

# 5 Things to Know

Before Starting Your First VR  
Training Program



# Welcome to The Future of Learning.

Immersive. Experiential. Multi-sensory. With a simple search, a list summarizing all the benefits and capabilities of VR is just one click away.

In all fairness – the descriptions are true. Ever since cutting-edge technology entered the L&D space, XR corporate training programs have championed experiential learning. VR training allows people to learn in a safe environment, onboarding has been made faster and more efficient, and immersive training environments are advancing how organizations upskill employees.

Conversations about training are no longer separate from the talk of digital technologies. However, the reality of VR training is that it can be limited by what you don't know. As organizations continue to review case studies and collect information before launching their first VR training program, they may be developing follow-up questions to the constant iteration of VR's appeal.

What organization doesn't want to save big on training costs and deliver consistent training to their workforce? Join the conversation and take a comprehensive approach to factoring in what you need to know about VR training – full transparency.

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### In Summary

VR is a catalyst for growth. Is your organization ready for real change?





**4x**  
**FASTER**

People learn four times faster in VR.



**90%**

Pilot programs show that 90% of learners increased their understanding of their duties through VR training.



# 5 Things to Know Before Starting Your First VR Program

## How VR Makes a Lasting Learning Impact

It's no surprise that VR enhances employee performance by engaging learners with hands-on training. By honing their skills through experiential learning scenarios, employees improve their knowledge retention and learn 4x faster in VR.

VR is more than just a trendy tech novelty reserved for the top 1%. VR's accessibility has grown in the business sector as an essential training tool across industries. By creating opportunities for self-directed learning, VR facilitates effective training methods backed by adult learning theory. In 2023, the multigenerational workforce is proving to thrive with the right learning technology. VR creates consistency and improves learning outcomes by catering to individual learning styles. By facilitating a safe and controlled learning environment, employees can train for high-risk industries and technical skills without causing potential harm to themselves or equipment. This supports more productive workforces and helps combat high turnover rates.

Inspiring a confident workforce doesn't happen overnight. With an emphasis on retention, VR training programs empower employees by bridging information with experience to improve role familiarity. Take Cox Communications for example. They recently conducted a pilot training for new and tenured Field Technicians where 90% of learners reported that VR increased their understanding of policy and procedures for home installations. With a deeper understanding of their role, Cox technicians could perform an installation process from start to finish with an elevated awareness.

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To virtually put someone in the scenario of an install is very beneficial for new hires. This training can help a lot for new techs getting an understanding for the basics of the job.





## So, how exactly does it work?



What's the secret behind VR's lasting learning impact? Navigating an interactive virtual environment activates the brain's neuroplasticity, allowing us to create new pathways in the brain and retain key information. VR training also allows learners to repeat scenarios, which increases their overall memory recall. As the brain becomes familiar with the consequences of mistakes in high-risk safety scenarios, employees can better respond and mitigate risks in real life.

By applying the science of learning, virtual reality engages employees with multi-sensory experiences that promote knowledge retention. VR is revolutionizing the corporate training landscape and advancing business growth by cultivating a safer and more agile workforce. The rewards are big for the organizations that do their homework. We've covered some key concepts, but there's always more to learn.

# 1. Why Some VR Projects Fail



***Preventing rookie mistakes can ensure the success of your VR training program and optimize your learning strategy.***

## Unaligned Teams



Did you know XR projects that disappoint are typically due to an unaligned team? If subject matter experts (SMEs), leadership, and L&D counterparts are not on the same page and involved throughout the entirety of the project—the final version of a training program can lead to several change orders, delays, and may illustrate the team's lack of unity.

The process of developing a custom VR program involves a structured set of steps, frequent check-ins, and review cycles. It's essentially a passing of the baton scenario that benefits from strategy and organization.

Unaligned teams are more susceptible to important details getting lost in translation.

It's like playing a game of telephone. However, following a solid design and development process can help align your team. Involving SMEs and decision makers during critical stages of planning ensures that the correct training objectives transfer into your program. Reviewing how your development team integrates learning principles into your training program is a step towards effectively collaborating with your team.

If you're wondering what clues to look for, you can ensure your team's alignment with thorough reviews. For example, check to make sure key information collected during the discovery phase is accurately reflected in the project outline and flowchart. The flowchart development cycles will also be a great reference to measure progress once asset creation and the first stage of alpha development are underway. From ideation to final product, your VR dream team is one with shared expectations.

## Scope Creep



Do you have specific performance goals in mind for your workforce? It's important to first identify skill gaps and clearly define your program's learning objectives. If key influencers lack involvement during critical stages of planning a project's scope, never-ending revisions will disrupt program development. That's where scope creep comes in.

Scope creep is the time-consuming predicament when new, unplanned material creeps into the scope of the project midway through development. Not only does this inconvenience the team working on the project, but it also becomes a time and cost factor. So, how can this be avoided?

### INVOLVE THE EXPERTS

Engage SMEs early on. Failing to involve SMEs in the early stages of project planning can lead to crucial omissions in program development. They play a pivotal role as contributors. Their absence during the initial project scoping may result in excluding vital information and effective learning strategies from the planning phase. Remember – SMEs are key influencers!

### KNOW YOUR LEARNING OBJECTIVES

Virtual reality works best for training interactive skills and step-by-step processes. Another way to combat scope creep is to maintain a clear idea of each and every interaction within a process to help facilitate realistic timeline estimates. It's easy to underestimate how many steps are in a simple process, so it's essential that leadership is well informed by SMEs of process complexity. Otherwise, the projected scope will always fall short, and everyone involved will be forced to reset their expectations.

Identify the most essential steps in your program that align with your learning objectives. Commit to a shared vision. When an organization envisions training looking one way and reimagining it later in development, it becomes an expense of everyone's time and budget. When VR is designed around the root cause for learning objectives, exceptional training can take place. Scope creep is closely tied to the process of defining the specific components that should be included in your immersive learning experience.







## Wrong Modalities



Depending on the training material, VR isn't always the correct modality. By establishing clear learning objectives early on, it's easier to answer these questions:



***What deficiencies exist in our current training program?***  
***Is Immersive Learning the correct solution?***

Essentially, putting training content in a VR or AR program that isn't interactive defeats the purpose of experiential learning.

Picture this scenario. You take your current eLearning PPE training and turn it into a VR experience. You make your first mistake when you copy and paste your current eLearning content and throw it into a headset. Imagine what that experience looks like for a learner. Chances are, once they put on a headset, they'll spend 20 minutes reading descriptions of each PPE item. At this point, the learning experience's introductory phase has already exceeded the ideal amount of time for wearing a headset, and learners haven't had the opportunity to reap the benefits of immersive interactions with the PPE equipment.

Headsets should engage learners with interactive opportunities to practice new skills. Prep work

should be done outside of the headset through instructor-led training (ILT), eLearning modules, or other traditional study tools to ensure maximum effectiveness of your immersive training experience.

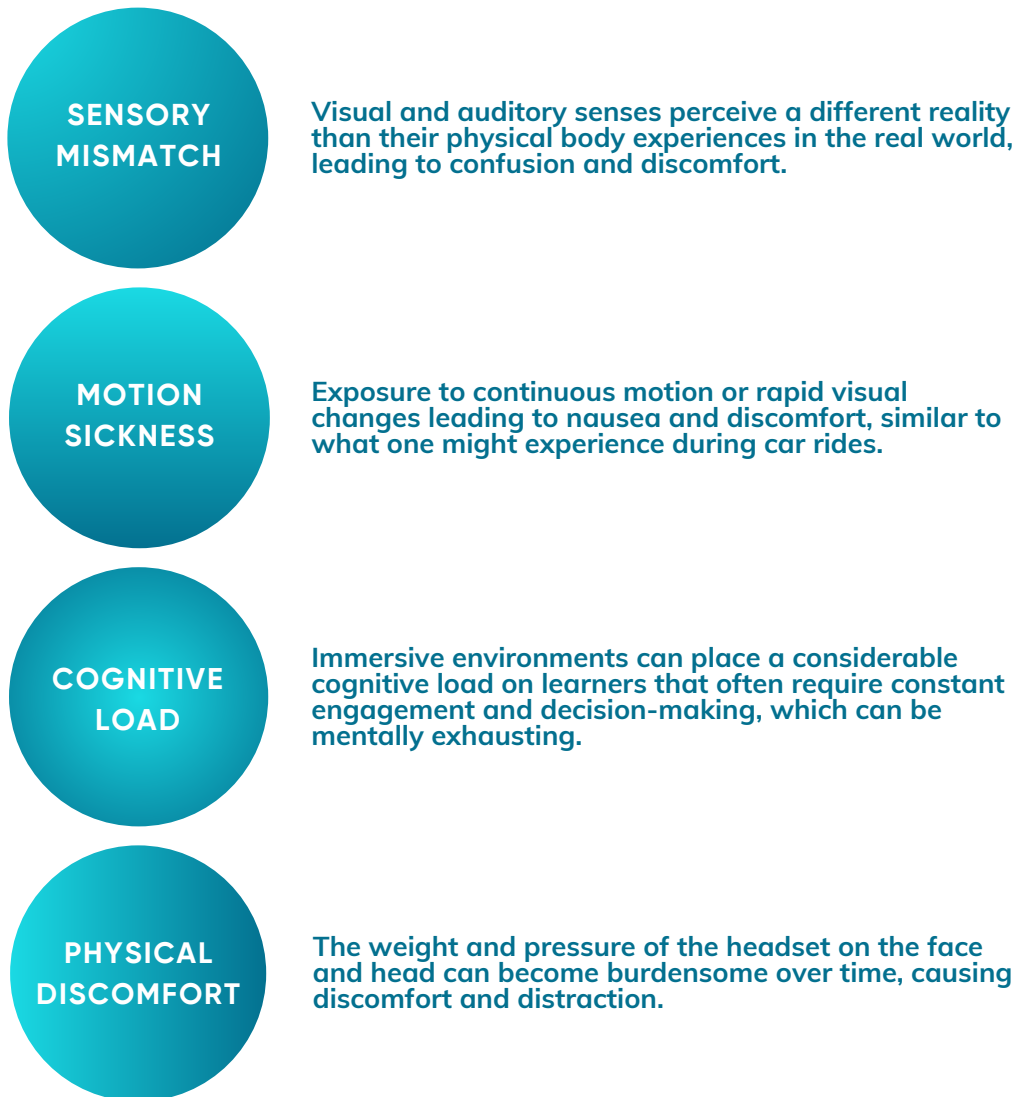
Don't get us wrong. While training topics like PPE are undoubtedly valuable in a VR training environment, the true emphasis should be placed on the way learners engage with the training material. In VR, learning is most effectively delivered through practical, hands-on tasks. Memorizing a bullet-point list and understanding the importance of PPE is a solid foundation; however, the real learning breakthrough happens when employees actively engage in the process of visually identifying, selecting, and physically donning each PPE item.

The act of performing a task has a profound impact on the learning experience, which is why selecting the correct modality for training is an important discernment. Proper PPE training in VR focuses on simulating scenarios that mirror real-world environments. Warehouses, construction sites, and hospitals are just a few examples of the environments VR can immerse learners in while presenting common hazards for learners to identify and respond to. Best of all, VR provides immediate feedback on actions to reinforce the correct responses during hands-on training.

## Disoriented Learners

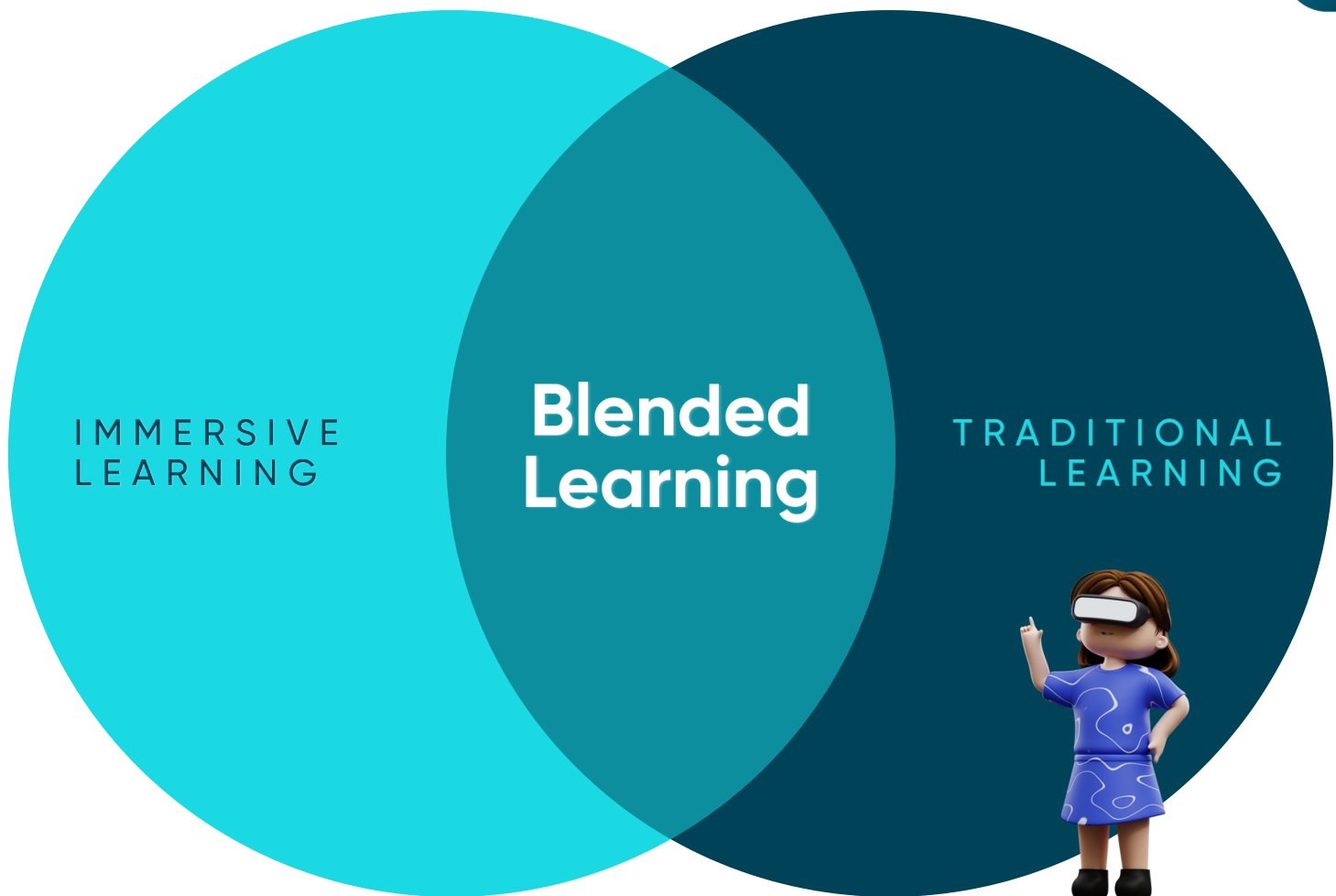


VR and AR sessions should be limited to no more than 20 minutes. While VR programs are realistic and have tangible benefits, learners can become overwhelmed or feel sick if they spend too much time inside a headset. Disoriented learners could experience:



Limiting sessions to no more than 20 minutes allows organizations to strike an important balance between leveraging the benefits of immersive learning and mitigating the risk of disorientation. This ensures that learners are fully engaged with content without feeling overwhelmed to maximize their learning success. Consider the example of PPE training – learners can begin training by delving into the fundamentals of PPE equipment during an eLearning session. To solidify their understanding and reinforce the content from their eLearning course, learners put on a VR headset and embark on a 15-minute immersive learning module. In a virtual environment, they not only configure their workstations but have the opportunity to suit up in the appropriate PPE gear within the recommended time frame.

The great news is that the most common mistakes when designing a VR program are avoidable!



## 2. VR is not a replacement

If anyone has told you that VR will solve all of your problems, they haven't given you the full picture of how VR works to improve adult learning. While many agree that VR is superior to any training modality, the true value of VR is in the ways it transforms existing training material into hands-on experiences.

VR can and should interface with other training methods. By implementing a blended learning model, VR shines as it is intended to: an effective learning reinforcement tool.

Blended learning is a model that seamlessly integrates various training modalities to create a comprehensive and versatile learning experience. In this approach, VR takes its rightful place as a highly effective learning reinforcement tool, bringing together instructor-led training, eLearning, and other traditional modalities, allowing them to synergize with the capabilities of immersive learning. By adding VR into a current training program, organizations can pair existing training content with XR technology for employees to learn in different contexts.

Blended learning provides diverse and learner-centric approaches to subject matter and flexible upskilling. By leveraging the scalability of VR, blended learning models can cut training costs while enhancing learning outcomes.



### 3. The Real Price of Virtual Reality

If you are ready to implement your first VR program, knowing the true cost of VR will help guide your decision-making process. VR pricing depends on a variety of factors, including the complexity of the program and the number of learners. The cost of creating content must factor in 3D objects, animation, and level of interactivity implemented by a team of instructional designers and XR developers who work collaboratively with your organization during the development process.

While VR training may give sticker shock

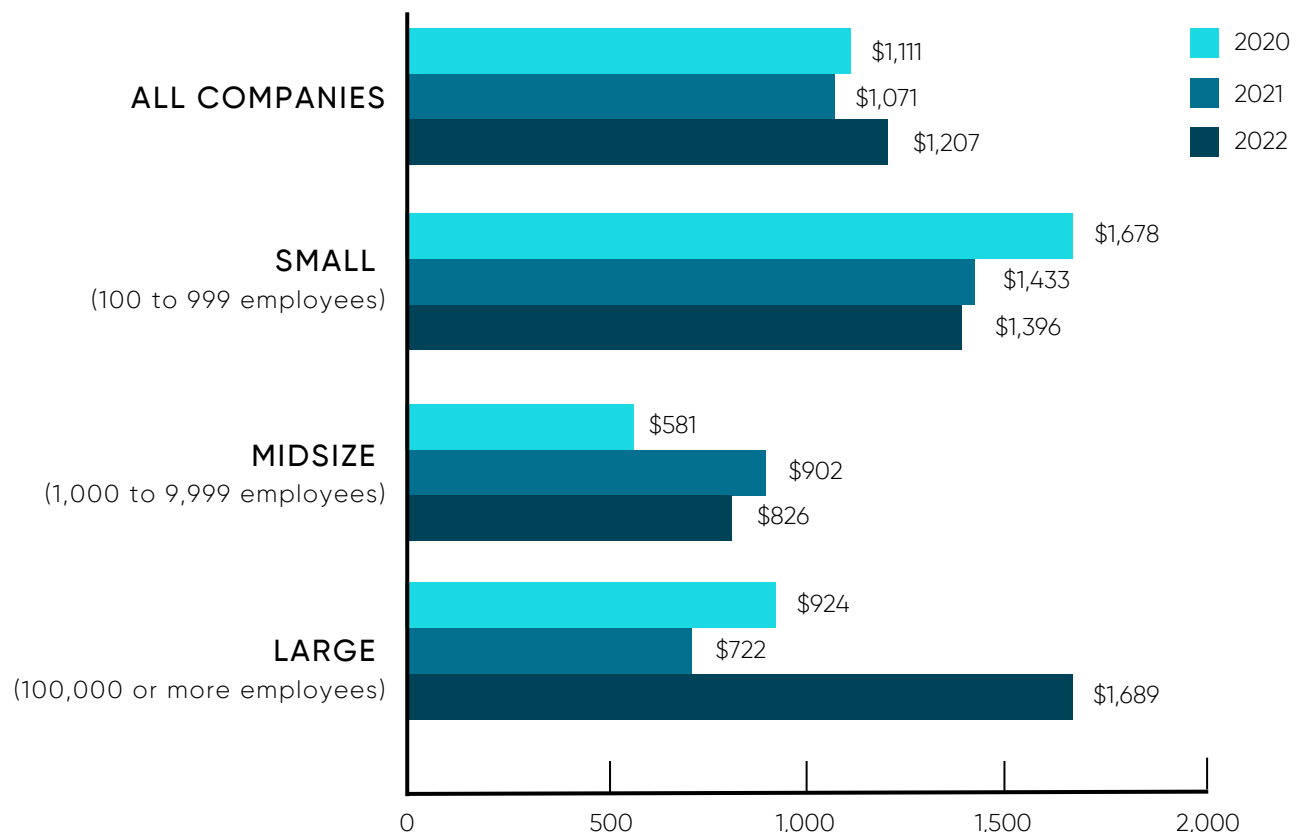
from the initial upfront cost, the long-term investment reduces the need for costly training resources for years to come. VR is a scalable learning solution that can be reused each year without additional costs.

Traditional modalities like instructor-led training have costs associated with it that end up stacking up through expenses like instructional materials, instructor salaries, employee salaries and a loss in production to execute each training session.

Comparatively, the cost of VR is more effective than annual operational expenses associated with ILT. According to the 2022 Training Industry Report, mid-size businesses that used AR and VR programs the most had the lowest training costs in comparison to other businesses who used traditional training methods.

#### Training Expenditures per Learner 2020-2022

TRAINING INDUSTRY MAGAZINE



## What kind of investment does VR look like?



### CUSTOM VR

Depending on how unique your training program is, the cost of custom VR can vary. If you're approaching VR development for standard industry practices, the entry point averages between \$50-\$75k. This starting point allows you to utilize pre-existing assets for common training in your industry, like pallet stacking or truck loading, giving you access to content that may not be exclusive to your organization but results in quicker development timelines.

If you work in an industry that requires training that is unique to your organization, starting a VR project from the ground up allows developers to create features that are tailored to your needs. One caveat of increasing the customization of your program is the extended development time. This type of content can have a higher price tag, ranging anywhere from \$100-\$200k. The value of an innovative training program crafted for your organization is well worth the higher investment and generates substantial ROI.



### OFF-THE-SHELF VR

The truth is that VR is no longer an exclusive luxury limited to those who can afford custom development. Ready-made VR training content is optimizing workforce development by delivering the same quality immersive experiences to learners.

Off-the-shelf (OTS) VR content champions accessibility, making VR adoption convenient for organizations that have been searching for an entry point to XR training. OTS provides universal training on essential and foundational skills, allowing companies of all sizes to start their own VR library.

Off-the-shelf VR has been proven to be an even more cost-effective alternative to creating custom VR content for standard training topics. Purchasing OTS VR training from an experienced vendor will vary. Some VR providers offer OTS content through a subscription model where VR is priced per headset and allows you to manage your content through an extended reality system with all the bells and whistles for optimal learner management. Other providers of OTS content might offer an a-la-carte option as you pay independently for each download. The general entry point for OTS content starts around \$2500, saving you thousands on custom content.



## 4. Metrics Are Essential

Every organization has its own specific business goals that can be reached by optimizing their learning strategy, but keeping tabs on training metrics falls through the cracks too often. In order to effectively evaluate your training program's success and measure employee development, you need data. The core mission of extended reality systems is to provide a suite of tools that allows organizations to perform XR analytics tracking and reporting.

Data tells a story that doesn't require you to read between the lines. VR training data offers an innovative solution for managing extended reality training, providing essential data and analytics to calculate ROI, KPIs, and performance metrics effortlessly. These metrics are essential to streamline training, saving businesses time and money by reducing learning timelines, minimizing learner errors, enhancing knowledge gained, and improving overall retention.



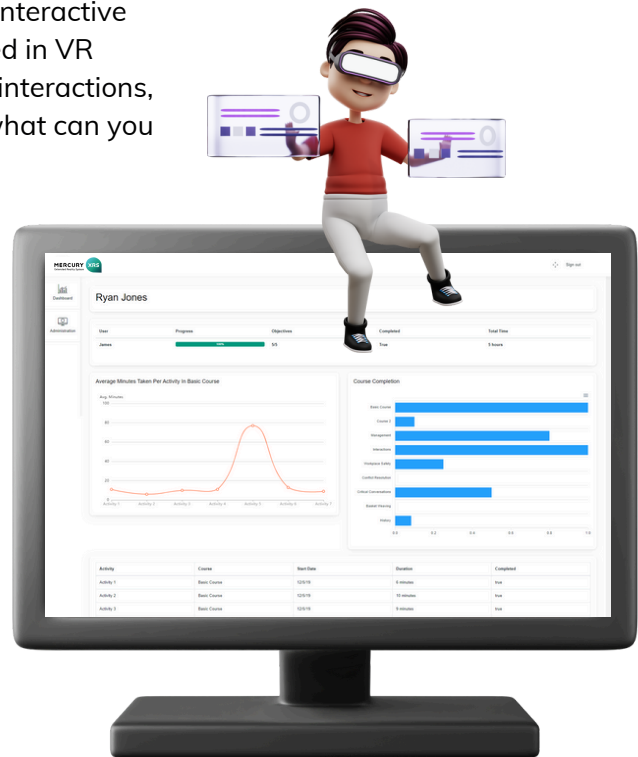
## How tracking your metrics can improve your L&D initiatives



VR programs are designed to engage learners with interactive training scenarios. Common metrics that are recorded in VR programs include completion rates, session replays, interactions, scored elements, time to completion, and more. So what can you do with all this data and how does it help?

Leadership can identify specific modules or aspects of VR training that learners struggle with based on assessment scores and completion rates. This data guides the refinement and customization of the training program, ensuring a more effective and tailored learning experience.

Tracking user interactions and feedback within the VR environment helps identify areas where content may need enhancement or expansion. Insights from learner experiences guide content development teams in creating more engaging, informative, and relevant training material.



## How tracking training metrics can save you time & money



We all know that data is the most valuable asset of any organization. Analyzing data is the first step in answering the big question - **How can I save time and money?**

### ROI

Tracking ROI should be top of mind after making any big changes in your organization. Step one is gathering all the data to prove your investment is worth your while. Tracking metrics on training completion rates and job performance gives you the tools to conduct a thorough cost-benefit analysis allowing you to evaluate your ROI on your VR training program. This will help you determine its overall impact on employee productivity and operational efficiency.



***How can I save time and money?***



### RESOURCE ALLOCATION

Analyzing metrics related to training completion rates, user engagement, and feedback helps leadership teams allocate resources more efficiently. They can optimize training budgets by investing in the most impactful aspects of the VR training program and reallocate funds from aspects that are less effective.

Imagine having the key to solve the greatest performance challenges right in your pocket. Training metrics are essential tools that help your organization pin-point what areas of training will improve your workforce and save you time and money in the process.

### SCALABILITY

VR training accompanied by an extended reality system can deliver consistent and scalable training to all employees, regardless of their location. Wireless syncing can offer easy updates and content delivery through Wifi, allowing companies to oversee the progress of multiple trainees in real-time without physical presence or individual check-ins. By skipping the trip out to each location for launch days, you'll save weeks on implementation and thousands on travel expenses.

You also won't have to worry about trainers conducting manual evaluations. VR training platforms automate this process by tracking each and every user interaction and performance within the virtual environment. This not only takes the pressure of having your trainers having a laser focus on observing their learners as they undergo training, but also ensures no metric is missed in the process.





# 16x MORE

Learners are 16x more likely to recall information from VR compared to traditional methods.

# 2.3 MILLION

By 2023 AR/VR is projected to be utilized in 2.3 million jobs in the US.

# 65%

65% of learners believed that VR is a very effective learning experience compared to other methods of learning.

# 47%

47% of companies believe their top training challenge is to engage learners in remote training.





## 5. The Major Benefits

VR training accelerates onboarding with a fresh way to engage new employees, reduces injury rates, and drives business growth by enhancing employee performance. The benefits of VR training are felt on every level of your organization. Confident employees, improved efficiency, and an elevated company culture.

### ACCELERATED LEARNING

Employees learn 4x faster in VR. By cutting down on training time, organizations can accelerate their onboarding process.

### COST-EFFECTIVENESS

At scale, VR is more cost-effective than traditional modalities. While the upfront costs of virtual reality are higher, the cost of recurring in-person training remains fixed in comparison to VR, which becomes less expensive over time.

### KNOWLEDGE RETENTION

VR improves knowledge retention. Learners are 16x more likely to recall information from VR compared to traditional methods. The science of learning tells us how VR effectivity works in tandem with the brain's neuroplasticity to facilitate memorable learning experiences.

### LEARNING ENGAGEMENT

In the 2022 Training Industry Report, 47 percent of organizations reported that their top training challenge during the pandemic was engaging learners in remote training. VR training content engages learners by recreating realistic environments with 3D objects and sophisticated animations that make training feel real.

For the modern day employee, training in VR is a unique opportunity that many employees view as a huge advantage. The benefits of VR demonstrate what effective learning can do to transform an organization. The immersive technology cultivates a thriving company culture where employee satisfaction and motivation are prioritized.

Employee surveys scaling a versatile list of industries share one key commonality. VR learners are not only enthused by the capabilities of the technology, but are in agreement of the tremendous learning potential in immersive training. From impactful realism to practical application of the technology, employee feedback shows a strong theme of learning engagement.

The increasing demand for VR training in corporate training programs goes beyond the business impact – it is strongly tied to positive user experience. Employee feedback has been overwhelmingly positive. Modern workforces are vocalizing the widespread preference for VR learning opportunities.

In a recent Field Safety VR pilot for Cox Communications technicians, **65% of participants believed that VR is very effective as a learning experience to address safety compared to other methods of learning**, emphasizing that they wouldn't forget the experience.

“*I believe this training can help a lot for new techs getting an understanding for the basics of the job... this training helps more than watching training videos in the past... Extremely high potential all in all.*”

## In Summary

VR is a catalyst for growth. Is your organization ready for real change?

As a proven recruiting and retention tool, immersive learning enhances training programs with realistic and interactive modules that help employees hone their best skill sets and contribute to a more productive workforce. It all comes down to creating the best learning opportunities for your employees – and people learn best by doing.

- VR is best used in a blended learning model.
- Ensure that your team is aligned for a smooth development process and successful VR program. This means keeping your SMEs involved from the start!
- VR has been proven to be more cost-effective than traditional training methods in just a few years.
- Cost will determine your level of customization.
- VR drives learning engagement and knowledge retention.
- Immersive training will save your organization time and money.
- With a new tool to measure learning outcomes, VR training programs address employee performance with a data-driven approach.

We've covered a lot, so we aren't surprised if you have more than five new takeaways. You might be wondering, **what should I do with this new information?** Stop daydreaming about streamlining efficiency and get in contact with the right team! It's your turn to optimize your training program and invest in your employees.





## References

"6 Step Guide to Blended Learning." Roundtable Learning, 10 October 2023, <https://roundtablelearning.com/6-step-guide-to-blended-learning/>

Farra SL, Gneuh M, Hodgson E, Kawosa B, Miller ET, Simon A, Timm N, Hausfeld J. "Comparative Cost of Virtual Reality Training and Live Exercises for Training Hospital Workers for Evacuation." National Library of Medicine. September 2019, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7231540/>

Freifeld, Lorri. "2022 Training Industry Report." Training Magazine, 16 November 2022, <https://trainingmag.com/2022-training-industry-report/>

Glotzer, Anna. "Cognitive Neuroscience and Virtual Reality: How Immersive Training Underscores the Science of Learning." Roundtable Learning, 8 May 2023, <https://roundtablelearning.com/cognitive-neuroscience-and-virtual-reality-how-immersive-training-underscores-the-science-of-learning/>

Krokos, Eric. "Virtual Memory Palaces: Immersion Aids Recall." 3 May 2018, [https://obj.umiacs.umd.edu/virtual\\_reality\\_study/10.1007-s10055-018-0346-3.pdf](https://obj.umiacs.umd.edu/virtual_reality_study/10.1007-s10055-018-0346-3.pdf)

PWC. "What Does Virtual Reality And The Metaverse Mean For Training?" PWC, 1 October 2023, <https://www.pwc.com/us/en/tech-effect/emerging-tech/virtual-reality-study.html>

Radisek, Vince. "9 Examples of Safety Training in VR." Roundtable Learning, 15 September 2023, <https://roundtablelearning.com/9-examples-of-safety-training-in-vr/>

Robertson, Rose. "Understanding and Applying the Adult Learning Theory: Applications for Independent Learning." Roundtable Learning, 30 August 2019, <https://roundtablelearning.com/independentlearning/>

Scott, Stachiw. "3 Mistakes People Make When Designing VR Training." Roundtable Learning, 6 October 2023, <https://roundtablelearning.com/mercury-xrs-what-it-is-how-it-works-what-it-could-mean-for-you/>

Smole, Stephen. "Mercury XRS: What It Is, How It Works, What It Could Mean For You." Roundtable Learning, 18 August 2020, <https://roundtablelearning.com/mercury-xrs-what-it-is-how-it-works-what-it-could-mean-for-you/>

Smole, Stephen. "Secrets of The Fortune 50: How VR Has Transformed Warehouse Training." Roundtable Learning, 20 October 2023, <https://roundtablelearning.com/secrets-of-the-fortune-50-how-vr-has-transformed-warehouse-training/>

Suchan, Jeff. "5 Examples of VR Training in Warehousing & Supply Chain." Roundtable Learning, 21 October 2023, <https://roundtablelearning.com/5-examples-of-vr-training-in-warehousing-supply-chain/>

Trudell, Tammy. "5 Questions to Ask Your New AR/VR Vendor." Roundtable Learning, 28 September 2023, <https://roundtablelearning.com/4-questions-to-ask-your-new-ar-vr-vendor/>

"What Does Virtual Reality and the Metaverse Mean for Training?" PWC, 15 September 2022, <https://www.pwc.com/us/en/tech-effect/emerging-tech/virtual-reality-study.html>