VIEWPOINT


# ARTIFICIAL INTELLIGENCE. REAL LEARNING.

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The story of mankind is also a tale of technological wonders. Agriculture, the wheel, and the printing press revolutionized human life, and changed the world forever. While every one of the four industrial revolutions thus far made a dramatic impact, they progressed non-linearly in terms of speed and spread. For instance, the first industrial revolution spanned nearly a hundred years, but the next three occurred in the same century.

Today, the digital revolution is in overdrive. In a few short years, "digital" has grown exponentially to permeate every aspect of our personal and professional lives. The enterprise has seen big changes by way of collaborative, specialized work; a workforce where human potential is amplified by digital enablers; and a workplace that's hybrid, anytime and anywhere.

> An effective learning strategy thrives on high quality trainers, innovative pedagogy, great content, and a top-notch learning experience.

Artificial Intelligence is front and center of this change.

The new work, workplace, and workforce paradigm naturally needs a new approach to training and education. To stay in step with trends, such as human-machine collaboration, fail fast-learn faster, and a blended workforce, learning has to be digitally driven, highly accessible, and delivered in micro-sized capsules exactly when needed. In addition, a learning strategy needs the following to be fully effective: high quality trainers, innovative pedagogy, great content, and a top-notch learning experience.

Today's enterprise Learning Platforms meet many of these requirements. However, being designed for scale, they provide standardized content and a defined learning path to *all learners, regardless of their ability, need, or level of motivation*. To provide the best experience and outcomes to *every individual learner*, organizations must provide a learning program that is personalized and engaging. Artificial Intelligence (AI) solutions can play a key role in enabling this.

The dramatic progress of intelligent technologies, including Generative AI, means organizations can take an AI-first approach to learning to improve the learning experience by:

### 1. Making it adaptive, personalized and persona-based:

Every learner is unique, with different learning needs, styles and abilities. Putting every learner, regardless of baseline skill, on a fixed learning path yields sub-optimal outcomes. The problem is that creating a personalized learning program for every learner at scale with manual means requires so much effort and time as to be infeasible.

But for a prompt-based Generative AI tool, assessing the skill level and learning needs of every learner, and curating content accordingly, is a job that can be done in real-time. With AI, every learner has the flexibility to choose their own path and method of learning. What's more, the tool also adapts the program based on learner persona, taking into account speed of learning, pace of progress, self-motivation level etc.

This calls for re-architecting traditional learning platforms systems with an AI-first approach, so they are sentient enough to perceive even the slightest change, and nimble enough to respond quickly. Doing this also ensures that the systems integrate well with both existing and emerging AI tools.

The most advanced AI-enabled learning platforms in the market leverage powerful real-time data collection and processing abilities to generate insights to further refine the learning experience. Built on the principle of zero latency, they perform instant simulations, crafting what-if scenarios to guide learners through the learning paths best suited to them. Not just learning, these platforms even offer adaptive assessments, modifying the level of testing based on aptitude and ability.

### 2. Providing real-time, integrated learning:

Usually, training and development is undertaken as a separate activity, outside of day-to-day work. The problem with this is that employees can hardly spare any time for learning. AI resolves this by breaking the learning required by an employee into micro modules and smartly integrating it within the work routine to be delivered exactly when needed. As illustration, consider a programmer who is stuck while writing a piece of code. An AI productivity tracking tool can sense this, and automatically trigger an AI-assisted Tutor Bot to help the employee.

By providing the right knowledge at the right time to every employee, an AI-first learning platforms can really enhance the learning experience. An advanced platform can also use contextual information from an ongoing conversation to immediately modify its response so it's in sync with the learner. This is why conversational bots and digital tutors are becoming so popular.

### 3. Gamifying learner engagement:

In a digital world, knowledge is not the problem. Learners have easy access to a wealth of content on most learning platforms. So why are learning outcomes often lower than expected?

A major reason is a lack of motivation among learners. This is why it is critical to provide an experience that is exciting, engaging and enjoyable. Once again, AI is the answer.

By adopting gamification principles – proven for enhancing engagement – an AI-first learning platform can inject energy and enthusiasm to motivate learners to learn better and complete their assignments on time.

### 4. Deploying a multimodal AI-augmented tutor:

Earlier, there was a mention of AI-powered tutors integrating learning within the workday routine. AI-based coaches, which can mimic student-teacher interactions, answer questions, and proactively assist learners, are proving quite effective, and several tutoring platforms are already using them extensively.

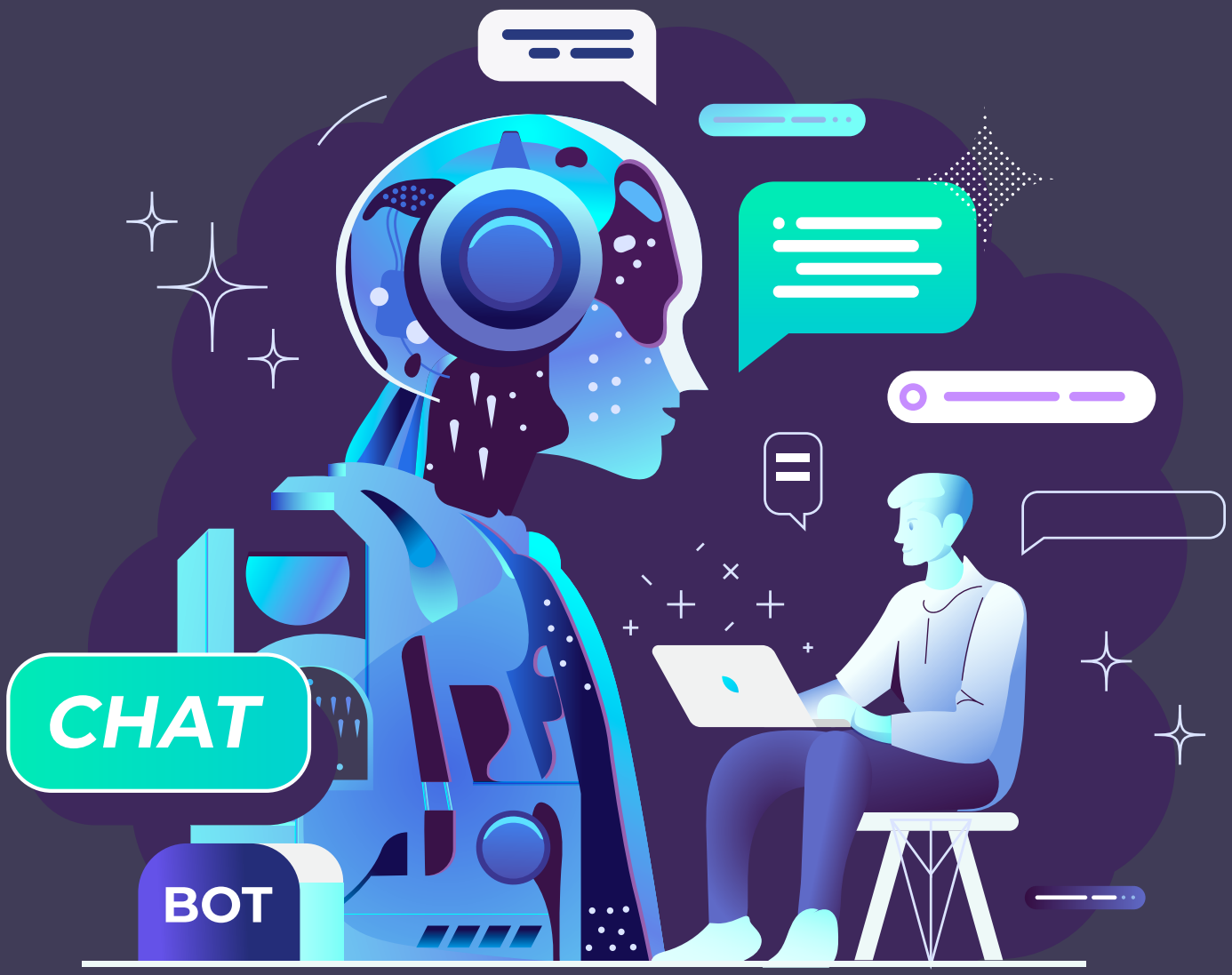
But this is just the beginning. The future holds unlimited possibilities for multimodal AI-based tutoring, including the use of Augmented/ Virtual Reality, humanoid robots, and holograms of human teachers to create immersive learning experiences. AI will also drive multimodal pedagogy – text to text, text to video, video to video etc.

### 5. Using AI to curate content:

Amid so much information, and so many learning needs, creating a customized training program for every learner was a near-impossible task for organizations. Despite standardizing training to a significant extent, learning and development departments had to spend a lot of time and effort in creating content. Not anymore. Now there are AI tools that can quickly scan, and even find, huge amounts of content, select the relevant bits, and piece them together for easy consumption. Generative AI tools can create and curate content intelligently, for different scenarios and user preferences. When content is enhanced by technologies like virtual reality, learners imbibe more and are able to apply that knowledge more effectively. Last but not least, since AI creates and refreshes content faster, learning programs stay relevant longer.

## The way forward

Advances in AI have already opened up unimaginable opportunities, and will continue to upend our lives. With intelligent machines relieving us of several routine tasks, we have an opportunity to amplify our human potential by leveraging AI. Specifically, in the area of training and education, an AI-first approach allows us to acquire personalized, adaptive, multimodal learning at population scale. Learning platforms that become AI-first will transform the experience for every learner.



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