CASE STUDY 👻 VIRTUAL REALITY

Virtually

>> BY IAN OLIVER (ACT)

### Find out how virtual reality gives you access to a real garage full of museumquality cars and memorabilia

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an Oliver is honing the cutting edge of technology, putting a physical collection of classic cars and memorabilia within reach of the entire world using virtual reality. The RROCA (ACT) member has created a virtual way into Ollies' Garage and the Canberra showroom of the Sir Henry Royce Foundation, and in some ways it gives people greater access to the displays than if they were there in person.

This is his report on its development in its first few months.

## "The premises and its contents can be open 24/7 on the web, having global exposure"

VERY SOON after Ollies' Garage and the Canberra showroom of the SHRF were officially opened last July, the venue began offering virtual-reality interactive tours (VRIT) using 3D technology. A virtual-reality tour is a simulation of a physical location, usually composed of videos, still images or 360-degree images. It may also use other multimedia elements such as sound effects, music, narration, text and a floor map.

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FLEASE KEEP OUT

A virtual reality interactive tour, or a virtual-reality self-guided tour, allows viewers to control their tour. They can choose what they look at and how long they devote to individual scenes and content. It is a more life-like experience, yet without the need for physical attendance and visitation. The premises and its contents can be open 24/7 on the web, having global exposure and providing exhibits such as 360-degree camera viewings of the interior of a vehicle. The concept saves the visitor time and the provider costs such as wages, electricity and consumables.

Ollies' Garage and the SHRF showroom are doing this using Matterport <sub>3</sub>D technology by MKVI Media, a newly created website, YouTube videos and other social media.

ROLLS-RUT

The first example of a virtual tour, created in 1994, was a walkthrough of a 3D reconstruction of Dudley Castle in England as it was in 1550; one of the first to experience a virtual tour was Queen Elizabeth II, when she officially opened it. Because the Queen's officials had requested titles, descriptions and instructions of all activities, the system was named and described as a "Virtual Tour, being a cross between Virtual Reality and Royal Tour".

With the expansion of video on the internet, video-based virtual tours are growing in popularity. Video cameras are used to pan and walk through real subject properties, for example. The benefit of this method is that the point of view is constantly changing throughout a pan. However, video eliminates any chance of giving the viewer control over the tour, which they simply follow

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1. On-screen flags draw your attention to items of interest

2. 360-degree cameras let you look in the front...

according to the recorded sequence. The tour is the same for all viewers and the subject is chosen by the videographer.

Capturing high-quality video requires significantly more technical skill and equipment than taking digital still pictures. In addition, editing digital video requires proficiency with videoediting software and has higher computer hardware requirements. Also, displaying video over the internet requires more bandwidth. Due to these difficulties, the task of creating video-based tours is often left to professionals.

The advantage of VRIT is that it enables viewers to move anywhere through the tour whenever they like, even going back to revisit aspects of it. Video is

merely part of a VRIT. Virtual tours are used extensively for universities, sport venues, the real estate and hospitality industries, museums, etc. More recently the technology has been used by planners to measure the

internal detail of existing structures, and to make risk assessments of buildings and contents. Virtual tours can allow a user to view an environment without needing to be present physically. Currently, a variety of industries use such technology to help market their services and products.

Over the past few years, the quality and accessibility of virtual tours have improved considerably, with some websites allowing the user to navigate the tours by clicking on maps or integrated floor plans. Virtual tours can be especially useful for universities and real-estate operators who want to attract students, tenants

...and in the same view turn to look in the back
You can move closer to better see any of the displays

and buyers, while eliminating the cost of travel to numerous locations. 3D virtual tour technology has been increasingly used in the documentation and preservation of historic properties that are at risk of being razed or have restricted public access.

A study done by the PEW Research Group showed that more than five million Americans watched virtual tours every day in 2004. Now, 20 years later, and following Covid 19, virtual reality tours with no face-to-face contact are extremely popular. This is particularly the case with the younger generation and the more tech-savvy but time-poor older generation, as it can be delivered from the comfort of home or anywhere else with internet connectivity.

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In the Canberra Fire Brigade Museum, the Museum of Freemasonry in Sydney, and the oldest and most visited gallery in Australia, the National Gallery of Victoria (NGV), VR is becoming a powerful tool to attract larger audiences. Leading international

museums like the Smithsonians in the USA, Musée du Louvre in Paris, the National Gallery in London, the Motor Museum of Japan and many more all embrace virtual reality. The technology allows museums to offer immersive experiences to people who might not be able to visit in person.

It is little wonder that the Mercedes Museum, one of the most famous and popular automotive museums in the world, announced in October 2024 that it is joining the growing number of worldwide motoring museums offering virtual reality experiences. With over 13 million visitors since its opening in 2006, it aims to extend into



- 5. Each car has its own story; just click the flag to learn it
- 6. Some flags open text, others bring up a video

the digital realm to present Mercedes-Benz Classic to a wider audience than would be traditionally possible.

The success of technological advancements in any commercial venture depends on the investment made and the professionalism applied. In today's digital age, opening business to the world wide web and delivering content that is both relevant and engaging is crucial for success. The potential of 3D technology to transform spaces such as car showroom museums, is particularly exciting. By blurring the lines between the physical and digital, 3D technology can offer innovative and immersive experiences that appeal to a broader audience. As this technology continues to evolve, it will undoubtedly open up new possibilities for engaging and entertaining viewers in ways that traditional methods cannot match.

#### **THE NUMBERS**

Up to 31 October 2024, Ollies' Garage counted:

2392	total visitors before 31 October	
355	physical visits (15% of total)	
2037	VRIT visits (85% of total)	
23	videos uploaded to YouTube	
28,853	video views (over 60 days)	
1254	average views per video	
481	average views per day	

You can't get hands-on but there's ample detail to see...
...and when you've finished, you can look for your next item

Innovations such as holograms offer yet another layer of unique and immersive display experience. Its splicing capability, high-resolution display and operation now enable it to be a more perfect choice for museums and displays. Holographic technology is worthy of research and possible future investment by Ollies' Garage and the Canberra Showroom of the SHRF.



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