skillable

Experiential Learning unlocks (your) AI potential.

Your organization will fall short of the potential AI brings without a strategy to explore, practice and validate job readiness through live-and-tailored environments for your teams, partners and customers.

Work has changed. How we train our people must change, too.

AI co-pilots and agents are changing the ways we live, work and play more dramatically than any innovation since the Industrial Revolution. The foundational ways people develop skills, do their jobs and grow into their potential will never be the same. Organizations traditionally lean heavily on static online courses and instructor-led videos or classes to train their employees, partners and customers. In the AI-era, this approach must evolve.

While engineering teams have been using various forms of machine learning (ML) and artificial intelligence (AI) since the early 1960s, the release of ChatGPT in November 2022 was nothing short of earth-shaking. Within just 10 months, demand for generative AI skills soared 1,848%[1] as organizations scrambled to find ways to leverage this transformational technology.

The result is a world where "people and organizations will not thrive unless learning keeps pace with innovation" (Gartner[2]). Innovation starts with people. Learning programs must shift from teaching "knowledge, process and procedure" to providing real-world experiences that include opportunities for people to learn how to broaden their capabilities and discern the right outcomes through real-time analysis, observation and iteration.

The transformation to performance-based learning and validation.

Nearly every organization is consumed with thinking about how AI will transform their workforce, processes, customer needs and products. Most have recognized this era will require cultural changes in how people think about developing new skills and producing better results. By 2027, 80% of large enterprises that outperform their competition will have built outcome-driven agile learning capabilities that provide needed skills (Gartner[2]).

In interactions with our own customers, Skillable is finding almost every aspect of how people think about learning program design and delivery is changing. Traditional training focuses on teaching knowledge, processes and procedures. Now, AI provides those things at our fingertips through AI powered agents and co-pilots. People no longer need to invest time in recalling and recognizing facts and basic concepts. AI handles that. This renders traditional skills obsolete.

Skilling related to true 'job readiness' is transforming from skills grounded in knowledge, process and procedure to new, higher order skills. Each person's brainpower must focus on higher-level cognitive processes, such as organizing, appraising and creating. As such, all aspects of learning become focused on using the appropriate tools – including AI-powered tools – to produce a desired outcome. This outcome could be in the form of documents, data, configurations, code or any one of many other things.

Put simply, organizations need to re-think all aspects of skill development.

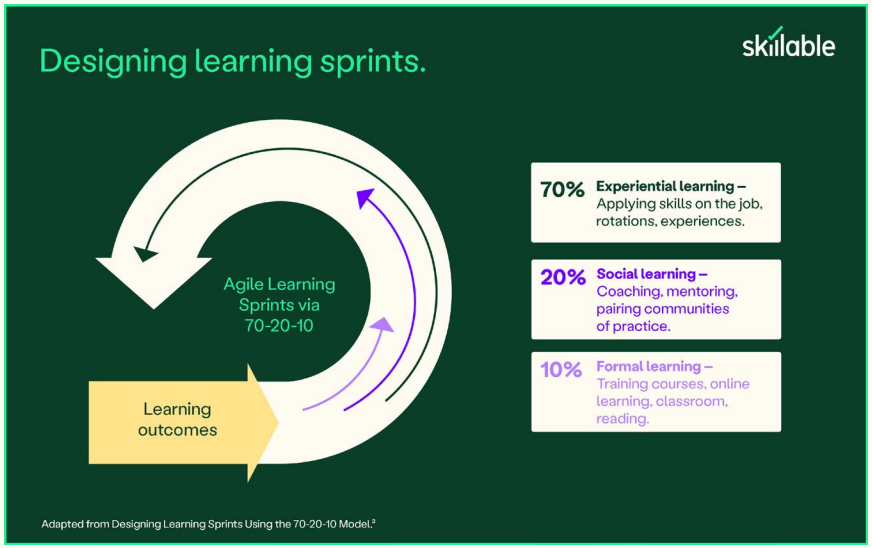
Method of learning a skill	
Traditional skills	**The AI-era**
1. Learn a process through content.	1. Analyze current and desired states.
2. Practice the process.	2. Iterate with AI-powered feature(s).
3. Demonstrate proficiency via process.	3. Produce desired outcome.
Experiential Learning plays optional role	Experiential Learning is *the* method

Modern learning programs in the AI-era must focus on helping their audiences learn to "analyze, observe and iterate" their way to a desired outcome. Providing opportunities for people to "learn while doing" requires a hands-on experience with real software, tools, data, access, restrictions and configurations they will find on the job. Additionally, these opportunities must be designed to provide realistic scenarios that introduce relevant scenarios with relevant outcomes.

AI shifts Experiential Learning from optional to primary modality.

AI-powered software changes everything. How we perform almost every task in every role is now supplemented by co-pilots and agents. Learning skills in the AI-era must provide ways for people to experience these co-pilots, agents and other tools in the context of their job. Experiential Learning is not just the best method or the safest method – it's the only method. There's no other way.

If the global workforce is expected to responsibly use AI-powered software to generate better outcomes, how can this happen by watching videos? For years, we have innately understood that people must have access to real-world scenarios using the applications, data, tools and situations to be truly 'job ready.' Even more so in an AI-powered world.



As Gartner's Build Resilient IT Talent report[3] highlights, organizations must provide methods that enable people to learn while doing. Experiential Learning gives people the chance to use new tools, processes and methods to accomplish meaningful outcomes. Once complete, these hands-on learning experiences provide tangible and relevant results that inform career guidance, job readiness and help people develop confidence in both the technology and in themselves.

The dynamic nature of AI-powered software makes live, hands-on environments absolutely necessary. You simply cannot interact with co-pilots and agents in video, simulation or another artificial medium. Only through experimentation and practice with the real software – in the context of real on-the-job tasks – will people be able to successfully and credibly attain new skills.

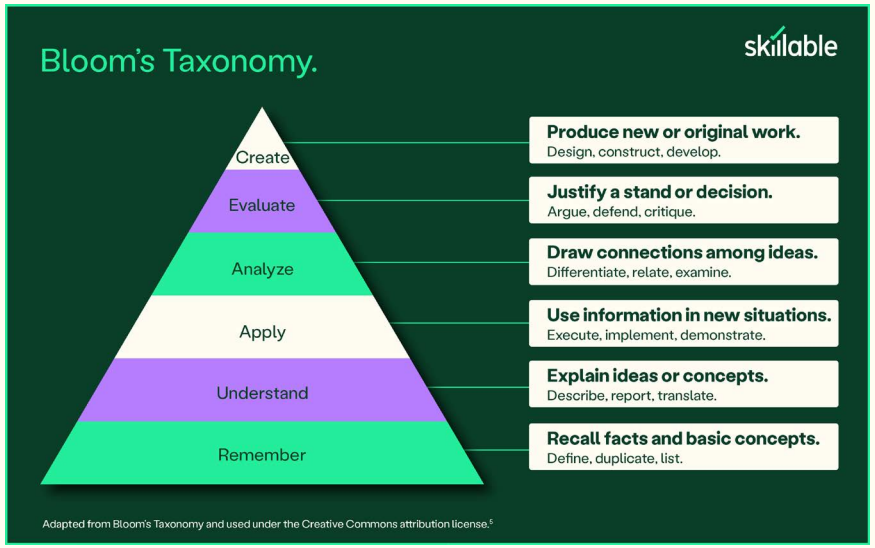
What is Experiential Learning?

Before we take another step, let's define "Experiential Learning" in the context of delivering learning, practice and skill validation experiences. Organizations leverage a platform, like Skillable, to create tailored "virtual labs" that mirror what people are likely to encounter in their job. Next, they then deliver these hands-on experiences to their teams, partners and customers via their LMS or HCM. In this context, a virtual lab consists of these fundamental things:

1. Highly configured, live environments. Orchestrated environments include everything learners need to perform the activities they need to do on the job, including cloud resources, applications, licensed user accounts and permissions, data and so forth.
2. Scenario-based instructions. A set of activities or tasks to be completed and/or evaluated. Instructions can be presented as challenges to overcome, problems to solve, follow-the-recipe steps or anything in between.
3. Exercise-appropriate scoring (optional). Hands-on experiences can be scored by a variety of different means. The most effective includes using AI and/or scripts to interrogate the environment to determine if all the right things are configured and working together correctly. If a person completes a set of tasks correctly, the platform validates them based on the outcomes of their performance. Other methods include traditional techniques like multiple-choice and fill-in-the-blank questions and contextual knowledge checks.

AI and Experiential Learning enable people to work more confidently.

Our ability to focus on higher level cognitive processes depends on our ability to recall, recognize or translate lower-level facts and ideas.[4] With AI providing the basics, we can address problems with a stronger foundation of base information. This foundation enables the focus to shift to connecting and analyzing better options, then formulating and iterating better overall solutions. In other words, from a cognitive perspective, AI enables people to accelerate the first two levels of Bloom's Taxonomy.



Using a simple example, you have likely used AI to generate a quick "starting place" for crafting a document or email. It's awesome and amazing. Why? AI typically includes relevant details and basics that we forget or may have missed. This better starting place enables our brains to focus on higher-level cognitive processing.

As this concept is applied across more complicated business and technology scenarios, the potential benefits are immeasurable. The nut to crack is providing these people with safe-but-real environments and scenarios that allow them to learn why, when and how to trust AI for the solutions they need to create.

How can we validate skills in an AI-enabled world?

With AI, how do you know who truly knows their stuff? The better question may be who has the skills to leverage and manipulate the right AI-powered tools to arrive at the best outcomes.

A "skill" is defined as "capability of accomplishing something with precision and certainty; practical knowledge in combination with ability; cleverness, expertness."[3] As AI becomes more and more entrenched within the applications and tools we use, how does this change the way we measure "skill" going forward?

The only way to assess skills in the AI-era is through providing AI-enabled live environments that can dynamically "score" people based on the outcomes of their actual performance. Experiential Learning platforms must provide a variety of AI-powered and other methods to interrogate each learning experience and validate actual produced outcomes – at scale.

Going forward, validating skills through proof of knowledge is not enough. People need to validate skills through proof of work, showing they can produce meaningful, relevant output, with and/or without the aid of AI-powered features.

AI-era skilling and enablement requires a proven, robust, AI-enabled Experiential Learning platform.

For more than 30 years, organizations have invested in largely static, generic eLearning catalogs to satisfy their growing needs for training and skill validation. Some of the vocabulary has changed and a few hype cycles have come and gone (e.g., Massive Open Online Courses or "MOOCs"), but organizations continue to struggle filling skill needs with qualified people. It shows that generic content is failing to prepare a person for the work they need to do on the job. As AI changes the way we work, learning programs must enable learners to get hands-on experience using AI-powered software.

Required components of an AI-enabled Experiential Learning platform.
Working with our customers over the last 10-15 years, Skillable has created a platform that includes the elements required to create, deliver and measure hands-on skill development and skill validation experiences. In 2024, Skillable delivered over 10 million labs built by our customers for their target learners. Over the years, we've learned there are five phases to consider:

01 Planning and design.

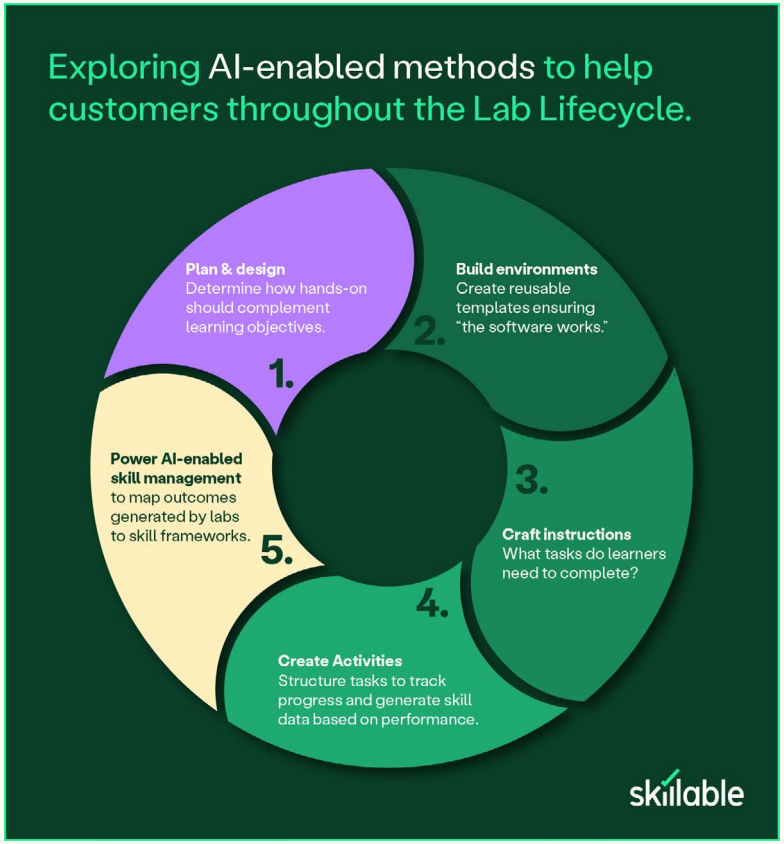
Learning program owners, instructional designers and Subject Matter Experts (SMEs) must align on what skills need to be covered, what someone must do to demonstrate a skill and how/if an AI-enabled application or tool should be leveraged. The platform should support these activities using AI-powered co-pilots and modern instructional design techniques to enable authors to create well designed programs. These capabilities should leverage grounded generative AI to do the following.
For example:

- Help content teams use company assets like role descriptions, learning objectives, job task analyses and course outlines to create program-level "Lab Blueprints" that suggest what labs to create, the objectives of those labs, and how to sequence the experiences.
- Suggest ways to personalize learning environments and experiences based on job titles and descriptions, account permissions, department standards and so on.
- Help determine where to embed hands-on labs into the day-to-day workstream based on a department's standard operating procedures or the weekly activities of top performers.
- Analyze telemetry, skill and granular activity data from each lab instance to identify common areas for improvement. This can help inform training strategies over time.

02 Creating tailored AI enabled learning environments.

Deploying live environments which contain real AI-powered software for learning and validation can prove technical challenging for even the most skilled authors.

Lab builders and Subject Matter Experts (SMEs) need a robust and flexible platform designed to deliver tailored learning experiences at scale. Features enabling lab builders to create lab environment "templates" that include the necessary permissions, tools and software to access and leverage AI-enabled software in the context of the users work. Having a robust and deep network of partnerships with the top AI providers to streamline providing learning access to AI tools is a critical component.



Skillable Studio provides right-sized AI enabled templates and building blocks to make it simpler and faster to build and/or tailor labs for business and individual needs.

A deep automation engine that enables ANY AI powered software, co-pilot or agent to be automated at scale for skill development and validation.

- Cloud sandboxes, such as Skillable Cloud Slice, streamline provisioning of business-critical cloud subscriptions and corresponding AI tools (i.e., Azure, AWS, Google Cloud).
- Managed Microsoft 365 and Office 365 subscriptions containing Microsoft Co-pilot for learning using AI-powered software.
- Data science solutions such as Jupyter notebooks, Python, R and many others for learning data science, machine learning and AI.
- Create highly realistic simulations that mimic real-world scenarios, especially for environments that are not cost effective to provision at scale (e.g., software licensing).
- AI powered visual scoring and AI powered scripts for assessing change in an environment and creating scoring and skill data.

03 Providing crafted, AI-assisted, instructions and guidance.

Lab Authors, SMEs and tech writers need a powerful and flexible platform designed to facilitate creation of hands-on experiences. Skillable is designing a collection of lab author co-pilots to help teams generate crisp, clear and appropriately complex guidance based on business-needed skills and user performance. These co-pilots can:

- Create a better starting place for lab instructions based on organizational files and related inputs, then assess overall readability and effectiveness of lab instructions.
- Emphasize personalized learning and reduce content creation effort through AI enabled mentoring and coaching.
- Create “learner-led learning” experiences designed to invite learners to choose their own prompt-aided approach to solving a specific problem.
- Enable the learner to selectively “go deep” on topics they do not understand, while remaining in the context of the lab.
- Standardize instructions and assessment questions to corporate style guides.
- Automatically translate instructions and lab guidance.
- Provide contextual and personalized remediation, assessments or hints based on each learner’s activity and performance. These types of enhanced feedback mechanisms help learners become more self-aware and self-regulated.
- Ensure all aspects of the learning experience are inclusive, providing specific support for people with disabilities and mitigate bias.

04 Validating skill through outcome-based performance.

Lab authors and SMEs need a variety of methods to validate learners did what they needed to do. Is the problem solved correctly? Are configurations accurately applied? Scored labs produce granular evidence of what a person did to earn a skill (e.g., isolated the virus, secured the user account, created the right trend in a graph). Most organizations lean on traditional metrics like course completion and time in course to infer skill. An AI-powered world demands more.

Skillable provides a myriad of scripting, traditional and AI-enabled methods to help teams validate outcomes based on actual user performance.

- Use Visual Scoring to validate performance based on the outcome displayed on each person’s screen.
- Use AI to validate personalized scenarios that were generated on-the-fly by AI.
- Use an AI-powered co-pilot to write highly customized scripts to validate your specific configurations.
- Generate knowledge checks and assessment questions either during the authoring phase, or in real time at the learner’s request.

05 Powering AI-enabled skills management with high-fidelity skills data.

While organizations are enthusiastically embracing AI-enabled Skills Management within their talent and day-to-day work contexts, they need more trustworthy data referencing specific skills (Gartner[6]). Experiential Learning generates high-fidelity skills data comprised of scenario-based evidence.

Skillable is collaborating with companies like Microsoft and EC-Council to better understand how granular skilling data can be accurately mapped to relevant skill frameworks using AI.

- Easily share your organization's standard and/or custom skill frameworks (e.g., taxonomy, ontology) with lab builders so granular tasks can be mapped to specific skills.
- Map your learners' results, i.e., validated lab activities, to appropriate skills within your skill frameworks.
- Use AI to create and/or improve dynamic skill frameworks based on what top performers do to successfully complete hands-on learning experiences.
- Support in identifying the performers who are most likely to qualify for or excel in a position based on their hands-on performance.

AI-powered work requires AI-enabled Experiential Learning.

Going forward, organizations must have a platform that enables content teams to provide relevant experiences across a myriad of different roles, skill levels and use cases. Scenarios ranging from configured sandboxes for practice to structured labs and performance-based testing must be provided if your teams, partners and customers are to reach their potential.

A robust, flexible and scalable Experiential Learning platform provides content teams with the potential to provide enablement on AI-powered software to your teams, partners and customers. Teams responsible for creating all forms of enablement content are enthusiastically embracing AI-enabled Experiential Learning platforms to ensure their audiences can produce job-ready results as effectively and efficiently as possible. Skillable continues to enjoy each opportunity to collaborate with our customers using our collective imagination to create the right hands-on experiences for the right audiences delivered at the right time. Have a blast with this transformation… we are!

Citations

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