KALLIDUS

Virtual Reality: The next big transformational learning technology

Kallidus VR in L&D Study

Executive Summary

Virtual reality (VR) has the power to transport users out of their everyday world and immerse and engage them in a 360° virtual environment with a high sense of reality. But can VR be used effectively to enhance learning and development while delivering the all important 'wow' factor? Or is it just hype? Kallidus asked over 200 learning professionals what they really think about using VR for learning and the results were compelling.

Key highlights

- There is an overwhelmingly positive view of VR's potential for L&D. Only 8% of learning professionals surveyed feel VR is 'just hype', 81% think it has 'real potential' and 11% are prepared to go one step further, calling it out as 'the next big thing' in learning.

- L&D professionals have a strong appetite for using VR. While just 2% of respondents are currently using VR for training in their organisation, 91% are planning to use it in their organisations. 12% of respondents have plans to use VR within the next year; 14% within two years and 6% within three years; the remaining 59% want to use it at some point, but are not sure when.

- VR is the number one new mode of learning that L&D professionals most want to implement in their organisations, with 53% of respondents wanting to implement VR for training as a priority compared with other new learning modes.

- 95% of respondents see VR as being useful for enhancing L&D. Technical skills development (64%), health and safety training (54%) and onboarding/orientation (41%) are the subject areas that respondents would most like to see VR being used for within their organisations.

- Perceived cost (73%), lack of knowledge on how to use VR (61%) and lack of cultural appetite (38%) are the biggest barriers that could hold learning professionals back from adopting VR.

- Respondents perceive the biggest benefits of using VR to be: helping to create a more engaging learning experience (89%), making high-risk or impractical training achievable (84%) and helping the organisation to be more innovative (81%).

The survey clearly highlights that VR has captured the imagination of most learning professionals. Even those who have not yet had the opportunity to experience it first-hand are excited about how it could be used in L&D. With so much enthusiasm and a growing awareness of the potential of VR, it looks set to be the industry's next big transformational learning technology and could be as game-changing as the advent of the PC.

Survey sample

The purpose of the study was to discover what L&D professionals really think of virtual reality. Does it have the potential to enhance learning and development or is the current buzz around VR just hype?

Our thanks go to the 206 learning professionals (a mix of directors, managers, consultants and administrators) who participated in our online study during June 2016. Learning professionals were fairly evenly distributed across all sizes of company and are currently working across virtually every industry sector.

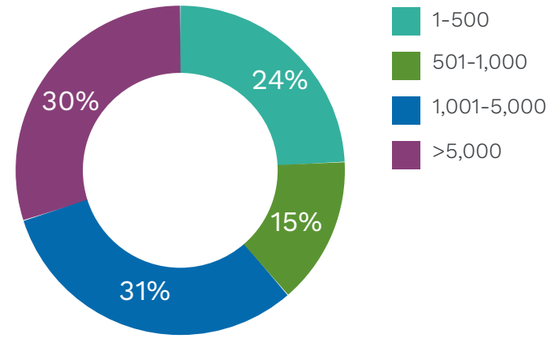

Figure 1: Company size

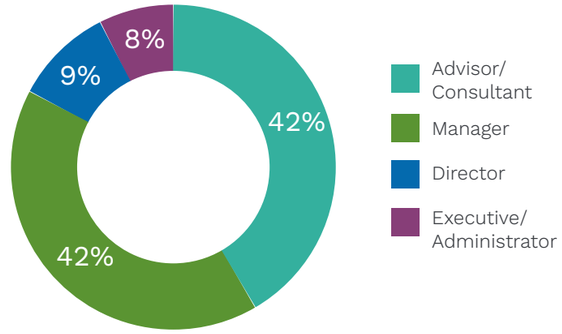

Figure 2: Job roles of respondents

Most L&D professionals taking part in the survey have had some experience of VR. 50% have watched VR on the web (e.g. on YouTube), around 25% have tried it for themselves either as part of their job (e.g. at a trade show) or at home, and 8% own a VR headset (most likely for gaming). Just 4% have tried it as part of a training exercise.

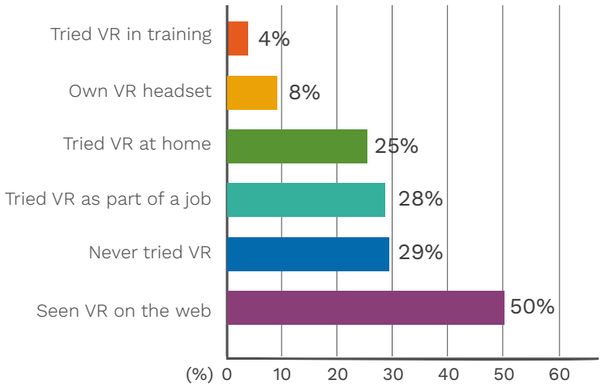

Figure 3: % of respondents who have experienced VR in different scenarios

VR: The game-changer

In order to understand where VR fits within today's learning strategies, respondents were asked which learning interventions they are currently using within their organisation. As expected, the most popular techniques are classroom training (91%), on-the-job learning (91%) and online courses (87%). Video training has become more popular than ever and used by 59% of respondents, while pure mobile learning appears to have been bypassed by many organisations - just 30% of respondents use it in their current L&D programme. Organisations are just starting out with game-based learning (17%) and social learning (28%) while VR is only currently being used by 2% of respondents.

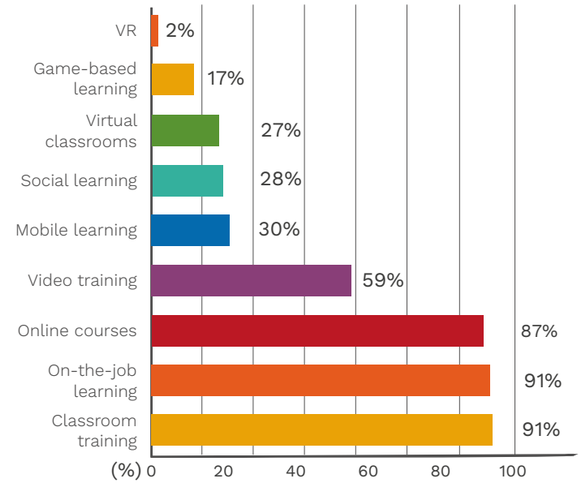

Figure 4: Techniques currently used for L&D

So what does the future of learning look like? In order to examine where VR sits on the future learning landscape, respondents were asked to choose which new techniques they would prioritise implementing from a list of those they are not currently using. VR is the clear leader and a priority to implement for over half of respondents (53%). The next most popular choices are virtual classrooms, a priority for 46% of respondents and a channel which still has

lots of potential for workplace learning, and game-based learning (37%) which continues to be a much talked about topic in the learning industry.

Clearly, VR is poised to be the next transformational learning technology and a game-changer for training and development. With analysts predicting widespread adoption among consumers and businesses over the next few years, it is encouraging to see learning professionals open to exploring its potential within L&D.

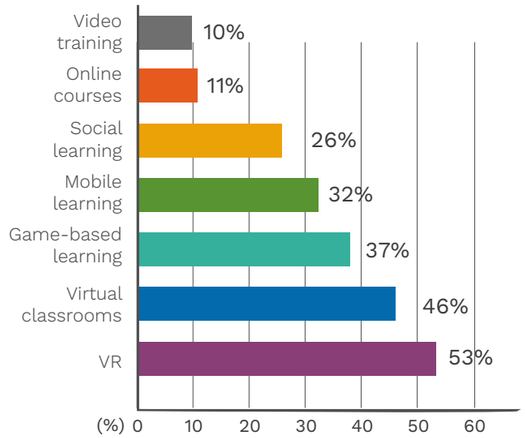

Figure 5: New modes of learning that L&D professionals want to implement

The Power of VR

The overwhelming majority of respondents (95%) can see the usefulness of VR for enhancing L&D.

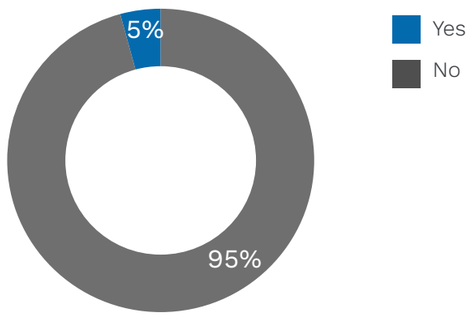

Figure 6: Subject areas that respondents would like to see VR used for in their organisation

So which subjects and skills do L&D professionals think offer the most potential and opportunity for using VR? Respondents said they would most like to see VR being used for technical skills development (64%), health and safety training (54%) and onboarding/orientation (41%) in their organisations.

It is not surprising to see technical skills and health and safety coming to the fore given that the use of VR in learning has its roots in high-precision training for medical professionals and the military and also because these subject areas are often the key focus of training. It is particularly encouraging to see that L&D professionals are thinking beyond the traditional uses of VR and hard skills development and are seeing the real potential it offers for developing soft skills such as personal effectiveness, negotiation and presentation skills.

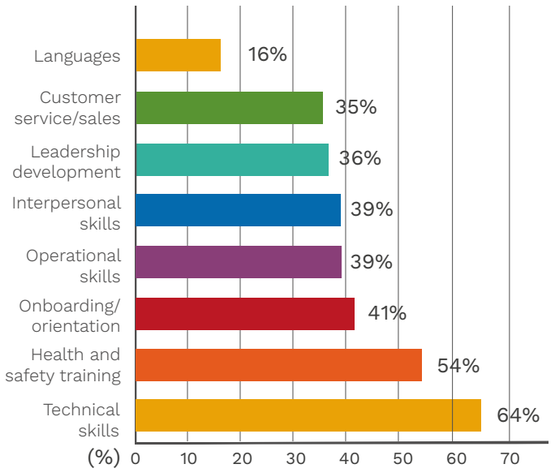

Figure 7: Respondents agreement with statements about the benefits of VR

And what of the potential benefits of VR? In what way is VR going to have the greatest impact on L&D? Respondents perceive the biggest benefit of using VR to be its ability to help create a more engaging learning experience, with 89% agreeing or strongly agreeing that engagement is a key benefit.

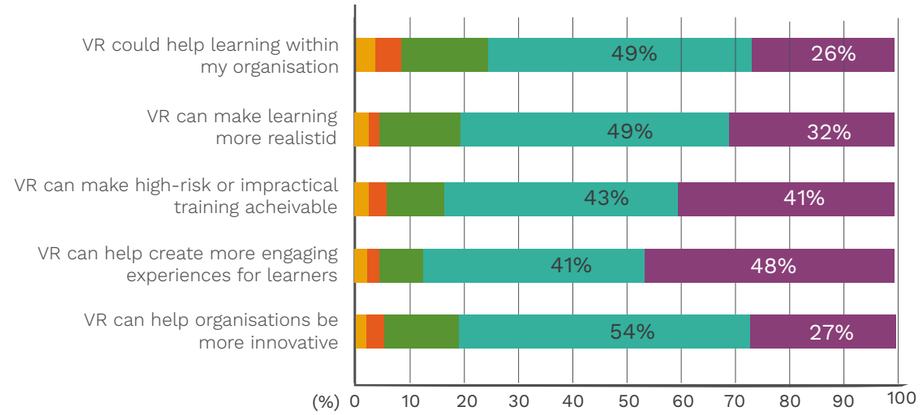

Figure 8: Respondents agreement with statements about the benefits of VR

Following closely behind are making high-risk or impractical training achievable (84%); helping organisations to be more innovative (81%); and making learning more realistic (81%).

VR: The reality

This study shows that there is a strong appetite for the use of VR in learning. Just 2% of respondents are currently using VR for training in their organisation, however 91% of respondents plan to use it in their organisation in the future. Only 7% felt VR was something that they would never use. 12% of respondents said they have plans to use VR within the next year; 14% within two years and 6% within three years; the remaining 59% who said they plan to use VR are not sure when.

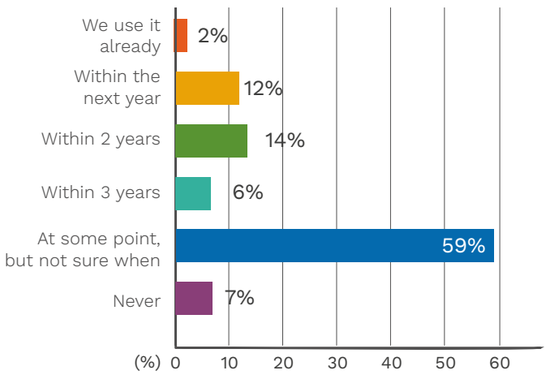

Figure 9: Timeframe for respondents planned use of VR for L&D within their organisation

As with any new investment in learning technologies, there will always be some barriers to overcome. So what could hold back today's learning professionals from adopting VR within their organisation? Topping the list of potential barriers is the perceived cost for VR creation and equipment for users (73% of respondents agreed this could be a barrier). Next is a lack of knowledge of how to use VR (61%) and a lack of cultural appetite or scepticism from leaders (38%).

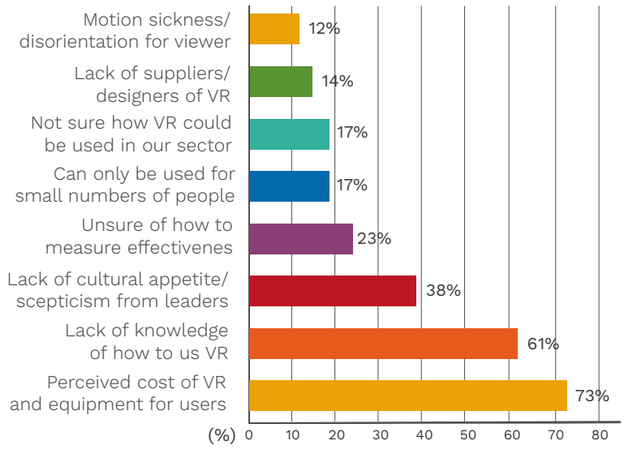

Figure 10: Perceived barriers to adopting VR within a respondent's organisation

The possibility that VR applications can only be used for training small numbers of people was far less of a concern (cited by

just 17% of respondents). Perhaps this highlights that learning professionals understand VR isn't just for very technical niche training applications but can be used among a far broader audience for a wider variety of applications.

It is interesting to look at how potential barriers vary depending on when respondents plan to implement VR. Of particular note, the main barrier for those who will most likely never implement VR in training is a cultural one or scepticism from leaders rather than cost. The 'never' respondents also have a lower understanding of how VR can be applied in their sector.

For those who are planning to implement VR in the next year, perceived cost, lack of knowledge of how to use VR and cultural issues are still the most common barriers, however, relatively fewer respondents are concerned with these barriers compared to those with longer terms plans to deploy VR. These pioneers appear to have a better understanding of how VR can be used within their sector and are more concerned about the practicalities of implementation like motion sickness, finding suppliers to work with and how to measure effectiveness.

For those planning to implement VR in the next three years perceived cost is a much greater concern than for any other grouping. This concern could be the key reason holding back this grouping from exploring the potential for VR in learning any sooner.

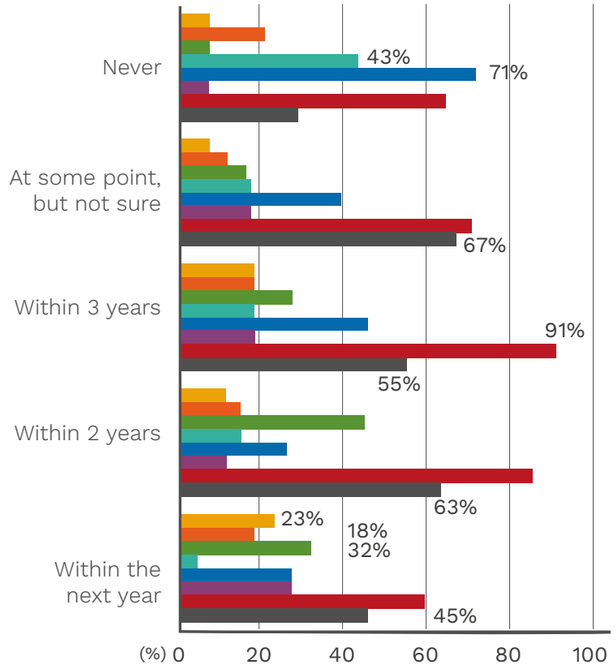

Figure 11: Perceived barriers by desired timeframe for implementing VR in L&D

When the perceived barriers to implementing VR are analysed by company size, the data reveals that it is the smaller companies (1-500 people) that have begun to use VR for learning. These companies are less concerned about perceived cost and have a better understanding of how they can use VR, although a significant number feel unsure of how VR can be applied in their specific industry sector. By contrast, it is the larger companies (employing more than 5,000 people) that are among the most concerned about cost and have the greatest lack of knowledge about how to use VR as part of their learning strategy.

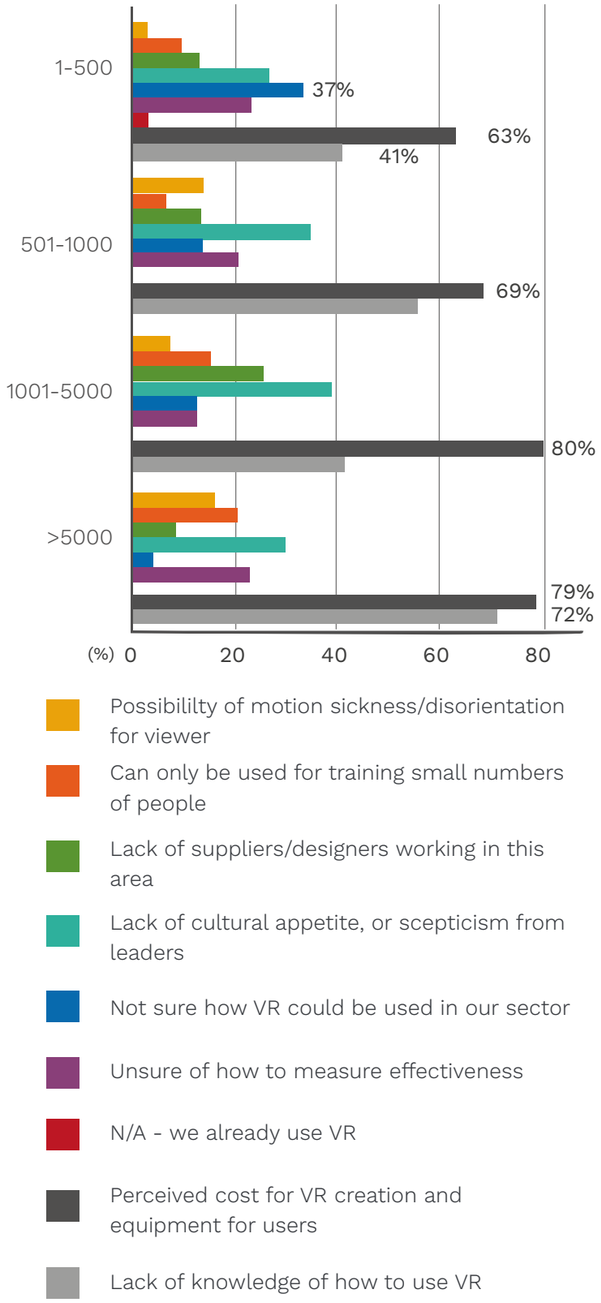

Figure 12: Perceived barriers breakdown by organisation size

VR: The next big thing?

Clearly learning professionals agree that VR is not just the latest hype. The overwhelming majority have a positive view of VR's potential for L&D. Just 8% of learning professionals surveyed feel VR is 'just hype', 81% think it has 'real potential' and 11% believe it is 'the next big thing' in learning.

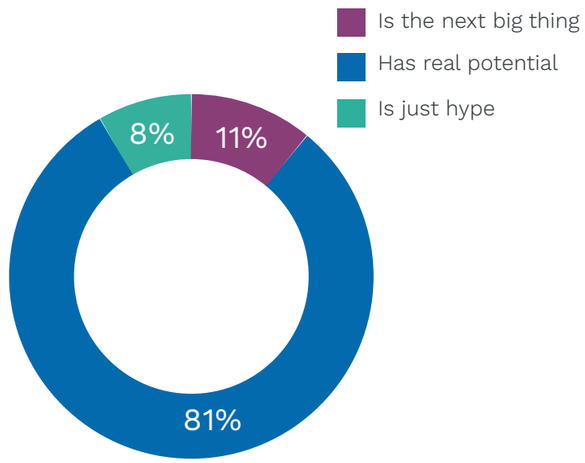

Figure 12: Respondents view of VR

According to Deloitte Global, VR is set to have its first billion dollar year in 2016 and, as this research by Kallidus shows, L&D professionals are enthusiastic about the opportunities VR presents for learning and want to use it engage learners and deliver innovation to the business. While cost is perceived to be the biggest barrier, the technology has come of age and the price of equipment such as head-mounted devices will continue to fall as uptake increases, making VR more accessible for every organisation.

Learning professionals are progressive and open-minded about how they could use VR and see a world of opportunity for learners and while not everybody has immediate plans to embrace it, a significant proportion have already put it somewhere

on their three year road-map. As with all new learning technologies, there will be a period of exploration to work out the best way forward and how to maximise effectiveness.

10 tips to get started with VR

1. Keep the needs of the learners at the heart of the solution - align VR capabilities with desired learner outcomes.
2. Define what unique experience VR will offer over and above the training options you might have considered in the past.
3. Focus on using VR to encourage people to try new things, solve problems and master their environment.
4. Think about how to use VR to make learning more engaging, motivating and fun.
5. Consider optimum learning time: content should be bite-sized and limited to 5-6 minutes at most.
6. Break down complex situations into smaller, digestible chunks.
7. For high-precision specialist training, it's best to invest in a high-tech headset like Oculus Rift or HTC Vive.
8. For training on a larger scale, use budget-friendly headsets, which are best suited to narrative content using branching scenarios to allow learners to make choices and see the consequences of their actions.
9. If you're experimenting with filming content, it's important to start off with a static camera. Make sure you have a central focus point to keep the user grounded in the learning.
10. Lastly, don't get sidetracked by the excitement of the technology - content is king and should be the key focus when investing in VR.

Kallidus and VR

Kallidus is an acknowledged expert in using technology for learning and has leading-edge experience in gamification. Our award-winning team of designers are skilled in creating innovative, engaging content that is aligned with learning needs which is critical to the success of VR.

Kallidus has started to partner with customers to explore and prototype VR learning solutions. We help organisations to get started with VR, advising them on how VR can be used effectively within today's L&D strategies and on the practical considerations of developing content.