

Chapter xx

An Overview of Virtual Business Events: Can Everyone Hear Me?

Truc H. Le and Ryan Yung

Abstract

The global COVID-19 pandemic has necessitated a fundamental shift in business events. As lockdown measures removed the viability of air travel and in-person events, organisations have had to transition to virtual alternatives. Prior to the pandemic, literature showed that the events industry has traditionally been slow to adopt technological innovations, being apprehensive to virtual events in general. On the research side, it is perhaps unsurprising then that literature on virtual events remains lacking. To address the growing importance of understanding the virtual events landscape, this chapter provides a cursory overview of virtual business events. A virtual events continuum is conceptualised to clarify the differences between the different types and platforms on which virtual substitutes of events or conferences can take place. Two virtual events are also presented as case studies, from which key takeaways and learning lessons are synthesised for future event organizers and researchers.

Introduction

The sudden and ruthless nature of 2020's global COVID-19 pandemic has forced organisations to embrace technological innovations, not only to support but also develop their business activities and to reach consumers that would otherwise be very difficult to access. In fact, innovations in technology are believed to play an important role in co-creating memorable experiences, which has been considered as an increasingly vital element in business events (Buonincontri et al., 2017). New technologies can “guarantee a greater level of information, transparency, dynamism, and customer-centricity in the co-creation process” (Buonincontri et al., 2017, p. 265). Against a background of continual rapid advancements in information dissemination technologies, researchers have postulated the potential benefits that virtual, augmented, and mixed reality would present to the events industry. The spatial depth, sense of presence, immersion and interactivity, unprecedented in traditional media platforms, suggests the technology would translate well to conferencing situations (Cheong, 1995; Gustafson, 2012; Guttentag, 2010; Hobson & Williams, 1995). However, whilst research in the education sector has found that using virtual events increases attendee engagement, motivation, and enjoyment, few of these findings have been explored in business events contexts

(Beck et al., 2019; Wei, 2019; Yung & Khoo-Lattimore, 2019). The lack of research is surprising, considering early conceptual discussions hypothesizing potential applications such as revolutionising business travel, long-distance meetings, and large-scale conventions by holding them in virtual spaces (see Pearlman & Gates, 2010; Guttentag, 2010; Williams & Hobson, 1995). The exponentially accelerated demand, interest, and acceptance of virtual events from the corporate travel industry, as a result of global lockdown, has further compounded the absence of literature on these concepts and potential applications.

Pre-COVID-19, researchers suggested that industry adoption and research of virtual reality events being limited and niche were due to barriers such as businesses still being relatively apprehensive about adopting these new technologies, alongside low perceived effectiveness, digital literacy, and awareness (Pearlman & Gates, 2010; Sox et al., 2017). Since then, the landscape of the events industry has arguably been irrevocably morphed as businesses trial virtual solutions to overcoming pandemic restrictions; in the process discovering use-cases for virtual substitutes of face to face events and meetings. In light of the paucity of research in this increasingly important subfield of tourism studies, the purpose of this chapter is to provide a cursory overview of virtual events in industry and academia, defining key terms alongside practical examples currently in practice. The chapter begins with an overview of generic concepts of virtual events before expanding into the different types of virtual events, how they are used, and what research has been done so far. Two case studies of virtual events are then explored and compared. The final section of this chapter discusses some substantial learning lessons from both theoretical and managerial perspectives, and henceforth suggests future research directions.

Generic Concepts of Virtual Events

The term virtual event is an ambiguous one. In this section, the generic concept and theoretical foundations of virtual conferencing will be examined. The section will begin with the types of virtual events discussed in literature thus far and where they are placed on the virtuality continuum. For the purposes of this chapter, the conferences and events that will be examined are ones focused on business settings and purposes; otherwise known as the MICE (meetings, incentives, conventions, and exhibitions) sector (Business Events Council Australia - BECA, n.d.).

The definition for an event in this chapter is “events where the primary activity of the attendees is to attend educational sessions, participate in meetings/discussions, socialize, or attend other organized events” (Fenich, 2012, p. 323). Virtual events are where forms of computer-mediated communication (CMC) are introduced (Çakir, 2002). Having CMC introduced means that at some level, one (or more) of the participants of an event is not physically present at the event location. The level

of integration of CMC into the conference determines the categorisation and where the conference sits on the virtual events continuum (Figure 1). The categories in the continuum include *face to face (F2F)*, *hybrid*, *virtual events*, and *virtual reality events* (Erickson, Kellogg, Shami, & Levine, 2010; Huang, Backman, McGuire, Backman, & Chang, 2013; Sox, Kline, Crews, Strick, & Campbell, 2017). Before the COVID-19 pandemic, *F2F events* were still at the forefront of the business events sector and involved participants meeting in a physical location (Sox et al., 2017). Since the travel ban in response to the pandemic, conferences and events have been forced into assimilating some form of virtuality. *Hybrid events* “involve a mixture of physical events with elements of a virtual event usually running simultaneously and with overlapping content and interactive elements” (VEI, 2011, p. 1). An example of this would be conferences or keynotes where one presenter is physically at the location whilst the other is there through video conferencing. *Virtual events*, arguably the most ubiquitous of the categories since the coronavirus pandemic, include desktop sharing (Citrix), webcasts (WebEX), and video conferencing (Zoom, Teams) (Pearlman & Gates, 2010). In these instances, participants are communicating visually, but are not in the same physical locale. Lastly, on the far right of the virtual events continuum, are virtual reality events. *Virtual reality (VR) events* are events held in virtual worlds such as Second Life or VR chat, where participants attend meetings, conferences, or exhibitions held in fully computer-generated virtual environments. Virtual worlds like VR chat are computer-based simulated 3D virtual environments that allow synchronous communication channels for human-controlled avatars to meet and interact with people in real time, and leave with an impression that they have visited a parallel world (Huang et al., 2013; Zelenskaya & Singh, 2011). When compared to the Reality-Virtuality Continuum by Milgram, Takemura, Utsumi, and Kishino (1994), the above categories are determined by how much of the environment is real, and how much is virtual or computer-generated. In this study, the focus will be on the right side of the continuum, which are events mediated by varying forms of virtual platforms. Table 1 below summarises the event categories and characteristics.

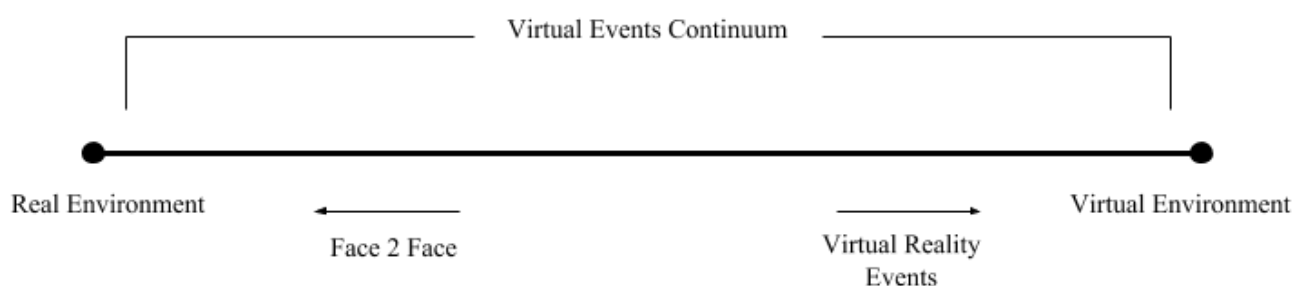


Figure 1. Virtual Event Continuum (adapted from Milgram et al., 1994)

Table 1. Event Categories and Characteristics

Event Category	Characteristics	Examples
F2F	Participants in physical location	N/A
Hybrid	Incorporation of interactive virtual elements at combination of physical and virtual locations	Virtual presenter at F2F conference
Virtual	Visual communication without physical elements	WebEX, Zoom, Teams
Virtual Reality	Participants in virtual environment	VR Chat, DreamOS, Second Life

Current Landscape of Virtual Events

Early conceptual discussions hypothesised virtual events revolutionising business travel, long-distance meetings, and large-scale conventions by holding them in virtual spaces; or planning, simulating, and sharing events within a virtual environment, which potential clients and consumers can explore and interact with (see Guttentag, 2010; Williams & Hobson, 1995). Research since then suggests that in practical contexts, virtual events will save time and money. Business event attendees meet to buy, sell, negotiate, develop professional networks, cooperate, coordinate, disseminate and gather information from each other (BECA, 2018). Globalisation and geographically-expanded markets have led to growing calls for improved infrastructures for mobility (Gustafson, 2012). In 2017, global business travel spending was a 1.33 trillion USD industry (Statista, 2018). Companies like IBM, attempted to curtail these travel costs during the late-2000s economic downturn by organising their Academy of Technology General Meeting (AGM), in 2008 and 2009, as a virtual reality event in the Second Life virtual world (Erickson et al., 2010). IBM estimates it saved about \$350,000 by hosting the 3-day conference in Second Life (Morrison, 2009).

Apart from financial considerations, virtual conferences have also been suggested as an alternative to reducing time away from both work and home for attendees (Welch, Ray, Melendez, Fare, & Leach, 2010). The ability to attend events in virtual reality could supplant much business travel (Cheong, 1995; Gustafson, 2012; Guttentag, 2010; Hobson & Williams, 1995), now an omnipresent feature of working life for many millions of people around the globe (Beaverstock, Derudder,

Faulconbridge, & Witlox, 2016). On average, corporate travellers take 14 business trips per year (GBTA, 2017). Where there was increasing growth of *hybrid*, and more importantly, *virtual events* pre-pandemic, the post-pandemic events landscape has seen exponential uptake in the utilisation of particularly *virtual events* in countries where lockdown measures have been more extensive. Even where safety regulations have allowed *hybrid events*, the increasing adoption of these new practices could have wide-ranging ramifications on the corporate travel industry as both the number of business trips and corporate costs spent on those trips could lower significantly.

The growth and adoption of virtual events can be attributed to several factors (apart from COVID-19); primarily the general population's increasing familiarity with online platforms, the maturation of virtual technology, and crucially, the improvements to internet bandwidth (vital for real-time experiences) (Pearlman & Gates, 2010). The scope of virtual events has moved from simple live-streaming to bi-directional interactive desktop sharing video conferencing applications like Citrix and webcast platforms like WebEx. Companies like VMware (<https://www.inxpo.com/assets/pdfs/case-studies/VmWare-Case-Study.pdf>) and Kaltura (<https://corp.kaltura.com/blog/virtual-summit-conference-without-borders/>) have held their annual global user conferences as virtual events. Designed to look similar to conventional *F2F* events, the *virtual events* mixed computer-generated exhibition halls, booths, and agendas, with live video feeds of speakers, staff, and panel sessions; all accessed from attendees' home PCs where chat rooms and topic-specific channels allowed interactivity directly with the live event as well as other attendees. Crucially, the *virtual events* also allowed all content to also be viewed after the conclusion of the live events, extending content value. For *VR events* held in virtual worlds such as Second Life, attendees create avatars (3-dimensional representations of themselves) before virtually roaming around the venue. Companies such as Intercontinental Hotel Group (IHG) even launched a Crowne Plaza inside Second Life complete with business meeting facilities including audio, video, and slideshow streaming for various configurations and group sizes (Huang et al., 2013). As immersive technologies continue to advance alongside internet bandwidth capabilities, research has postulated that these *VR events* will become more and more immersive (Guttentag, 2010). Additionally, for organizers, any form of virtual events allow easier collection of analytics such as attendee behaviour, to leverage the data later.

Despite their growing popularity, empirical research on virtual or hybrid conferences in the tourism and hospitality literature appears to be extremely limited (Sox et al., 2017; Wei, 2019). In their literature review on virtual and hybrid meetings, events, and conferences, Sox et al. (2017) found that research on virtual events have largely been approached from the education sector; the number of articles in education journals were almost double compared to articles in tourism and hospitality journals. These articles discussed virtual and blended learning technologies (e-learning) such as

lecture capture. Research has shown that innovative teaching methods such as the use of virtual worlds and virtual reality increases enjoyment, motivation, and engagement of students (Deale, 2013; Hsu, 2012; Huang, Backman, Chang, Backman & McGuire, 2013; Kurilovas, 2016). However, few of these findings have been examined from a business events point of view.

Additionally, Sox et al (2017) found that *F2F* meetings were still preferred to *virtual events*. This is unsurprising as the MICE sector has been traditionally slow to adopt IT solutions (Pearlman & Gates, 2010). The hesitation can also be explained by Gustafson (2012)'s warning that any large transition to *virtual* events in place of business travel involves a logistically complex mix of policies, contractual agreements with travel agencies, feedback and sanctions, within and between organizations. While there appears to be an overwhelming industry opinion that *virtual meetings* will not replace *F2F meetings*, many meeting planners appear to think *virtual meetings* can be used in place of smaller (20-30 attendees) *F2F* events (Carlson Wagonlit Travel, 2010). *Hybrid events* were also found to be an acceptable combination of the two from the perspectives of both organisers and attendees (Pearlman & Gates, 2010; Sox et al., 2017).

In terms of *VR events*, there has been apprehension toward using virtual worlds for businesses mainly due to the steep learning curve and inability to collaborate on conventional business platforms such as Microsoft Office (Pearlman & Gates, 2010). Pearlman and Gates (2010) found that businesses are apprehensive and still see VR/Augmented Reality (AR) in the business events sector as a fad rather than the future. In a later study on meeting planning for generation Y audiences, Sox, Kline, and Crews (2014) found perceived effectiveness to be a major barrier to virtual meeting adoption. Crucially, it has to be noted that research conclusions thus far were based on articles only up to 2012 (Sox et al., 2017). Considering the rapid rate of technological expansion, these findings may not be currently relevant; particularly in light of the forced adoption and acceptance of virtual events during the pandemic. For example, at the end of 2018, technology start-ups like Dream (<https://dreamos.com>) released VR applications solely focused on collaboration and productivity in professional business settings. Dream OS has productivity tools built-in such as Dropbox, Google Drive, and web browsers for collaboration and presentations, all in 3D VR so users never need to remove their head-mounted devices throughout the session. This signals potential avenues for researchers to revisit, especially with VR and augmented reality (AR)'s growing prevalence. It would be interesting for future researchers to explore how and to what extent apprehension toward VR events for corporate use has shifted post-COVID.

Case Studies

VR technology has been increasingly adopted in business events. Although there was an ongoing trend of adopting *hybrid events* as an alternative to *virtual events* and *virtual reality events* in the business events sector (Pearlman & Gates, 2010; Sox et al., 2017), this trend has changed substantially since COVID-19. As communities go online in the wake of the pandemic, business events are following that trend and reaping the benefits. The \$1.5 trillion global business event industry has seen events either closed, rescheduled, or gone virtual due to the pandemic (Data Connectors, 2020). Since the start of 2020, the industry has experienced an unprecedented growing number of *virtual events* (and *hybrid events*) as the pandemic continues and travel budgets are cut (Seraphin, 2020), while *virtual reality events* are still scarce in number. This section discusses two business events including Salesforce's *World Tour Sydney Reimagined* (*virtual event*) and HTC's *Virtual VIVE Ecosystem Conference (V²EC 2020)* (*virtual reality event*), while touching base on the *IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR)* as a combination of *virtual* and *virtual reality event*. These events were chosen because they were held in 2020 in the wake of COVID-19 pandemic, yet contain different purposes, key features and implications for future virtually-held business events. Each case study begins with the organisation background and event rationale, the key features of the event, subsequently outlines the outcomes and concludes with implications for future events.

Case Study #1: Salesforce's World Tour Sydney Reimagined - March 2020 (Virtual Event)

Organisation Background

Founded in 1999, Salesforce is a global company pioneering the revolutionary idea of replacing traditional desktop customer relationship management (CRM) software with integrated CRM in the cloud (so-called Salesforce Customer 360 Platform), making it accessible anytime from anywhere. Salesforce Customer 360 Platform provides powerful, connected products for improving business marketing, sales, commerce, service, IT, and more. Today, Salesforce's cloud platform is the world's #1 CRM solution (Salesforce, 2020).

Event Rationale

Salesforce is known for its large-scale business-to-business (B2B) conferences. The annual Sydney World Tour conference is Salesforce's largest in the Asia Pacific (APAC) region, normally attracting around 15,000 onsite attendees and taking more than six months to organise. Instead of cancelling the conference in 2020 due to COVID-19, the company "reimagined" the massive B2B convention to be delivered online in just ten days - *World Tour Sydney Reimagined* (<https://www.salesforce.com/au/events/worldtour/syd20/overview/>). *World Tour Sydney*

Reimagined delivered a full program to businesses worldwide, streamed from Australia completely online for the first time.

Event Key Features

Sydney World Tour had initially been scheduled to take place in a physical venue, featuring more than 150 sessions. The reimagined version was slimmed down and eventually featured more than 100 speakers in a mix of live and pre-recorded video streams made available online, and an expo featuring 18 virtual chat rooms. The International Convention Centre in Sydney was transformed into a series of Salesforce-branded studios. While many of them were live-streamed from these physical studios with appropriate social distancing, some speakers pre-recorded their sessions. Salesforce also recreated the trade show and exhibition hall element of the live event in meeting rooms at its Sydney and Melbourne offices, allowing its software engineers to do live demos in 18 different 'rooms', as well as offering live Q&A, and one-to-one consultations (Perez, 2020).

Due to the level of complexity and large scale of the event, the event could have taken months to recreate. Being "reimagined" within ten days, there had been substantial work on content, planning and speakers and to maintain a high level of customer engagement.

Team Building

The APAC Marketing Team oversaw the creation of a series of work streams for *World Tour Sydney Reimagined*. Each one focused on a different aspect of the event: content, engagement, and communications. Other subgroups covered online streaming, live demos, customer management, and more.

Regular scrums ensured everyone knew what deliverables were most pressing. Scrum is a framework that helps teams work together. Much like a rugby team (where it gets its name) training for the big game, scrum encourages teams to learn through experiences, self-organise while working on a problem, and reflect on their wins and losses to continuously improve. There were meetings with headquarters in the U.S. every morning and with the local APAC team in the afternoon.

Moreover, getting leadership buy-in with visuals from the start was important. The APAC Marketing Team stressed on the importance of creating visuals to help people understand what the event was going to look like and what the company's production values would be. For the event, the team built slides that replicated looking at a presentation through a screen (see Figure 2) (Perez, 2020).



Figure 2. Slides that replicated looking at the presentation (Fleming, 2020)

Prioritisation was another key. This was done by stopping answering everyone's questions so the team could focus on prioritisation. "We didn't want to be overwhelmed with the amount of challenges that we had to solve," recounts Derek Laney, Salesforce's Head of Solutions and Product Marketing, Asia Pacific (Perez, 2020).

Content Building

The World Tour Sydney team procured a broadcast location and then set to work on content programming. A war-room team was assigned within the first few hours. On day one, the team determined which of the event's 150 sessions would translate best to a virtual format. They came up with a plan for the top 30 sessions and all the people needed to deliver them. It is recommended working with the wider team on a need-to-know basis to stay on target and move fast. Once again, prioritisation was key. "It's okay if there's ambiguity around what the process is," Laney said. "Not to say that we kept anything confidential, but we needed to focus. Opening up ideas to a larger group can create distraction." As a result, event organisers should determine the right time for open collaboration and the right time to be directive to avoid clashing interests (Perez, 2020).

Keeping Audience Engaged

Streaming content is relatively easy but building in two-way interaction is a challenge. The initial live event was meant to include an expo hall, so the team built a digital experience inspired by the act of browsing booths. Attendees from around the world could explore 18 virtual rooms based on Salesforce Customer 360. A company expert hosted each room, sharing demos with visitors and answering questions in real time. The experience let visitors engage with content in a way that was more active than watching a video and less formal than a scheduled meeting. Social media could also share highlights and preserve an element of two-way, live interaction. The social team worked to add interactive activities such as contests, Q&As, polls, and other fun moments into the mix (Perez, 2020).

Preparing the Team for Live AV

More importantly, it should be noted that being on camera on a set is very different from being in front of a live audience. Speakers used to a live environment are now in a feedback vacuum, so they must project confidence to engage the audience. Event organisers must show speakers what the set and overall experience will look like for viewers. Also, it is important to encourage presenters to rehearse in front of a camera as early as possible, which then gives them the opportunity to see what they look like while presenting. By doing that, they can empathise with the viewer's experience and change their delivery (Perez, 2020).

There were also a few tips on maintaining visual quality. Firstly, the duration of sessions need to be shortened because attention spans are shorter online. Secondly, a conversational format with multiple people talking to each other is preferred since a variety of speakers makes for more engaging discussion. Thirdly, the camera only sees a one-by-one meter square, so the detail of what's in that area and how it will appear to viewers is really important. Last but not least, ensure that content is accessible for the visually challenged and hearing impaired, and if the event is for a global audience, consider translation services for captioning (Perez, 2020).

Keeping All Stakeholders Briefed

It is vital to communicate directly with sponsors, partners, and customers about the event's pivot. For the most part, many stakeholders are in the same situation and will understand the event organiser's decision. Since they have a stake in the event's success, collaborate with them on shifting content programming if needed. Furthermore, remember to consider briefing the sales team when the event is being pivoted. The in-person event was a significant opportunity for them to gain new leads, connect with existing accounts, and win new deals. Same principles apply to virtual events. It is important to keep them in the loop so they can plan accordingly. This can be done by (1) holding briefings and posting updates on internal channels; (2) building slides and renderings that replicate what could be seen on screen so the sales team knows what the event will look like; (3) recording a quick one-minute

explainer video to give employees a chance to sample the experience; and (4) demonstrating the production quality so sales can relay progress to their clients (Perez, 2020).

Event Outcomes

By adopting such innovative strategies within a short timeframe, Salesforce's *World Tour Sydney Reimagined* outperformed face-to-face attendances by 3000 with 13,000 registered attendees and 80,000 views. It attracted more than 1.5 million views on the day across Facebook, Twitter, LinkedIn and YouTube, while 80,000 tuned into Salesforce's live platform, giving the organiser their details, and engaging with everything the event had to offer on launch day, including the online access to all 100 sessions (Howarth, 2020).

This achievement was super impressive in terms of the short turnaround time and the team's ability to adapt to the fast-evolving crisis. However, what was even more impressive was how successful the new format was at engaging the audience. The statistics are extraordinary, and the new event, Salesforce's *World Tour Sydney Reimagined* is now a poster event for how large-scale virtual events can be created to engage a vast amount of online audiences.

Case Study #2: HTC's Virtual VIVE Ecosystem Conference (V²EC 2020) - March 2020 (Virtual Reality Event)

Organisation Background

Founded in 1997, HTC is a Taiwanese consumer electronics company headquartered in Taiwan. In 2016, HTC began to diversify its business beyond smartphones, having partnered with Valve to produce a virtual reality platform known as HTC VIVE. HTC VIVE is branded as the premier VR platform and ecosystem that creates true-to-life VR experiences for businesses and consumers. The VIVE ecosystem (<https://www.vive.com/>) is built around premium VR hardware, software, and content.

Event Rationale

To help enable collaboration within and growth of the eXtended Reality (XR) industry, HTC has conducted its annual XR industry conference (the VIVE Ecosystem Conference) every year since 2016. In 2020, in the face of COVID-19, the event organisers decided that it would be online, streamed live to YouTube. Considering the conference being about VR, HTC decided to conduct the entire conference within VR and renamed the event *the Virtual VIVE Ecosystem Conference* (stylised as V²EC). V²EC 2020 (<http://htc-vive.mikecrm.com/zKgh3os>) marked the first major physical industry event that has been replaced fully by an interactive VR digital counterpart. The inability to meet and communicate face to face due to COVID-19 triggered an invaluable opportunity for HTC to showcase VR's potential (through HTC VIVE) in a bid to break through conventional thinking and physical boundaries (ENGAGE, 2020).

Event Key Features

V²EC 2020 took place on March 19th in Engage VR (<https://engagevr.io/>), which is the education and training-focused social VR platform created by Immersive VR Education. Engage VR allows attendees to have 1:1 social interactions and high visual quality, while offering management tools to conduct a large-scale event with or without a VR device. Virtual attendees registered and downloaded Engage VR to take part, and followed along via 6DOF VR headset or livestream via monitor. The conference was broadcasted in both Chinese and English, and the discussions were live in both languages in the virtual space (Hayden, 2020).

Approximately two thousand attendees from over 55 countries registered for the conference, with worldwide speakers attending the conference in the form of their own custom VR avatars made specifically for the event through the custom avatar builder (see Figure 3). The attendees interacted with each other with freedom and the special space that was created for the conference, just as they would expect from a physical conference. Executives and experts from leading XR and telecom industry players shared their insights on the impending impact of XR innovations on the world and the audience were treated to a unique immersive conference experience not possible in the real world. The conference also provided in-depth technical tutorials in VR on new advanced developer tools created by VIVE for its developer community. Using an immersive environment to teach VR development also made some complex issues much simpler to grasp (ENGAGE, 2020).



Figure 3. VR avatar through the custom avatar builder (Antunes, 2020)

COVID-19 was highlighted at *V²EC 2020* in an unusual way. *V²EC 2020* made it interactive and engaging by putting all attendees in hazmat suits and bringing out Coronavirus models, which floated above their heads (see Figure 4). This was not only to showcase the power of VR technology but also an example of how to use VR influence to impact for the greater good. In addition, crowd controls at *V²EC 2020* were taken into consideration in the virtual world. Conference attendees were able to use their arms to express themselves, but they were forced to remain seated and muted during the conference. To further engage the audience, the conference also included 3D virtual elements like models of whales and trains (Huffman, 2020).



Figure 4. VR technology with coronavirus models (Huffman, 2020)

Event Outcomes and Challenges

Prior to the pandemic, the mindset of many people is that XR is a nice-to-have technology. Post-pandemic, the benefits of XR to overcome the physical barriers between people could make it a must-have technology over time. XR is not considered as a specific game or application like with prior computing technologies, but rather the ability to regain a part of the daily life lost due to the new reality facing the world today. Working-from-home, distance learning, home-based fitness, immersive entertainment and networked social interactivity will all be part of the new normal in our lives. In addition, virtual events save the time and cost of traveling and will have huge environmental benefits even when the initial health concerns of the virus subside. On stage at *V²EC 2020*, a new strategic

partnership between HTC and IVRE was announced, allowing HTC to distribute the Engage VR platform globally (ENGAGE, 2020).

Although *virtual reality events* such as *V²EC 2020* allow a greater sense of immersion, presence, and the ability to 'walk away' from the main presentation and network, the business events industry's low adoption of VR equipment and a shortage of VR equipment emphasise the fact that VR environments have not yet been scaled up for large audiences. The barriers to entry of VR technologies in the business event industry include bandwidth challenges across the VR application, lack of eye contacts with speakers, and reading participants' body language, tone and emotions to better understand the messages they are trying to convey (Wee, 2020). Whilst the adoption of such technologies is still evolving and improving, the pandemic will, perhaps, trigger a shift towards the serious pursuit and adoption of such technologies in the business events industry as travel remains elusive and uncertain in the foreseeable future.

Supplementary Case Study: The IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2020) - March 2020 (Virtual & Virtual Reality Event)

For context, there were other events categorised on the virtual event continuum between *virtual* and *virtual reality events* such as *the IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2020)* (<http://ieeivr.org/2020/online/>), which was also hosted in March, 2020 as a result of COVID-19. The conference utilised a customised version of Mozilla's Hubs (<https://hubs.mozilla.com>) social VR platform to host the virtual rooms. Conference attendees joined the Hubs rooms from most web browsers by using 2D screens or immersive VR displays. The online conference site was located at <https://ieeivr.online>, and was available to all registered conference attendees. The virtual rooms included spaces to co-watch the video streams of papers, keynotes, panels, and workshops in small groups, visit virtual poster sessions, the 3DUI contest, and demos at the designated times, and have social activities during breaks and after-hours. IEEE VR 2020 as a result made use of various advantages of a virtual event while managing to engage the attendees with immersive environments provided by VR platform Mozilla's Hubs (IEEE VR, 2020). All three events discussed are plotted on the virtual events continuum as shown in Figure 5.



Figure 5. The case studies plotted on the virtual event continuum

Learning Lessons

Technical Lessons

An important distinguishing difference in these platforms is the hardware. Conventional virtual event platforms, and even Second Life, are utilised on 2 dimensional platforms such as desktops, laptops, or displays used in teleconferencing equipment. Innovation and moving toward 3-dimensional platforms is rooted in the maturation of VR technology, which has experienced exponential growth in recent years. As evidence, the VR market size is projected to double annually from USD 3.7b in 2016 to USD 40.4b in 2020 (Statista, 2016). The importance of VR as a platform lies in research suggesting VR's ability to visualise spatial depth, unprecedented in traditional media forms, as its biggest strength when applied to tourism contexts (Guttentag, 2010). Theoretically, the ability to visualise spatial depth is a key factor in improving the user's sense of presence, a central tenet in VR research.

Presence is widely accepted to be the sense of 'being there' (Nash, Edwards, Thompson, & Barfield, 2000; Schuemie, van der Straaten, Krijn, & van der Mast, 2001; Schultze, 2010; Slater, Usoh, & Steed, 1994). Ultimately, when sense of presence in a virtual environment (VE) is high enough, the user achieves a perceptual illusion of non-mediation (Bartle, 2007; Lombard & Ditton, 1997). This

means the user starts viewing the VE as an actual place, suspending disbelief, and feeling present within the computer-mediated environment (Bystrom, Barfield, & Hendrix, 1999; Draper, Kaber, & Usher, 1998; Nicovich, 2017; Sheridan, 1992; Steuer, 1992).

Lessons for Business Event Organisers

Key Considerations for a Virtual Business Event

Hosting a virtual event does not entirely follow the same process as hosting an in-person event. Accumulating from key features and lessons learned from the case studies above, there are some key elements for business event organisers to consider when planning a virtual event (Event Birdie, 2020; Khim, 2020; Donkin, 2020):

- 1) Establish the vision and parameters for success.
 - Go back to the event objectives: What did you want to achieve from your in-person event? Is it still possible to achieve that right now? With an in-person event out of the question, what's the best way to achieve it? What do you want the event to look like? What topics do you want to cover?
 - Know the audience: Pinpoint your target audience so that you can find speakers who also want to reach that audience. If you have a set number of expected registrations, you can attract speakers with an idea of what their reach will be if they participate.
- 2) Reach out to the right speakers and choose the right partners.
 - Get expert speakers in the targeted industry: The relationships can be built with these industry experts thus enhancing the brand association and credibility.
 - Get the speaker with large audiences: This helps develop event credibility and drive the number of registrations.
 - Choose the right content partners: Technology can be tricky, so be careful about who you choose to represent your brand. Technology can enhance an online experience, but what looks amazing in a live event space may not always transition well onto a desktop, television or mobile screen. The main challenge being how to "hold" or fully engage an audience for the duration cast.
- 3) Create event virtual assets.
 - The assets included in a virtual event may vary based on the event type (i.e. *hybrid*, *virtual*, *virtual reality*, or a combination of *virtual* and *virtual reality event*), yet they comprise a number of fundamental elements such as landing page (home page), agenda page, session page, live Q&A, and social media images. Other elements vary depending on the event type and key features offered in the event.

- Content distribution: Look at the content with a very critical eye. Shorten each session, and choose only those that will be engaging enough to keep attention from attendees who do not have to get up and “sneak out” of a conference hall, but only to click over to a new tab.

4) Promote the event.

- Promotion through key speakers: Ask speakers to promote the event to their email list and on their blogs and social profiles. This also helps demonstrate how much interest each speaker drives and how many registrations they contribute.
- Promotion through blog posts and social posts: Brainstorm promotion post topics based on the topics the speakers will discuss, and come up with a publishing cadence for the promotional posts.
- Build anticipation before the event: Determine ways to get registrants to share the event before it happens through a contest or giveaway, and how to get registrants to engage with speakers before the event. These tactics help enhance the event's exposure to the public.

5) Go live.

- Aim for engagement, not viewership: Making people watch an experience is materially different than enabling people to participate in it. Maintaining audience attention will be the biggest challenge, people really are only going to see one presenter on their own for around 18 minutes maximum.
- Align with the sales team: The event would have been great for sales enablement. Sales representatives could use the event as a piece of content to share with prospects and be helpful. It is also important to let the sales representatives know about the event and how to talk about it in case prospects bring it up on a call.

6) Create a post-event plan and analysis.

- Creating a post-event plan is essential: Have a communication plan for the registrants, whether it's sending them content, telling them about the company's products or services, or asking for feedback.
- Have parameters in place for post-event analysis: To prove that the virtual conference is worth the time and effort, do an analysis of the traffic and registrations the event receives, video views, and send a survey to the registrants. These parameters can also tie back to the event revenue, number of product sign-ups and new clients retrieved after the event.

The Future of Virtual Business Events

In the wake of COVID-19 pandemic, the importance of virtual events is increasingly evident in the business events industry. Virtual events therefore will be dominant in terms of frequency and importance in response to advances in global technology, as well as in response to globalisation forces and the costs or risks of travel amid COVID-19. Perhaps one positive from the global pandemic is organisations and corporations being forced to incorporate virtual events in one way or another, in the process accelerating development and acceptance of the technology for business events purposes. Nevertheless, Seraphin (2020), in his review of event studies in the face of the pandemic, reinforces Getz's (2012) futurist ground about virtual events, that virtual events will only be "in addition to, and not a substitute for, live event experiences" (p. 14). This is because live events, new technologies, and social media have been playing a fundamental role in determining event attendees' satisfaction and revisit intention, especially for Millennials. Indeed, 48% of Millennials are saying they attend live events so that they have something to share on social media (The Pulse Report, 2020). However, it is important to mention that as of the end of 2020, the ability to return to attending in-person events, particularly of the international nature, is dependent on measures of pandemic resolution that are not yet evident.

Regardless, there has been an ongoing proposition that a hybrid model can be adopted for the future business events industry, which allows for the ongoing preference for virtual events, considering the substantial changes in lifestyles after lockdown. Humans still need interaction with peers to improve their development. The benefits of in-person events shine through in terms of human interaction, which has been missed during lockdown. However, online events bring more people together, without the limits of space, all without the environmental damage of thousands of people to one place, and reduce time and money for business travels. "Even online events limit participation, just in a different way, what I want to see is humanity developing new strategies of virtual and physical interaction with social inclusion for those who cannot access these types of communication", said Dr. Jonas Carvalho e Silva, a specialist in clinical Psychology and Culture (DW Akademie, 2020). A future that combines the best of both worlds, where online is here to stay: 'Hybrid formats will become prominent in the foreseeable future'.

References

- Antunes, J. (2020). HTC Vive: the first fully online conference in Virtual Reality. *Provideo Coalition*. Retrieved from <https://www.provideocoalition.com/htc-vive-the-first-fully-online-conference-in-virtual-reality/>
- Bartle, R. (2007). Presence and Flow. *Techné: Research in Philosophy and Technology*, 10(3), 39-54. doi: 10.5840/techne200710311.
- Beaverstock, J. V., Derudder, B., Faulconbridge, J. R., & Witlox, F. (2016). International business travel: some explorations. *Geografiska Annaler: Series B, Human Geography*, 91(3), 193-202. doi: 10.1111/j.1468-0467.2009.00314.x.
- Beck, J., Rainoldi, M., & Egger, R. (2019). Virtual reality in tourism: a state-of-the-art review. *Tourism Review*, 74(3), 586-612. doi: 10.1108/tr-03-2017-0049.
- Buonincontri, P., Morvillo, A., Okumus, F., & van Niekerk, M. (2017). Managing the experience co-creation process in tourism destinations: Empirical findings from Naples. *Tourism Management*, 62, 264-277. <https://doi.org/10.1016/j.tourman.2017.04.014>
- Business Events Council Australia - BECA. (2020). About business events. Retrieved from https://www.businesseventscouncil.org.au/page/about_business_events.html
- Bystrom, K.-E., Barfield, W., & Hendrix, C. (1999). A conceptual model of the sense of presence in virtual environments. *Presence: Teleoperators and Virtual Environments*, 8(2), 241-244. doi: 10.1162/105474699566107.
- Çakir, A. E. (2002). Virtual communities - a virtual session on virtual conferences. *Behaviour & Information Technology*, 21(5), 365-371. doi: 10.1080/0144929021000048439.
- Cheong, R. (1995). The virtual threat to travel and tourism. *Tourism Management*, 16(6), 417-422. doi: 10.1016/0261-5177(95)00049-T.
- Data Connectors. (2020). Virtual Summits and the Future of Business Gatherings in a Post-COVID Era. Retrieved from <https://www.dataconnectors.com/virtual-event-infographic/>
- Deale, C. S. (2013). Incorporating Second Life into online hospitality and tourism education: A case study. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 13, 154-160. doi: 10.1016/j.jhlste.2013.09.002.
- Donkin, H. (2020). What we learnt working on Salesforce World Tour Sydney Reimagined. *Mahlab*. Retrieved from <https://mahlab.co/blog/online-event-salesforce-world-tour-reimagined/>
- Draper, J. V., Kaber, D. B., & Usher, J. M. (1998). Telepresence. *Human Factors*, 40(3), 354.
- DW Akademie. (2020). Life after lockdown: Virtual events could be here to stay. Retrieved from <https://www.dw.com/en/life-after-lockdown-virtual-events-could-be-here-to-stay/a-53982711>

- ENGAGE. (2020). V²EC 2020 – Virtual VIVE Ecosystem Conference. Retrieved from <https://engagevr.io/2020/04/v%C2%B2ec-2020-virtual-vive-ecosystem-conference/>
- Erickson, T., Kellogg, W. A., Shami, N. S., & Levine, D. (2010). Telepresence in virtual conferences: An empirical comparison of distance collaboration technologies. *Proceedings of CSCW 2010*.
- Event Birdie. (2020). Event Showcase | Salesforce World Tour Reimagined. Retrieved from <https://www.eventbirdie.com/event-showcase-salesforce-world-tour-reimagined/>
- Fleming, C. (2020). Salesforce Tour [Image]. Retrieved from <https://twitter.com/colinjfleming/status/1234975085703778304>
- GBTA. (2017). *GBTA BTI Outlook — Annual Global Report & Forecast July 2017*. Retrieved from https://www.gbta.org/cvweb/cgi-bin/msascartdll.dll/ProductInfo?WRP=DNNProductInfo.htm&productcd=RESEARCHRPT173&WMT=main_template_Product.htm
- Getz, D. (2012). *Event studies. Theory, research and policy for planned events*. London, UK: Routledge.
- Gustafson, P. (2012). Managing business travel: Developments and dilemmas in corporate travel management. *Tourism Management, 33*(2), 276-284. doi: 10.1016/j.tourman.2011.03.006.
- Guttentag, D. A. (2010). Virtual reality: Applications and implications for tourism. *Tourism Management, 31*(5), 637-651. doi: 10.1016/j.tourman.2009.07.003.
- Hayden, S. (2020). HTC is Hosting Its Next Developer Conference in VR Amid Coronavirus Concerns. Road to VR. Retrieved from <https://www.roadtovr.com/htc-vec-v2ec-2020-vr-developer/>
- Hobson, J. S. P., & Williams, A. P. (1995). Virtual reality: A new horizon for the tourism industry. *Journal of Vacation Marketing, 1*(2), 124-135. doi: 10.1177/135676679500100202.
- Howarth, B. (2020). Can virtual events fill the physical conference gap? *CMO from IDG*. Retrieved from <https://www.cmo.com.au/article/672004/can-virtual-events-fill-digital-conference-gap/>
- Hsu, L. (2012). Web 3D simulation-based application in tourism education: A case study with Second Life. *Journal of Hospitality, Leisure, Sport & Tourism Education, 11*(2), 113-124. doi: 10.1016/j.jhlste.2012.02.013.
- HTC Vive: the first fully online conference in Virtual Reality. *Provideo Coalition*. Retrieved from <https://www.provideocoalition.com/htc-vive-the-first-fully-online-conference-in-virtual-reality/>
- Huang, Y.-C., Backman, S. J., McGuire, F. A., Backman, K. F., & Chang, L.-L. (2013). Second Life: the Potential of 3D Virtual Worlds in Travel and Tourism Industry. *Tourism Analysis, 18*(4), 471-477. doi: 10.3727/108354213x13736372326154.

- Huffman, A. (2020). REVIEW: V²EC 2020 Virtual VIVE Ecosystem Conference. *Medium*. Retrieved from <https://medium.com/@chicktech/review-v%C2%B2ec-2020-virtual-vive-ecosystem-conference-17255000dfa>
- IEEE VR. (2020). Online Experience. Retrieved from <http://ieeevr.org/2020/online/>
- Khim, D. L. (2020, September 08). How to Launch a Virtual Conference for Lead Generation and Customer Acquisition: A Step-by-Step Guide [Blog post]. Retrieved from <https://blog.hubspot.com/marketing/virtual-conference>
- Kurilovas, E. (2016). Evaluation of quality and personalisation of VR/AR/MR learning systems. *Behaviour & Information Technology*, 35(11), 998-1007. doi: 10.1080/0144929x.2016.1212929.
- Lombard, M., & Ditton, T. (1997). At the Heart of It All: The Concept of Presence. *Journal of Computer-Mediated Communication*, 3(2). doi: 10.1111/j.1083-6101.1997.tb00072.x.
- Milgram, P., Takemura, H., Utsumi, A., & Kishino, F. (1994). Augmented reality: A class of displays on the reality-virtuality continuum. *Telem manipulator and Telepresence Technologies, Proceedings of SPIE Vol. 2351*, 282-292.
- Nash, E. B., Edwards, G. W., Thompson, J. A., & Barfield, W. (2000). A Review of Presence and Performance in Virtual Environments. *International Journal of Human-Computer Interaction*, 12(1), 1-41. doi: 10.1207/s15327590ijhc1201_1.
- Nicovich, S. (2017). Presence as a Sense of Place in a Computer Mediated Communication Environment. Retrieved from http://digitalcommons.kennesaw.edu/cgi/viewcontent.cgi?article=1211&context=ama_proceedings
- Pearlman, D. M., & Gates, N. A. (2010). Hosting Business Meetings and Special Events in Virtual Worlds: A Fad or the Future? *Journal of Convention & Event Tourism*, 11(4), 247-265. doi: 10.1080/15470148.2010.530535.
- Perez, L. (2020). How to Turn an In-Person Event Into a Compelling Virtual Experience. *Salesforce Blog*. Retrieved from <https://www.salesforce.com/blog/2020/03/pivot-live-stream-virtual-event-fast-business.html>
- Salesforce. (2020). About Us. Retrieved from <https://www.salesforce.com/au/company/about-us/>
- Schuemie, M. J., van der Straaten, P., Krijn, M., & van der Mast, C. A. (2001). Research on presence in virtual reality: a survey. *CyberPsychology & Behavior*, 4(2), 183-201. doi: 10.1089/109493101300117884.
- Schultze, U. (2010). Embodiment and presence in virtual worlds: a review. *Journal of Information Technology*, 25(4), 434-449. doi: 10.1057/jit.2010.25.

- Seraphin, H. (2020). COVID-19: an opportunity to review existing grounded theories in event studies. *Journal of Convention & Event Tourism*. doi:10.1080/15470148.2020.1776657
- Sheridan, T. B. (1992). Musings on Telepresence and Virtual Presence. *Presence: Teleoperators and Virtual Environments*, 1(1), 120-126. doi: 10.1162/pres.1992.1.1.120
- Slater, M., Usoh, M., & Steed, A. (1994). Depth of Presence in Virtual Environments. *Presence: Teleoperators and Virtual Environments*, 3(2), 130-144. doi: 10.1162/pres.1994.3.2.130.
- Sox, C. B., Kline, S. F., & Crews, T. B. (2014). Identifying best practices, opportunities and barriers in meeting planning for Generation Y. *International Journal of Hospitality Management*, 36, 244-254. doi: 10.1016/j.ijhm.2013.09.009.
- Sox, C. B., Kline, S. F., Crews, T. B., Strick, S. K., & Campbell, J. M. (2017). Virtual and Hybrid Meetings: A Mixed Research Synthesis of 2002-2012 Research. *Journal of Hospitality & Tourism Research*, 41(8), 945-984. doi: 10.1177/1096348015584437.
- Statista. (2018). *Global business travel spending from 2015 to 2017*. Retrieved from <https://www.statista.com/statistics/612244/global-business-travel-spending/>
- Steuer, J. (1992). Defining Virtual Reality: Dimensions Determining Telepresence. *Journal of Communication*, 42(4), 73-93.
- The Pulse Report. (2020). *2019 event industry trends*. Retrieved from https://insights.eventbrite.com/c/the-pulse-report-2019?x=Jhd4nj&mkt_tok=eyJpIjoiTXpGbE5XUm1NbVt0WWpJdyIsInQiOiIyNHZ2anFvU3hXZHI0bGtXbmQ1cmh6UFhWa3RhaHZUNW1QbEw5RFZ0ZGFUUSStnciFhck11M2c1NkRtaEY2cTRDeIBUxJrWjRXU1B2Tk1BY0Q5QmY4MmxVaThhOFk4Y2h1a211bGdubWhXR2xWUDkxTXNzS29MZXY1b3dEMG1EcyJ9
- Wee, P. (2020). VR events: for engagement and presence. *Meeting & Conventions Asia*. Retrieved from <https://www.meetings-conventions-asia.com/News/Technology/VR-events-for-engagement-and-presence>
- Wei, W. (2019). Research progress on virtual reality (VR) and augmented reality (AR) in tourism and hospitality. *Journal of Hospitality and Tourism Technology*. doi: 10.1108/jhtt-04-2018-0030.
- Welch, C. J., Ray, S., Melendez, J., Fare, T., & Leach, M. (2010). Virtual conferences becoming a reality. *Nature Chemistry*, 2(3), 148-152. doi: 10.1038/nchem.556.
- Yung, R., & Khoo-Lattimore, C. (2019). New realities: a systematic literature review on virtual reality and augmented reality in tourism research. *Current Issues in Tourism*, 22(17), 2056-2081. doi: 10.1080/13683500.2017.1417359.

Zelenskaya, K., & Singh, N. (2011). Exploring Virtual Recruiting From Employers' Perspective Using "Second Life". *Journal of Human Resources in Hospitality & Tourism*, 10(2), 117-128. doi: 10.1080/15332845.2011.536505.