Machines are becoming better at being machines. We need to become better at being humans...



The Future of Work

The coming of AI and automation to the workplace means that many tasks that people undertake today may well be automated in the future.

Whilst technological advancements have consistently changed the workplace over the past 250 years, the pace of change today, and the potential for disruption to the way we work, are essentially unprecedented.

A key part of preparing people for this new future is to give them tools that will help them adapt to change.

The Rise of Soft Skills

Whilst 'hard' digital skills are rightly seen as essential in today's workplace, it's the 'uniquely human' skills that machines, for the foreseeable future, cannot emulate that are increasingly in demand.

Good communication, strong emotional intelligence, creativity, empathy, adaptability - soft skills are essential to the future of work (Forbes)

The Challenge of Soft Skills Training

Soft skills are difficult to measure and equally difficult to train. Unlike hard skills, a 'one and done' approach is not sufficient for acquiring skills that will make a lasting change in behaviour. This means delivering soft skills training at scale can be both costly in time and money.

Combine this with a global pandemic, and it is evident that traditional models of delivering soft skills training need to evolve.

"

"Technological optimists believe future automation will move beyond substituting for the 'routine-manual' human tasks technology performed in the late 20th century to almost the entire spectrum of work...

It may be left to people to provide "hearts" – that is, tasks that require emotional intelligence, originality or social skills such as persuasion or caring for others."

Mark Carney

Governor of the Bank of England (2013 - 2020)

Sep 2021 www.bluenovation.co.uk







VR Usability Testing at University of Suffolk

At Blue Novation we have been trialling virtual reality software for soft skills training under the aegis of the EIRA Innovation scheme, with support from researchers at the University of Suffolk.

We approached the University to help evaluate the use of embodied virtual reality and conversational artificial intelligence specifically as a mechanism for the delivery of immersive, experiential training for soft skills.

"

"At the end of the day, it's not about technology. It's about creating engaging learning experiences that give people the skills and confidence to grow. By partnering with Blue Novation and running this study with the University of Suffolk, we were able to demonstrate learners' eagerness to engage and pave the way for a new generation of transformative experiential learning."

Christophe Mallet CEO

7 bodyswaps

In addition, we partnered with Bodyswaps, an award-winning immersive learning platform designed to deliver lasting behavioural change. Since 2019, London-based Bodyswaps has helped a wide range of organisations deliver measurable value by building more empathic workplaces and fostering greater inclusivity.

Their VR training scenarios simulate realistic workplace scenarios and are a highly sophisticated form of role play. Using virtual embodiment, the learners interact with a virtual character, then swap bodies and watch an avatar of themselves as the situation is played back. The impact of this new perspective encourages self-reflection and embeds learning from practical experience within a virtual environment.

For the usability testing we used a module from their four-part Career Mindset Development program.

Why Virtual Reality?

Exploration + Adaptive Practice = Psychological Safety

VR simulations are designed to be experienced individually without other participants or external evaluation. The psychological safety created by virtual environments encourages exploration without fear of failure, leading to repetition and variations in practice that embed information in new, more durable ways.

Embodiment + Affect = Emotional Engagement

Being embodied in a virtual character allows for an emotional, personal and highly memorable experience for each individual, informing their responses and giving learning personalisation a new meaning.

Immersion + Application = Real-play not Role-play

Learners get to interact with virtual humans using their own voice. The combination of social presence and participation unleashes the benefits of hands-on practice usually reserved for face-to-face role-playing.

Data + Reflection = Self-coaching

Comprehensive analytics, leveraging behavioural and semantic data, provide highly personalised real-time feedback. This encourages self-awareness and enables powerful moments of reflection.

66

"VR supported by good conversational artificial intelligence can enable a learner to explore multiple possible solutions and find the right way for them.

There is already research showing that Virtual Reality training of soft skills can achieve faster and better results, with trainees being much more focused on the learning, than other approaches.

Being able to fail safely and learn from mistakes, and being able to repeat this process until the skill has been mastered are clear advantages."

Professor Nicholas Caldwell

Professor of Information Systems Engineering University of Suffolk

6 Sep 2021 www.bluenovation.co.uk







Usability Testing Objectives

- 1) To understand the experience of engaging in training utilising embodied virtual reality and conversational artificial intelligence
- 2) To explore the possible contribution of embodied virtual reality and conversational artificial intelligence in a training context
- 3) To identify any issues experienced/observations made by the users during their training experience





Evaluation

This evaluation was achieved through providing research participants with access to the Career Mindset Development training module developed by Bodyswaps.

Once training had been completed, the participants engaged in a focus group. The mean age of participants was 39.6 years (SD = 10.09), participant ages ranged between 29 - 58 years.

Findings

Participants' own subjective experience of the training was overwhelmingly positive about the value of using VR for this type of training.

All participants unanimously agreed that they would learn more effectively in an immersive environment.

Report Extract



Dr Rachael Martin Senior Lecturer in Psychology for the **School of Social Sciences and Humanities**

Usability Research Report

University of Suffolk

Participant 9 "highlighted the benefit of being in a safe space to practice skills as 'to be honest many of us do not like the role play element of a

workshop .. it's always incredibly awkward'.

They **recognized the benefit** of being 'immersive, with the avatars' and that whilst it was 'weird to hear yourself back' and 'very odd looking at the avatar with your voice' it provided the opportunity to 'see and hear how you came across' ultimately helping you 'to improve' which is 'really good'."

At the core of our collaboration with Blue Novation was usability testing of a VR soft skills training package. We wanted to objectively test the viability of VR in this context with volunteer participants, and discover what worked well and what required fine-tuning. Our volunteers unanimously reported positive experiences in trialling the VR package.

They found the learning experience genuinely engaging and there was a definite willingness to try VR for future learning. They also provided valuable insights into how to make the training even more compelling and effective.

Professor Nicholas Caldwell

Professor of Information Systems Engineering, University of Suffolk

6 Sep 2021 www.bluenovation.co.uk







Feedback

Feedback from the focus group provided valuable insights into how to make the training even more compelling and effective.

Two clear suggestions emerged:

- The first was the need to allow users to orientate themselves in the virtual world prior to undertaking training as this would reduce the distraction evident from a novel environment.
- The second is around the virtual world itself, the level of detail provided and the avatars used.

Both categories of feedback will be influential in designing and refining our blended learning programmes and for future software developments.

66

"At Blue Novation we believe that learning helps individuals and businesses grow and develop, now more than ever. Although delivering training that elicits behavioural changes can be challenging, VR provides an ideal "safe space" to hone and perfect these essential skills."

Trudy Sore

Learning & Development Director
Blue Novation

Want to change the way you deliver your soft skills training?



Then we'd love to hear from you!

Get in touch trudy@bluenovation.co.uk +44 (0) 7841 835 793

Blue Novation



At Blue Novation we believe that learning fires growth, both for individuals and for businesses. We deliver forward-thinking training to help meet the challenges and opportunities of a future workplace shaped by technological change. Blue Novation has been part of the Innovation Martlesham cluster since 2013.

University of Suffolk



Located in Suffolk's county town of Ipswich, the University of Suffolk is a transformational university, absorbing the best of UK university traditions and aligning them with a twenty first century audience and a modern world of employment and entrepreneurship.

Bodyswaps



Bodyswaps is the most engaging, safe and effective way to train soft skills and bridge the ever-elusive gap between learning and behavioural change. Bodyswaps offer a library of ready-to-go workplace simulations for learners to practise their soft skills in safe and realistic environments.

6 Sep 2021 www.bluenovation.co.uk