td at work
TIPS, TOOLS & INTELLIGENCE FOR DEVELOPING TALENT

DECEMBER 2023
ISSUE 2312

A Framework for Immersive Learning

Phoenix R. Cavalier

atd
TECHNOLOGY APPLICATION

technology application
VOL. 40 • ISSUE 2312 • DECEMBER 2023

A FRAMEWORK FOR IMMERSIVE LEARNING

Tools & Resources

Need a trainer's lifeline? Visit td.org/TDatWork.

Printed in the United States of America.

For help or inquiries about your subscription, please contact Customer Care at 800.628.2783/703.683.8100 (international).

TD at Work (ISSN 2373-5570, Electronic ISSN 2373-5589, ISBN 978-1-957157-29-0, Electronic eISBN 978-1-957157-30-6) is published monthly by the Association for Talent Development, 1640 King Street, Alexandria, VA 22314. *TD at Work* is available for subscription in print or digitally. ATD national members receive a digital subscription to *TD at Work,* plus archive access, as part of their membership dues. The subscription rate for the Monthly All-Access (12 print and digital issues, plus archive access) is $129 (ATD national members) and $179 (national nonmembers). The monthly digital subscription rate for 12 issues is $109 (nonmembers). Periodicals postage paid at Alexandria, Virginia, and additional entries. POSTMASTER: Send address changes to *TD at Work,* 1640 King Street, Alexandria, VA 22314. Claims for replacement of subscription issues not received must be made within three months of the issue date.

AUTHOR

Phoenix R. Cavalier
Phoenix R. Cavalier is the founder of Verus Learning, a learning technology strategy company. With more than 20 years in leadership, instructional design, corporate training, program management, speaking, and facilitation, he has implemented a range of global learning solutions. Cavalier is skilled in the science of learning and the power of storytelling. He is guided by one core belief: It's about people.

Content Manager, Technology Application
Alexandria Clapp

Editor, *TD at Work*
Patty Gaul

Managing Editor
Rachel Pelovitz

Senior Graphic Designer
Shirley E.M. Raybuck

This guide is an urgent call to action: Learning in the flow of work is the only way talent development professionals can begin to meet employees where they are and equip them with the knowledge they need to thrive in their roles.

The current technological landscape makes it possible to empower employees more effectively than at any other time in history by using immersive learning, a method based on augmented, virtual, or mixed reality content (including 360-degree video, 3D-rendered environments, or "digital twins" of real environments) or a combination thereof. All immersive formats have the capacity to deploy in scalable ways using existing mobile device hardware or through the acquisition of wearable devices.

While *extended reality* (XR) is the umbrella term for immersive technologies, this guide uses XR to refer to immersive learning going forward.

The ability to benefit from breakthroughs in XR depends on understanding how the tools and platforms differ from other learning solutions. Additionally, seeing how XR works alongside current educational modalities will help you synergistically enhance all your programs.

Despite some initial complexity, the wonderful world of XR includes innovative platforms from an array of vendors, which enable L&D teams to launch low-cost use cases with ease. In some cases, you can launch a valid design within three months if you're ready to get to work.

What makes the strategic shift to XR so challenging for organizations is a desire to achieve bold technological wins without first conducting an honest assessment of the levels of change required to achieve lasting performance improvement.

From a thorough reading of this guide, you'll gain a strong grasp of what it takes to identify, define, market, design, deploy, and maintain a robust XR initiative with long-term sustainment tactics. You'll also acquire an understanding of why XR projects have much more in common with a marketing campaign than any learning management system deployment you've launched in the past, which is when you'll know you're ready to build futuristic learning.

This guide will help you to:

- Establish a framework to get started with XR.
- Consider the partners to include.
- Think critically about how XR solutions can benefit your unique learning use case.
- Describe clear differences between simple and complex XR designs as well as the varying levels of effort required to achieve a lasting impact for learners.
- Craft a concise impact statement linked to observable, measurable behaviors that result from a sound learning strategy.

Identifying Use Cases

If you want to launch immersive content, it is essential to fully understand the complex reality of your existing learning and performance landscape. Often, there are vital interdependencies among a range of tools and technology that affect, direct, or limit the viability of even a basic XR use case.

Devices and Partners

It is likely that one internal business group in an organization works closely with certain tools and platforms without realizing which person or team directs the platform it relies on each day. You must gain clarity to effectively narrate not only a good XR use case but a viable one.

The deployed XR device could be a mobile device, wearable, or a combination of hardware types. A diagram (see Figure 1) is an effective way to begin documenting what defines your current technological landscape, which is how you identify who manages or leads tools within your environment. For example, publishing content often means working with LMS administrators on final uploads and testing.

Once you have documented whom you need to complete a given task, their team, and any kind of intake and engagement process, you will illuminate interdependent technologies, business groups, and—most importantly—people.

After you create a list of tools and identify internal partners, you may need to make some introductions. To transition from awareness of your learning landscape to tactical understanding, translate your list into outreach steps.

Outreach will reap dividends throughout your XR deployment journey because no matter what the platform, you'll need open and clear lines of communication among many stakeholders to integrate and rely on various XR components at different times and throughout your organization.

Sample Use Case

Let's consider a basic use case: Pat wants to create an immersive how-to video.

Pat evaluates the environmental factors associated with the XR use case. He writes, "Learners will click an icon to launch the how-to video about reducing production errors, leveraging a 360-degree video and the device accelerometer, which measures acceleration and exists in most phones today."

When debriefing interdependencies, Pat realizes there are several interdependent variables to address before a learner can consistently launch the video.

Even that basic use case relies on design planning related to 360-degree video production, including unique storyboarding, shot diagrams, and interaction planning for wayfinding by the learner. Other components include final

video file size; local device memory storage capacity; available local data download speeds; video-hosting platform permissions and single sign-on validation; video content management standards and policies; and XR platform design and enablement, including pre- and postproduction sustainment.

Basic use cases often fail because of assumptions that excited and enthusiastic technology champions make. There is no way around the tough task of first identifying and defining your use case by vanquishing any suppositions you have about how things work in your unique corporate or educational landscape. The ability to evaluate the requirements of successfully deploying an XR use case relies on recognizing that even a simple idea will have many moving parts, and L&D teams must identify all those facets early and check them often.

Validating Hardware Selection

Based on a clear understanding of your organization's technological landscape in tandem with newly open communication lines among key stakeholders, proceed to the next tactical step of your XR deployment strategy.

Basic use cases often fail because of assumptions.

Because devices are ubiquitous, it's easy to overlook areas of risk hidden behind shiny glass and the latest apps. An effective way to frame that focus area is to realize that billions of people rely on technology they don't fully understand. Technology isn't about intelligence; it's about expectation, which is why hardware selection, acquisition, and deployment play a huge role in the perceived effectiveness of any XR use case (see Figure 2).

Most people around the world expect a device at work to perform as easily as their personal devices. That is why every learning professional isn't just competing for attention; we're competing with YouTube, Google, and smartphones based on device expectations.

When sharing an XR training plan with business owners and the C-suite, they will likely ask, "Why can't we deploy the new course to our LMS and have staff access it with the tablets we have now?" or "Why don't

Figure 1. Relationships in Play

How well you understand your learning landscape directly affects your ability to define a viable use case for immersive learning. At the heart of that understanding are the relationships you'll need for a truly successful deployment. For each of the tools or technology below, with whom will you partner?