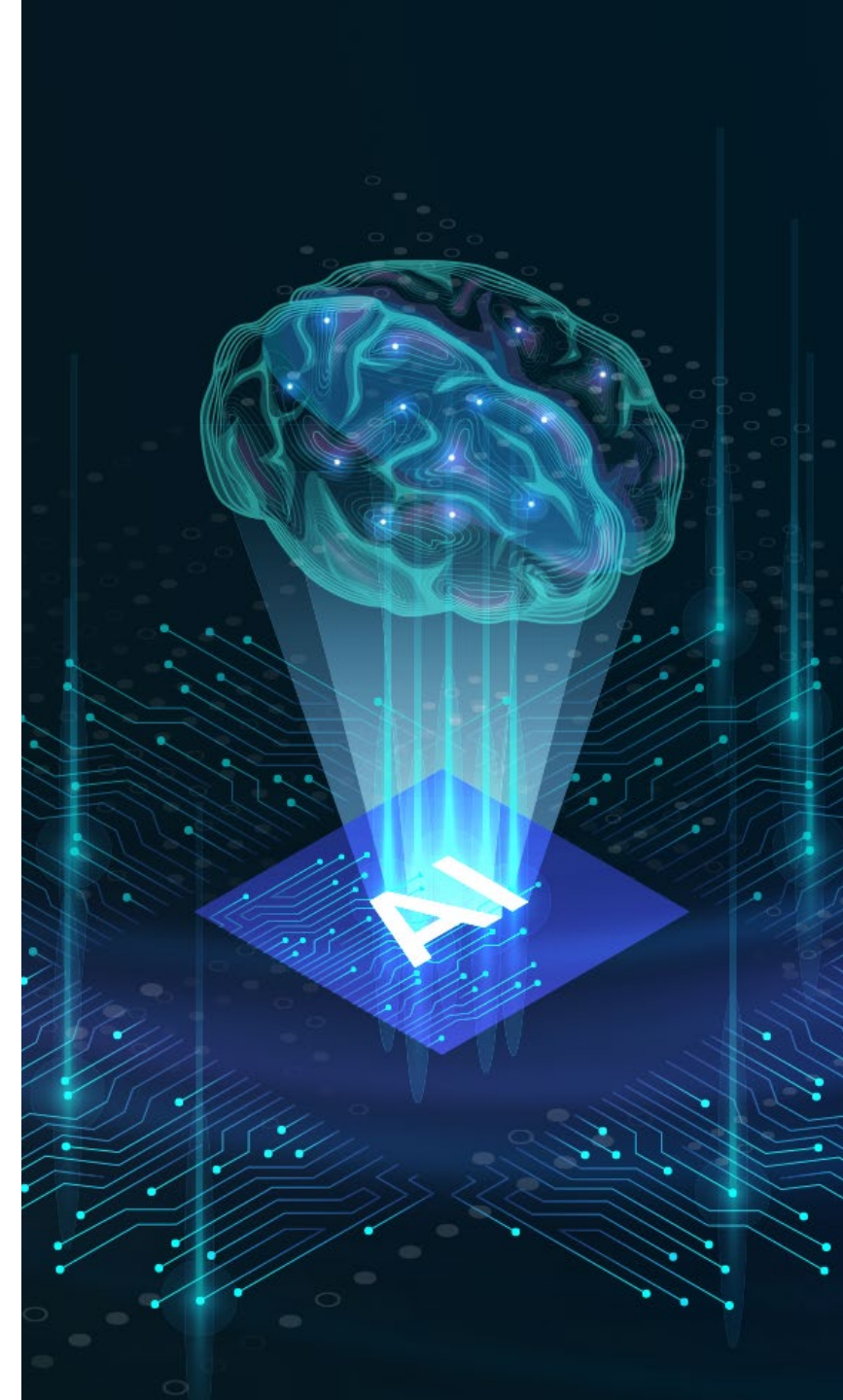


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Establish an end-to-end approach

It is vital to adopt an end-to-end approach when implementing GenAI in L&D. This involves analyzing the entire L&D ecosystem to identify potential bottlenecks, knowledge, or skills gaps as well as the key areas where GenAI can add value. Business leaders need to align on the value and ROI of the desired end state and to define KPIs as well as major roles and responsibilities. This kind of holistic approach will enable L&D departments to harness the power of GenAI and make the

learning experience more personalized and adaptive, while also generating actionable insights for both learners and practitioners throughout the entire L&D transformation process.



Perform a skills assessment

To thrive in this continually evolving landscape, L&D practitioners need to develop a unique set of skills. Here we highlight a few of the skills that are likely to gain more relevance for L&D practitioners in the GenAI era:

Digital literacy

A general understanding of digital platforms and applications is vital for L&D practitioners to effectively leverage GenAI technologies in designing and delivering learning experiences.

Digital ethics

It is critical for L&D practitioners to understand the ethical implications and challenges surrounding AI technologies in the L&D space, whether it relates to the privacy and security of learner data, the potential biases in AI algorithms or transparency and accountability in the use of GenAI-driven learning solutions.

Adaptability and continuous learning

As GenAI continues to evolve at a dizzying pace, practitioners need to embrace continuous learning and stay up-to-date with the latest trends and advances. This will empower them to adapt learning practices to the changing needs of the learners.

Technological Fluency

L&D practitioners must be able to work with GenAI systems and tools seamlessly. They must work alongside GenAI-driven platforms, leveraging AI-generated data and insights to enhance learning experiences and facilitate meaningful interactions with learners.

Data analytics and interpretation

Data analytics skills are critical for L&D practitioners to understand and explore the distribution of the underlying data, to identify potential biases or limitations and to optimize training and content generation processes.

Critical thinking

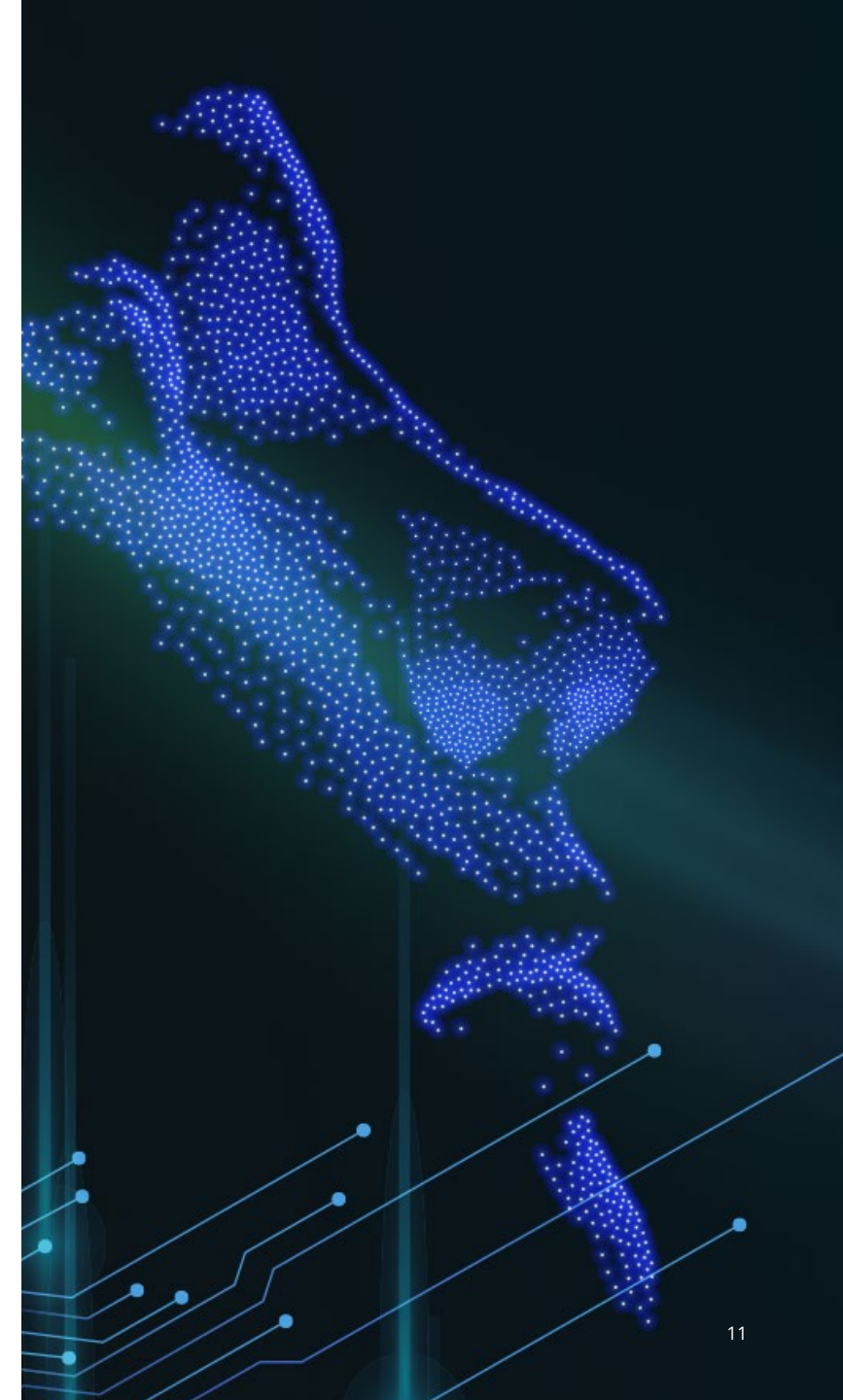
Lastly, critical thinking and problem-solving skills are essential for L&D practitioners to navigate the complex landscape of GenAI-driven learning. They must be able to evaluate the outputs of GenAI systems, interpret results and identify potential biases or errors to maintain the quality and integrity of the learning programs.

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It is up to L&D leaders to assess whether they have the requisite skills in their teams and to identify any existing skill gaps. We recommend using surveys, interviews and performance data analysis to conduct this assessment and then to define the steps required to fill those gaps in alignment with the overall learning strategy goals.

Upskill your L&D team

Once L&D leaders have conducted the as-is analysis, they must provide the practitioners with the tools, resources and training measures (e.g., web-based trainings) they need to use GenAI tools effectively. These initiatives will ensure that the workforce both understands and can effectively use GenAI tools, ultimately empowering them to leverage the full potential of GenAI. L&D practitioners who have received comprehensive training in GenAI are more likely to understand its potential as well as its ethical implications and more likely to find innovative ways to use the technology and build competitive advantage for the company as a whole.



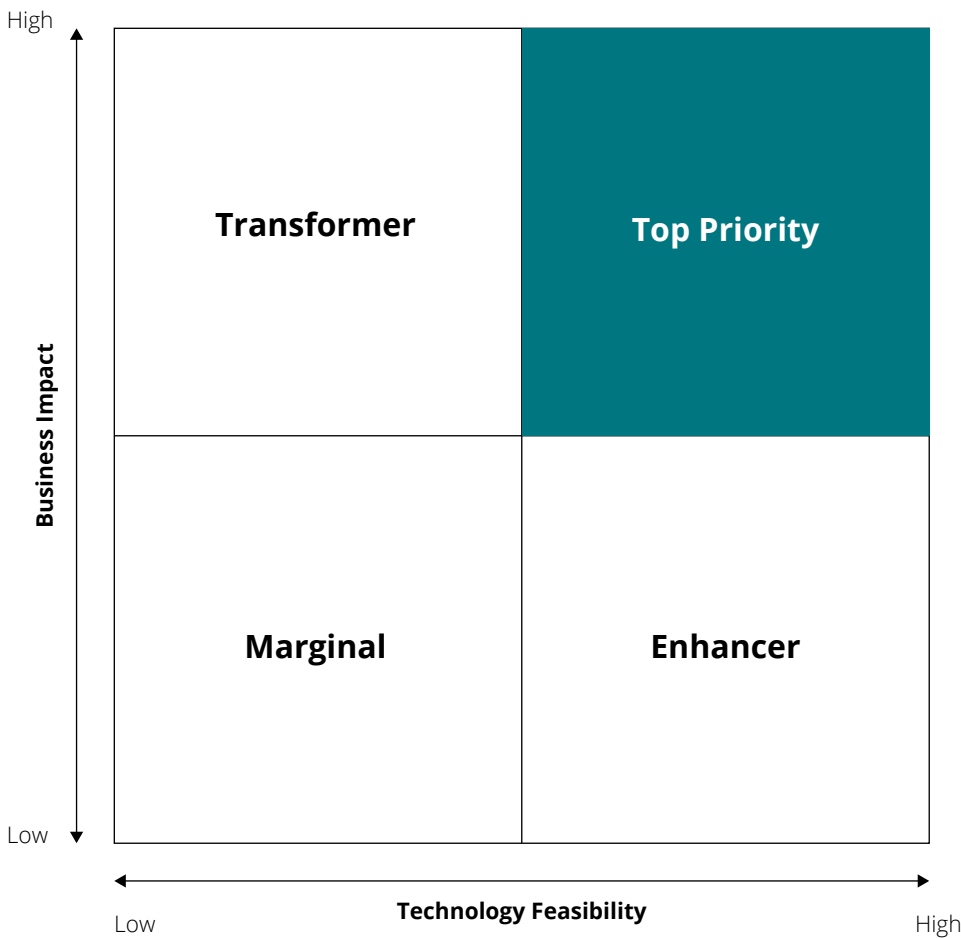
Identify and prioritize use cases

According to Josh Bersin, “rather than chase the technology it’s much better to fall in love with the problem”.¹ L&D leaders should not, in other words, see GenAI as an all-purpose tool for solving every imaginable issue. They should first engage with employees, trainers, business leaders and other stakeholders to identify the goal of these L&D initiatives. The next step involves a thorough analysis of existing L&D processes to identify the biggest pain points and improvement areas, engaging with the same stakeholders to better understand their experiences, challenges and areas of dissatisfaction. Once the pain points are identified, L&D leaders can then carefully assess how and where GenAI can add value and help resolve the issues in the pain points.

To rank the use cases for GenAI in the respective L&D we recommend Deloitte’s use case prioritization model based on technical feasibility and business impact (those specific areas where GenAI can effectively enhance the learner experience, increase engagement and make learning more effective overall). The top-ranked use cases are called “Top Priority” according to the model, and these high-value cases should be first on the implementation list. So-called “Enhancer” are generally designed to improve efficiency and reduce costs without too much reengineering effort on the business side. Success with these use cases can pave the way for GenAI adoption enterprise-wide. The disruptive ideas that are called “Transformer” can have a real impact on the business. However, they require extra effort and may also create resistance within the enterprise. Lastly, both the value proposition and feasibility are low for “Marginal” use cases.

¹ The Role of Generative AI in HR is now becoming clear, Bersin, 2023

Fig. 1 – AI Use Case Prioritization



Recruit internal and external IT support

When it comes to implementing GenAI in L&D, organizations will need technical support from both internal IT teams and external technology partners. The internal IT team offers valuable insights and expertise about the systems, infrastructure and security measures within the company, which pertains to challenges relating to data quality, accuracy, confidentiality and risk management. L&D teams can rely on them to help troubleshoot any technical issues that arise during implementation.

External technology partners, on the other hand, are GenAI specialists with the tools organizations need for specific use cases, e.g., to develop avatar trainings. With today's ever-evolving provider landscape, it is vital to select partners based on in-depth market research and with specific use cases/technical requirements in mind.

Pilot, iterate, repeat

We recommend starting small on the GenAI journey and choosing more limited projects over a full-scale transformation. Pilot projects, such as a GenAI-powered chat bot offering personalized training programs or a GenAI-based tool for content creation, offer numerous benefits. They allow to assess the feasibility and impact of GenAI in the L&D department and the effort it takes to integrate the technology into existing systems and processes. Selecting small-scale projects that directly address organizational needs and priorities will help focus efforts and resources on the areas where GenAI can have the most significant impact. A targeted approach like this is more likely to succeed and better able to demonstrate the value and potential of GenAI to executives, learners and other stakeholders. With quantitative and qualitative data from small-scale pilots, organizations can measure the impact on KPIs from learning outcomes and effectiveness

to learner engagement, while also gathering valuable insights and lessons learned for future implementations. The result will be a more refined implementation and scaling strategy, a better grasp of potential challenges as well as a growing set of best practices for GenAI-powered L&D solutions.

05 What are the ethical considerations?

GenAI has the potential to revolutionize corporate learning and development. This is not, however, without certain risks. We advise L&D leaders to recognize the ethical considerations and address them with careful mitigation strategies.

The first consideration concerns algorithm bias, the risk that an AI model may unintentionally perpetuate biases present in the data used to train the model. Using a dataset that is diverse and representative during the training process will address this risk and ensure fairness and inclusivity in the AI-generated content.

The limited context comprehension of GenAI systems is another potential risk. Where models struggle to accurately understand complex contexts or nuanced situations, they might deliver incorrect information or inadequate support. The best way to mitigate this risk is to keep humans in the loop (HITL) and ensure qualified staff are conducting oversight, whether that means reviewing generated content, correcting errors and biases or ensuring the overall quality and ethical use of the technology.



There are additional risks inherent in the system with its technical limitations. GenAI-powered corporate L&D solutions may generate inaccurate content with information that is very convincing but incorrect (known as “hallucinations”), flawed translations or faulty predictions, jeopardizing the overall learning process and targeted learning outcomes. Performing regular updates and improvements (such as fine-tuning) to the training data and algorithms can help mitigate this risk. The same goes for data privacy and security, particularly where AI systems require access to sensitive employee information. With strong encryption measures, robust access controls and regular data audits, you can help minimize the risk of a data breach.

These are all issues of digital ethics that may have an impact on either the individual (e.g., one user in a specific situation), an enterprise (e.g., the use of sensitive data) or society as a whole (e.g., the impact on the workforce at scale). It is vital

for companies to take the ethical implications of GenAI-powered L&D seriously. A recent survey showed that most C-suite executives have ethical concerns when it comes to implementing AI systems, first and foremost a lack of trust in the technology. However, only one in five companies have put in place a framework to address and manage digital ethics issues.²

Trust is clearly key to the adoption of AI-enabled systems, so an important first step will be building user confidence in the applications provided by the L&D departments. If organizations want to maximize the potential of GenAI in L&D, digital leaders and top management must provide clear guidelines on when and how to address the digital ethics issues of each use case (e.g., automated content generation, intelligent mentoring systems). This will empower practitioners, prevent unintended consequences and drive user-centric, responsible innovation.

One way to handle these ethical challenges and streamline the decision-making process would be to develop a digital ethics strategy tailored to L&D practices. Deloitte recommends a framework with three pillars: a set of guiding ethical principles, specific measures for operationalizing the strategy (including tools to classify the digital ethics challenges of each new project) and a governance structure that assigns clear roles and responsibilities while also ensuring adequate resources are allocated. It is vital for this strategy to give everyone—whether it is learners, practitioners or business leaders—the support they need. A robust digital ethics strategy, properly implemented, is a key enabler for successful digital transformation in general and AI adoption in particular.

²Digitale Ethik und Vertrauen in Technologien 2023, Deloitte, 2023

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