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DIGITAL EXPERIENTIAL TRAINING

A NEW BREED OF WORKPLACE TRAINING SOLUTIONS.

Overview

There are substantial compromises inherent in all of today's workplace training solutions, most of them revolve around: scalability, engagement or affordability.

However, we believe a new category of solutions is emerging; in this paper, we introduce the ***Digital Experiential Training*** category. This new category of solutions is poised to resolve the compromises of current approaches and set a new standard for workplace training which is long overdue.

Contents

Executive Summary

- Although the L&D space has seen its share of technology evolution, the options for delivering impactful training at scale are still limited. This essential L&D deliverable is still one that's fraught with compromises, with current solutions generally lacking either scalability, engagement, or affordability.

- What if there were solutions which combined the strengths of the current approaches, but had none of the compromises?

- At Facilitate, we believe that this is possible. In this paper we introduce the ***Digital Experiential Training category:***
  a new category of workplace training solutions that resolves the compromises of current approaches. As the name suggests, this solution will be digital, providing training experiences which are experiential in nature.

In order to deliver on this ideal, solutions in the ***Digital Experiential Training*** category will have the following essential elements:

Future-Proofed

Solutions in this category will need to be 'future-proofed' and recognise the reality of adopting new learning technology; this means allowing for the creation of valuable content today but ensuring that the same investment is still relevant and impactful tomorrow.

Self-Authoring Only

Solutions relying on outsourced effort will never be as cost-effective, flexible, and responsive as an internal capability.

Experiential By Design

While difficult to deliver cost-effectively at scale, learning through powerful experiences has long been seen as the gold standard for adult learning (especially for practical skills). Solutions in this category will turn this problem around and provide digitally-based training experiences.

SME Empowering

By empowering lay people to create content, the creation process can move beyond the L&D function and allow *SMEs* to capture expertise across the organisation with ease. This will be of enormous benefit to knowledge management strategies in larger organisations.

Although this is an emerging category in the L&D space, there are market-ready solutions available already. Any organisation which avails itself of these solutions will undoubtedly be at the forefront of workplace training and benefit accordingly.

The Current State of Workplace Training

The workplace training space has embraced innovation as much as any sector, and many improvements have been realised. Generative AI, micro-learning, Capability Academies - the list goes on.

One aspect that has seen relatively less innovation, however, is the training modalities themselves. These are still based on some variation of either in-person training, eLearning content, or, in some cases, XR-based content such as AR or VR. This is somewhat disappointing given that this is 'where the rubber hits the road' as far as actual training goes. These modalities are the way most employees obtain new knowledge and it is often at this point that much of the effort put into workplace training is realised (or not, as the case may be).

If we look more closely at the actual training modalities available for workplace training, there are three modalities that are relevant:

In-person training

e.g. formal classroom, informal on the job.

eLearning

either computer or mobile device-based format.

Immersive technology

mainly Virtual Reality - can be either headset or computer-based.

Current Limitations

The mainstay for most organisations is in-person training combined with some form of digital training, usually in the form of eLearning packages. Some organisations are including immersive technology into this mix as well, especially for high-value use cases. There are some substantial limitations with both of these approaches, however.

IN-PERSON TRAINING

In-person is often very effective and engaging and, in some cases, the only way certain training can be delivered. The two main compromises that have to be made are that it's costly and difficult to scale across a large organisation or a geographically distributed learner base (hybrid remote workforce).

Another challenge with in-person training is the difficulty in standardising such training experiences. Especially for large organisations, there are often many different facilitators with varying levels of experience and teaching capability, which can make for highly variable outcomes in terms of training.

Lastly, in-person training also requires considerably more logistical effort to coordinate. It's often necessary to ensure SMEs, learners, and equipment are co-located in both space and time, which in turn consumes more L&D resources to deliver. So whilst it is often the most effective training modality, the cost, lack of scalability, and difficulty in standardisation means that in-person training is often limited to high-value training or learners.

An example of these compromises is that of a heavy haul rail operator who incurred large costs for in-person training for rail route familiarisation training for locomotive drivers. This required taking a locomotive and an SME offline and shutting down the selected rail route for the training to be conducted. As can be imagined, the associated training costs were high, flexibility of training sessions and, standardisation low: not representing good ROI overall. A digital experiential solution, however, completely transformed this training problem.

ELEARNING

Digital training certainly addresses a lot of the in-person issues as it is affordable, scalable, and easy to standardise across an organisation. However, the most significant compromise here is the level of learner engagement and therefore overall effectiveness of the training. This is due to two major factors: the use of generic content and the fundamental lack of engagement of the modality itself.

The rapid growth in vast content libraries has not helped this: in fact, many organisations are pulling away from large content libraries post-Covid, instead creating their own content, more specific and contextualised to their organisation. Generative AI is currently being heralded as a solution to this limitation, by adapting and creating content based on organisation-specific criteria. While this certainly has the potential to increase content specificity and therefore be a game changer in traditional eLearning, it's unlikely to address the second significant limitation of this modality, which is the lack of engagement from learners.

Given that eLearning is a 2D, screen-based experience capable of delivering limited realism and engagement, there is a natural limit to how interesting, and also how effective, such content can be. As a result, many organisations are left looking for ways to make their eLearning content more engaging (and effective).

An example of the compromise with eLearning is that of a government emergency services provider. They are required to provide fire fighting awareness training to over 20,000 volunteers across a large geographic area; usually a classic case for eLearning. However, they have found time and time again that the training was not engaging for learners and, more importantly, was not realistic enough. It is simply not possible to convey the intensity of a bushfire scenario with a 2D eLearning-based modality: the level of sensory immersion and interaction required cannot be achieved. Instead, they have turned to another digital solution, one designed ideally for experiential learning: virtual reality.

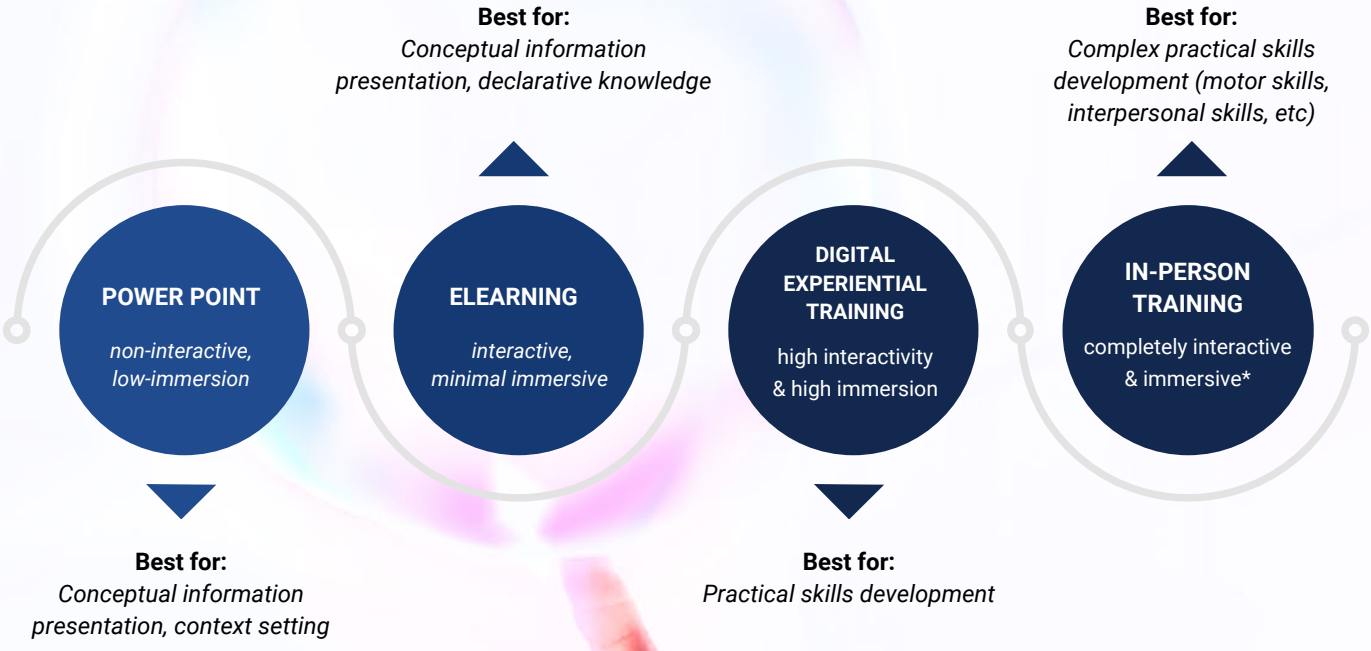


Figure 1: Learner immersion & interactivity levels for current training approaches.

**This assumes realistic and practical scenarios are used; where this is not possible (e.g. high-risk tasks/situations) a highly immersive and interactive learning modality like VR is the best option.*

IMMERSIVE TECHNOLOGY APPROACHES

That moves us onto the next evolution of digital training technologies: namely immersive technology, in particular the use of Virtual Reality as a training modality. Virtual Reality based content has been around for a while but its mainstream availability has been limited.

This technology offers several advantages over eLearning: it is highly engaging, interactive, and, as a result, more effective. It also retains the benefits of digital training in that it's highly scalable and standardisable. Although the initial investment for this technology is more than for eLearning, considering the much higher training effectiveness, it is still likely to represent better value overall.

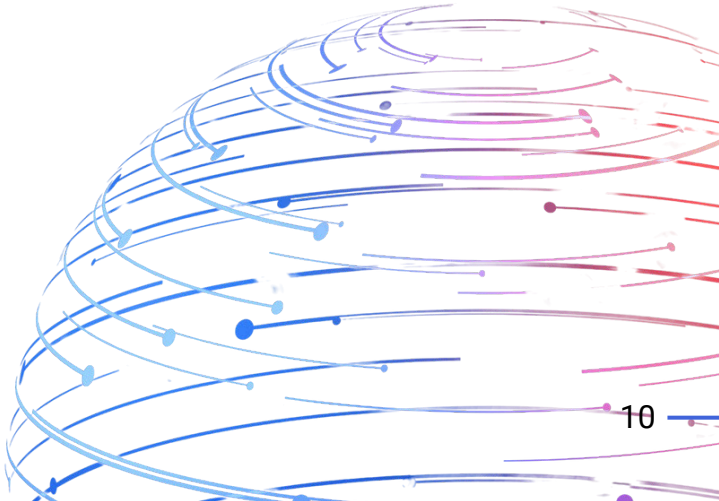
As good as this sounds, there is still one major drawback to this modality, and that is the issue of the training content itself. Currently, the two main methods for obtaining training content for these technologies are Off the Shelf generic content and Developer Created content.

Off The Shelf Generic Content

Looking at Off the Shelf content first, there are currently no large content libraries available (not unlike the early days of eLearning). There is a limited selection in the market at the moment, with most focusing on lower-level hard skills (e.g. working at heights, manual handling, etc), or certain soft skills topics (e.g. interview skills, active listening).

This lack of coverage is a substantial limitation because of the greater investment in VR technology that's required relative to eLearning. This investment does not represent strong value if an organisation is only able to address a small number of its training use cases, and has to do so with generic content. This issue will be especially pertinent for organisations with proprietary or site-specific equipment or processes; in these cases, generic content will be of little value.

In addition to the lack of choice and generic nature of Off the Shelf content is content flexibility. There is often no, or only limited, ability to change or adapt the content over time. Some content available in the market can be customised to limited degrees, but it would be difficult to know if this degree will be sufficient for future equipment/process changes. This lack of 'future-proofing' is not appealing given the investment needed to adopt the base technology such as VR headsets, as well as the current lack of certainty in most business contexts.



Developer Created Content

The other main option for obtaining VR training content is the creation of custom content, generally via an outsourced software development service provider that employs teams of software developers to code bespoke training.

Much like customised eLearning content, this can be as specific as required and there are almost no limits to the use cases that can be addressed. However, this custom work comes at a high cost (entry point for a proof of concept often starts at USD50K) and takes months to complete. Aside from the cost, another major compromise is the content flexibility. Changes are certainly possible (unlike some Off the Shelf generic content), but this cannot be done in-house and will incur more cost and time.

An important point to note here is that the need to adapt content over time is often more important the more specialised it is. This presents a Catch-22 for custom content: highly contextualised/specific training content is almost always more powerful than more generic content, but if any changes need to be outsourced then it's more challenging and costly to keep the content specific over time.
Hence, organisations that are innovative enough to go down this path typically find themselves completely at the mercy of their software development service provider.

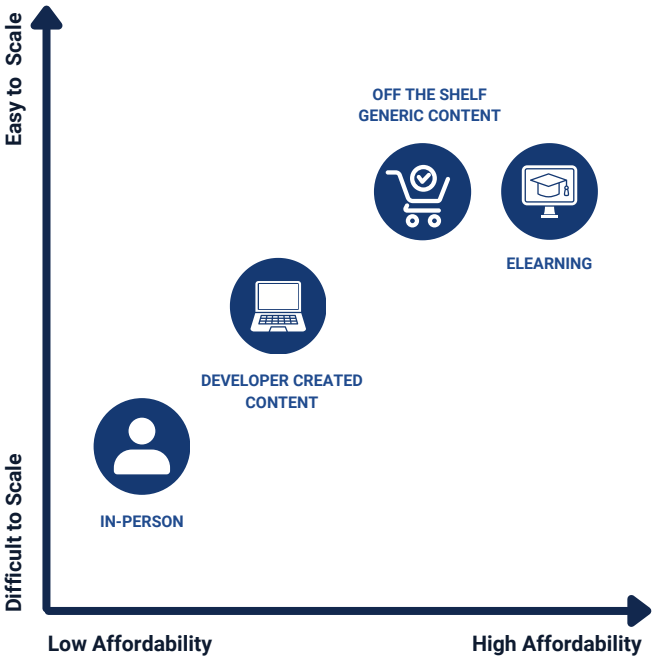


Figure 2:
Affordability as a function of **Scalability**, for current training solutions.

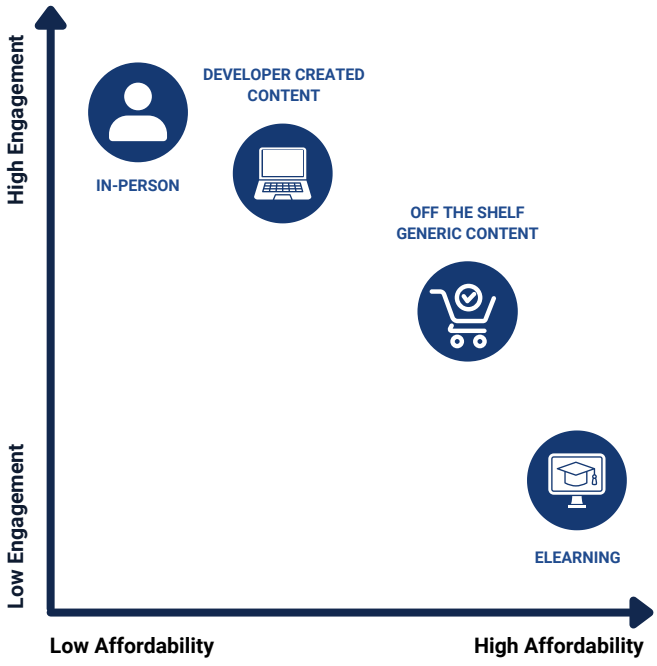


Figure 3:
Affordability as a function of **Learner Engagement**, for current training solutions.

Summary

Although there have been piecemeal solutions to some of these compromises, the underlying flaws of these methods are so ingrained that we believe **there's limited meaningful evolution that will occur without an entirely new approach.**

No doubt, in-person training will always be required for some workplace training, but it's clear that no amount of evolution will change the cost of taking SMEs offline and co-locating them with learners whilst trying to standardise the delivery.

Likewise, for eLearning, none of the new trends such as Generative AI and capability academies, as exciting as they are, promise to overcome the fundamental lack of learner engagement with eLearning content. Even the most promising new modalities like VR aren't scalable when content is created through high-cost, one-off custom builds that can address only one use case. As for Off the Shelf generic content for VR, it is difficult to future-proof due to a lack of flexibility and, likely, this content will pretty soon face the same fate as the enormous eLearning content libraries of today.

Macro level trends in L&D

The core limitations outlined here are also reinforced when considering macro-level trends in L&D more broadly. Generally speaking, most of these trends speak to the need for training modalities that:

1. ***allow for customised content & content flexibility***
2. ***are digital-first and inherently scalable***
3. ***represent good overall value***
4. ***are future-proof for a new generation of talent***
5. ***are more engaging and impactful than eLearning***

Custom & Flexible Content

There has been a substantial growth of large eLearning content libraries during Covid, as organisations struggled to digitise their training in a short space of time. However, much of this content was highly generic in nature and didn't deliver the behavioural change expected. Notable L&D commentators have remarked on the post-Covid realisation of the need for training content to be customised to an organisation. Josh Bersin, for example, suggests that
***"A well-run Capability Academy for marketing professionals or HR staff may be $500k-$2 Million to build and it's worth every penny. The ROI of "off the shelf video content"* is much harder to cost-justify.**

No doubt for certain use cases and certain organisations, generic content will suffice for some years to come. However, it's not likely to be the solution of choice for organisations looking for a high-performing training function to support their goals.

Digital First

Another macro-level trend requiring greater flexibility in training delivery is the remote work trend. Although mass adoption of fully remote working has not occurred, employee preference for hybrid (part home/part in office) models remains high in most geographies. A recent McKinsey report suggests that more flexible working arrangements is the number 3 reason for employees changing jobs[1].

With less time in the office being a likely trend, the coordination challenge and inefficiency of in-person training are likely to be exacerbated. At first glance, the traditional eLearning medium (with or without generic content libraries) seems like an obvious solution to this.

However, the fundamental limitations in engagement and effectiveness of both eLearning and generic content are undeniable, pointing to a clear need for a digital medium that is more effective. Indeed, we've seen this sentiment reflected in the post-covid market, with many organisations looking for more engaging digital mediums to use.

[1]: *https://www.mckinsey.com/industries/real-estate/our-insights/americans-are-embracing-flexible-work-and-they-want-more-of-it*

Future-Proofed for New Talent

Similarly to the work-from-home preference, there are clear preferences in the new generation of the workforce for more interactive, engaging, and immersive ways of learning.

More engaging ways to provide training are going to be required if an organisation is to create a culture that can both attract and retain top talent in the future. Many XR-based training solutions fit this requirement very well and are likely to appeal to a new generation of employees. Moreover, it's also likely that expectations around content specificity will be higher for this new generation. AI-driven adaptive training pathways and other forms of individualised training could be integrated with immersive training modalities.

Affordability & Value

Lastly, the ever-present pressure on budgets is not something that is likely to change. Thus, solutions that represent real value are needed. Although solutions like eLearning with generic content represent a relatively cheap way to reach thousands of learners, given the limited engagement and effectiveness it is questionable whether this reflects real value. Solutions which are more effective at translating a training experience into sustainable behaviour change are likely to represent better long-term value.

Moreover, solutions that can provide effective training across a wider variety of use cases are also likely to deliver a higher ROI, with the adoption and ongoing operation costs of any new technology spread across multiple areas of an organisation.

The Opportunity To Change Perspective

From this look at the larger landscape and the compromises of current training modalities, it's apparent that at least two core problems remain:

Because of the compromises of current training solutions, L&D professionals can't deliver:

- **cost-effective and engaging training in a scalable and standardised way and/or**
- **offer customised or asset-specific training in a cost-effective way**

Clearly what's needed is a new way of thinking about this challenge: a point of view not based on compromises, but one based on combining the strengths of current solutions to create a new category of workplace training solutions. And, perhaps most importantly, one that unleashes the full potential of the training creator.

What if there were solutions that combined the strengths and had none of the compromises of the current approaches?

What if we as L&D professionals could easily deliver engaging and standardised training which is scalable across geographies, affordable, and, best of all, is a capability that can be developed in-house?

It sounds too good to be true, but thanks to the confluence of a number of new technologies and broader L&D trends, we may actually be closer to this ideal than we think. Let's explore what this might look like.

A New Category of Workplace Training Solutions

A truly differentiated solution won't just be an incremental improvement on certain aspects of the current state. Rather, it would eliminate, or at least substantially reduce, all the limitations of current solutions. In practice, that would mean it would offer the L&D professional a way to provide training which is:

1. **Engaging for learners and provides effective outcomes**
2. **Fully customisable and specific to the organisational context**
3. **Scalable across geographies and hybrid work models**
4. **Standardised and easy to align with policy and processes**
5. **Convenient to create, edit, deploy, and manage - ideally an internal capability**
6. **Represents real value to the organisation**

The Core Elements Of The New Category

We call this new category or workplace training solution the **Digital Experiential Training** category. As the name suggests, solutions herein will be 'digital first' and provide training experiences that are experiential. Given these requirements, any solutions seeking to take advantage of this new category would need to have the following essential elements:

1 Self-Authoring Only

- Solutions relying on outsourced effort will never be as cost-effective, flexible, and responsive as an internal capability.
- Moreover, easy-to-use self-authoring creation also makes it faster and easier to create asset-specific or customised training content by empowering SMEs.
- Similarly, solutions requiring specialist skill sets or external service input will be less valuable than those which enable organisations to develop internal capability.

2 Future-Proofed

- Solutions in this category will need to be 'future-proofed' and recognise the reality of adopting new learning technology; this means allowing for the creation of valuable content today, but ensuring that that same investment is still relevant and impactful tomorrow.
- This may take the form of a solution where training value can be extracted gradually, as the organisation moves along the adoption curve. This is in contrast to solutions with large up-front costs and, sometimes more importantly, substantial change management effort requirements before the value is realised.
- This thinking comes to life when considering the most likely technologies in this new category: Virtual Reality, Augmented Reality, and Mixed Reality. These are undoubtedly the future gold standard of training and learning delivery, particularly Virtual Reality. an organisation to gain value today and build on this investment over time. However, solutions in the Digital Experiential Training category need to recognise that the reality of providing headsets to all trainees today may not be feasible. Thus, they need to provide a pathway to that gold standard, one that allows an organisation to gain value today and build on this investment over time.

- We believe that high-impact training can be achieved by content that leverages mediums such as 360-degree imagery and 3D model-based experiences, even if they are accessed via 2D applications or web browsers: this is something every organisation can start with. If that same content can then be used in XR headsets, whenever the organisation is ready, that's future-proofing.

3 Experiential By Design

- Experiential training has a strong background in the learning sciences and it suggests that adults in particular learn best by playing an active part in the experiences they partake in. This means digital training content must be seen as an experience that the learner: A) feels they are a part of, and, B) has control of key outcomes that occur. Given this requirement, interactivity and immersion become essential to delivering effective training outcomes.
- This is where traditional eLearning fails, as it cannot create a sense of being immersed in a real-life experience, drastically reducing the level of engagement. Nor are the interactions realistic or meaningful enough for the learning to be truly experiential. These are both well-known limitations of eLearning.
- Again, the only training approaches capable of delivering high enough levels of interactivity and immersion are either, In-person or XR-based experiences. Given that In-person training is difficult to scale and standardise, that leaves XR technologies as the only no-compromise option for delivering experiential training.

4 SME Empowering

- Our view of the new category sees the empowerment of SMEs across an organisation as the key to unlocking the complete value of a training solution.
- By empowering lay people to create content, the creation process can move beyond the L&D function and allow SMEs to capture expertise across the organisation with ease. This will be of enormous benefit to knowledge management strategies in larger organisations.
- Conversely, any solutions requiring specialist internal skill sets will be of limited value for all but the largest organisations.

Digital Experiential Training In Practice

Now that we've looked at the essential elements of the **Digital Experiential Training** Category, it's worth exploring what solutions within this category might look like in practice and what the state of the market is for such solutions.

Immersive Self-Authoring

The first two characteristics suggest that an immersive self-authoring tool would fit this category well. Such a tool would be like a modern, easy-to-use eLearning creation tool, only it would enable the creation of digital experiential content. Of central importance here would be a solution that can be used by laypeople and does not require specialist skills.

Additionally, any digital training tool must be able to integrate with existing learning technology systems: at a minimum, it must be able to send learner data to an LMS and allow a learner to access content from within the LMS or LXP (e.g. via SCORM or xAPI integration).

Accessibility

From a content accessibility point of view, solutions in this category need to meet the market where it's at but also allow organisations to 'future-proof' their investment. One way to do this is by allowing content to be accessible on the hardware they have today (e.g. computers) but also be compatible with the hardware of the future (e.g. VR headsets). In essence, this means creating content once and knowing it will be usable with future hardware.

Experiential Training

Although most VR-based immersive content will be much more engaging than eLearning, this does not mean it will be automatically pedagogically effective. The content created will need to leverage the newfound level of realism and interactivity that is possible within this Digital Experiential Training category (e.g. leveraging 360 degree imagery-based or 3D-model base experiences). This means that the content should have higher levels of realism (visual, mechanical, social realism, etc.) and provide the learner with a way to shape the training experience (choice points and feedback loops).

Ideally, a solution would allow for the use of multiple different immersive and interactive content types within one experience, given that different content modalities (e.g. 3D models/environments, 360 imagery) have each been found to have their distinct advantages from a training point of view. Additionally, the option for collaborative or individual learning should be standard. Most workplace roles are highly collaborative and, as such, training which aims to be realistic will sooner or later require collaborative approaches.

Self-Authoring vs. Service Based

As was stated in the essential elements, we see the Digital Experiential Training category as bringing about greater empowerment of L&D professionals and organisations to deliver training value. This suggests that solutions which are based on service provision (e.g. 'Do It For You' models) are not a viable path in the long term. Numerous VR creation agencies offering a service-first approach to content creation, but such an approach is unlikely to be cost-effective or flexible enough and, whilst appropriate in some instances, does not belong in this new category.

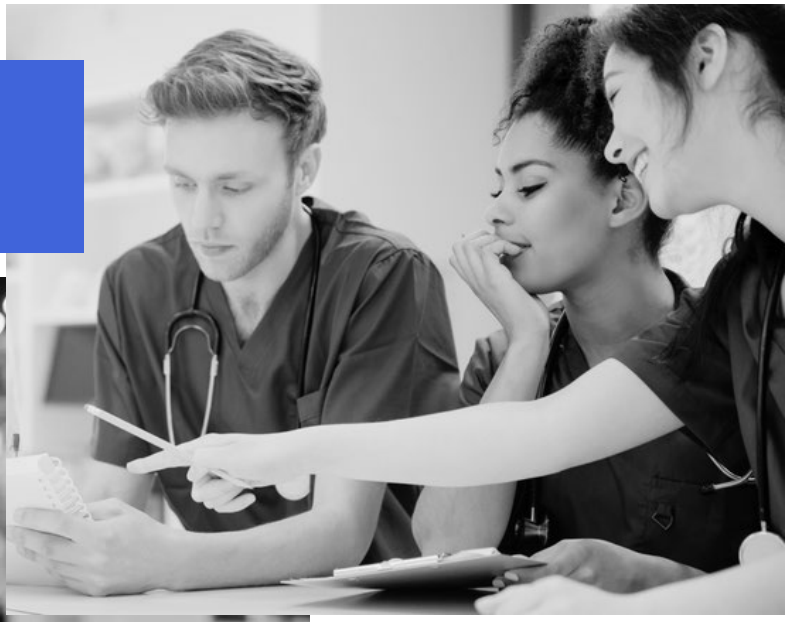
Similarly, any so-called 'low-code' solutions, which still require specialist skills are not in a position to truly empower the average SME who carries the expertise within the organisation. Consequently, such solutions don't fit with the vision presented here, which takes the view that the development of an in-house capability is the best way to eliminate the long list of compromises in training modalities outlined earlier.

More Practical Information

For organisations who want to be part of this new way of solving workplace training challenges, there are likely a lot of questions and considerations. To assist with this we've compiled some commonsense considerations in a guidance document; this is available from our website, www.facilitate.tech.

Real World Examples

Below are two short examples of organisations making use of solutions in the new Digital Experiential Training category.



Northern Star Resources

The Problem

Northern Star Mining Services ('Northern Star') needed effective site inductions and onboarding processes for new employees. This challenge is a well-known one in the mining industry: Powerpoint-based inductions may fail to engage all people effectively, and knowledge retention is at risk of being low in comparison to other learning methods. In-person inductions are costly, difficult to scale , and sometimes impossible due to safety and/or operational constraints.

Solution

Northern Star saw the limitations of the current training modalities and turned to self-authored Virtual Reality content, a central solution in the new Digital Experiential Training category. They filmed a series of 360-degree videos within multiple underground mine sites and then used a self-authoring tool to add interactive elements. Although the resulting content was accessible via browser and computer, they opted to provide new employees access to VR headsets for the full immersive experience.

Outcomes/New Capability

The business's main objective was to increase the engagement rate and awareness of site-specific conditions and risks, which they clearly achieved. Some noteworthy trainee quotes were that the Facilitate experiences:

"provided an experience that was almost like I was there"

1. **"were more engaging than a slideshow format or LMS presentation"**
2.
3. **"gives a good rundown on all the safety aspects of being underground"**

Not only did they solve the immediate training challenge, but they have also created a new internal capability (driven by SMEs outside of L&D) which they can extend to many more use cases across the organisation. This success is underpinned by using a solution that had all the essential elements of the new Digital Experiential Training category.

Government Emergency Services Provider

The Problem

This government agency's challenge was rooted in the scalability and affordability of training across a large geographically dispersed volunteer base. Needing to provide high-risk bushfire-related training to 29,000 volunteers spread across a large area, their options with current training modalities were limited: unengaging eLearning or costly in-person training by a traveling training officer.

Solution

The provider turned to a solution based on the new Digital Experiential Learning category: indeed, they have been using solutions from this category for a while, as they have an internal simulation and training department. The team was experienced in capturing 360-degree video footage of, and even inside of, fires, hence they were easily able to create highly realistic content. They also used a self-authoring tool to add additional elements to the footage and create a full experience. Moreover, the content was highly realistic and highly specific to the rural bushfire context, an essential factor in this type of training.

Outcomes/New Capability

The training solution has been rolled out across the state at more than 30 different locations and over 150 training instances have taken place already. This digital-first approach allowed trainees to gain exposure to environments and situations that could not otherwise be replicated. Trainee reception has been overwhelmingly positive.

The emergency service provider was committed to using this solution and plans to expand their use of our solution and VR to cover a greater range of content areas and trainees. Given the high-risk nature of their work and the dispersed trainee base, they are a prime example of an organisation leveraging solutions from the Digital Experiential Learning category.

About Us

We are Facilitate. We provide a Digital Experiential Training solution via our self-authoring VR creation platform, Facilitate.

We wrote this piece because we've spent many years listening to L&D professionals and reviewing the current state of workplace training, and we've realised that it's a landscape of compromises. Despite many technological advances, delivering engaging, scalable, and affordable workplace training is still a challenge for many organisations.

However, we recognised that an entirely different category of solutions was needed: one based on combining emerging technologies in a way that eliminates existing compromises. We call this the Digital Experiential Training category, and it's already here.

Our purpose with this paper was to articulate our thinking and share the idea of this new category with the broader L&D community. Ultimately, it was to show that there is another way to look at and solve existing problems.

We invite everyone in the L&D to look at this new category for themselves and to explore what's possible. Ultimately, we want to invite you to start unleashing the full potential of the L&D role in your organisation.

Join us as we revolutionise the future of workplace training and blaze a new trail into the future of workplace training.

References

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