GPStrategies

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7 Tips for Implementing AR and VR for Business and Learning Professionals

Virtual reality (VR) and augmented reality (AR) have evolved over the past couple of years and have become more accessible for business and learning, both technologically and financially.

Often voiced in the same breath, VR and AR are two different ways of bending reality to demonstrate, visualize, and impart information. Because they are often confused, here's the difference between them and their offshoots:

Virtual Reality (VR)

VR is a virtually immersive experience that can include real-world content like 360-degree video, a digitally rendered environment or a mix of both. To experience VR, you need a special headset like an Oculus Quest or Google Cardboard with a smart phone.

Augmented Reality (AR)

With AR, digital content is layered over the real world. The physical environment remains central to your experience and is augmented by adding virtual details. A device like a smart phone is used to view the real world while digital details are produced in the layer over the image.

Mixed Reality (MR)

MR is a combination of both virtual and augmented realities, allowing you to interact with both at once. You can pull virtual elements into an augmented reality experience, or layered details are integrated into an immersive environment.

Extended Reality (XR)

XR is the all-encompassing term for all of the virtual, immersive, and layered environments. Using the term XR allows for growth of this space through addition of new technologies.

7 tips to get started

Many companies are interested in using AR and VR for learning and corporate use but don't know where to get started. So GP Strategies' Chief Learning and Innovation Officer, Matt Donovan; Tom Pizer, Director of Learning Technologies; and Dennis Bonilla, Dean of the Wiley Education Services Global Academy and Fellow of the Future Workplace Network put their heads together to come up with 7 tips you can use to get started using VR and AR in your modality mix.

Tip 1 | Start small

There are many tools on the market today to help develop content rapidly and lower the bar for entry. We suggest you start with an AR or VR training use case that's meaningful and impactful to your learners. Keep it small and focused, and incorporate measurement. Also consider the tools and devices you'll need ahead of time and how you'll supply them to your workforce. After some practice you will be able to plan to scale, include ideas that worked well, and tailor the experience for your unique learning culture.

Tip 2 | Start simple

We suggest getting started with a simple test-and-learn approach and make it low barrier, meaning that it can be accessed on a number of different devices. It's easier to do with augmented reality because of the devices needed. A simple test-and-learn approach will familiarize your developers and writers with the process and get the learners comfortable with the user experience too.

Tip 3 | Consider your culture

There's so much disruption these days that it can be hard to determine how AR and VR fit into your culture. So start with what you are trying to accomplish. What is the most effective way to achieve those goals? Augmented or virtual reality training or operations will not always be the best answer. Also consider that every time you implement a new technology, there's a culture shift. So be prepared for change management.

Tip 4 | Choose the proper approach

To determine whether the best approach to use is AR or VR, consider the challenges your workforce is experiencing. Are your people struggling to perform their job at the point-of-work? AR will allow them to scan an object and get information in a just-in-time manner. For example, you can provide a mechanical technician with augmented learning that allows them to scan a machine part and learn how to replace it. On the other hand, VR allows the technician to explore, replace, and repair parts in a virtual scenario that doesn't require equipment downtime or mechanical risk. It allows them to understand and practice the skill prior to implementation.

Tip 5 | Know which tools to use

Your developers may already be familiar with commercial tools that allow for simple VR development, such as Immerse, CenarioVR®, and Adobe® Captivate®. These common tools are capable of deploying 360 content to desktop or inexpensive VR viewers and lower the bar for test development. You might even find it useful to design/storyboard in these tools prior to investing in a much more robust effort in professional development tools such as Unity or Unreal.

The same is true for when it comes to commercial options for AR development. Zappar, Layar, and Blippar are cloud-based solutions that make it easy for content developers to quickly create simple and/or robust solutions that can be deployed to large audiences. For more professional or custom deployments, tools such as ScopeAR, Vuforia, and Unity allow for virtually unlimited development options.

Tip 6 | Review your staff's capabilities

When GP Strategies started implementing VR and AR solutions a few years back, we refined our existing talent. Because our people were already experienced, upskilling was a viable option. It really depends on the team you have in place. Content creation for VR and AR, for example, is a whole different animal than traditional instructional design. So as you move into this arena, consider who can be upskilled and where you may have gaps in your team's expertise.

Tip 7 | Start now

If you think of VR and AR as a structure, we're just on the first floor now. So it's an ideal time to jump in. We're still building and perfecting tools and techniques as we envision the growing potential of the AR, VR, and MR spaces. Also, AI is beginning to creep into the space, creating new opportunities to extend capabilities. It's the perfect time to start because everyone is feeling their way through right now. And if you start now, you'll be ready to command mature tools, new modalities and the intricacies of the approaches when the tipping points for these technologies arrives.

The future is bright for AR and VR. GP Strategies® has used it effectively for a variety of needs, from automotive sales training to continuity of business during COVID. As developers and users become more accustomed to the technologies, we foresee them as having a huge impact on modern learning. Join us on the journey using the tips above and if you have questions, reach out.

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Learn more about AR and VR

About the Authors

Dennis F. Bonilla

Dennis F. Bonilla, Dean of the Wiley Education Services Global Academy and a Fellow of the Future Workplace Network, is an industry-recognized Digital Learning & Technology Transformation Strategist specializing in the integration of adult learning neuroscience, digital learning technologies and curriculum, data analytics, and corporate and higher education strategies for the modern multi-generational workforce. His wealth of experience in delivering learning technology leadership and innovation spans a variety of industries including higher education, technology, energy, manufacturing, medical, biotech, telecommunications, and nuclear energy. He's worked for and consulted at Fortune 100 companies in the technology, manufacturing, energy, and healthcare industries.

Matt Donovan

Matt Donovan, Senior Vice President and Chief Learning and Innovation Officer for GP Strategies, brings more than 25 years of experience supporting a wide range of Global Fortune 500 companies through significant transformation initiatives. Not only has he been recognized through industry awards, but his articles are regularly published and presented at a variety of national and international conferences. He has a Master of Science in instructional systems technology from Indiana University.

Tom Pizer

Tom Pizer, Director of Learning Technologies for GP Strategies, has over 20 years of experience in the technical digital-media field. He has an extensive background in a variety of creative and technical mediums including digital media specification, production, testing, and implementation. During his career Tom has created, specified, directed, and/or managed hundreds of hours of educational, instructional, and entertainment-based media and has served clients in a wide variety of markets including the Federal government, trade associations, commercial organizations, and educational institutions.

About GP Strategies

GP Strategies is a leading workforce transformation partner—one of the few truly dedicated global providers in the marketplace providing custom solutions. We believe our transformation focus, when paired with deep listening, a customer-centric approach, and innovative expertise, enables our clients to routinely achieve superior business and operational results from our evidence-driven and technology agnostic recommendations.

Whether your business success requires a change in employee performance and mindsets, learning technologies, or critical processes, GP Strategies is the transformation partner you can trust.

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