HOW MIGHT IMMERSIVE TECHNOLOGY DISRUPT THE TRAVEL INDUSTRY? & WHAT CAN WE DO TO PREPARE FOR THE TREND?

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01. ABSTRACT

In recent years, immersive technology such as AR, VR and the Metaverse look set to influence, impact, or even disrupt many industries, such as marketing, education, healthcare as well as societal effects relating to social interaction factors from widespread adoption. Apart from when browsing and booking a holiday, the travel industry has remained relatively untouched over the years. However, after nearly three years of the epidemic, the global leisure tourism industry has suffered a significant drop in tourist arrivals and a loss of more than 50% of revenue as a result of the international ban. And among a host of immersive technologies, the rapid development of VR and its effectiveness in simulating real-life experiences offers opportunities for virtual holidays, especially when actual travel is not possible.

02. INTRODUCTION & BACKGROUND

In the past ten years, the tourist sector has faced several crises and calamities, from terrorist attacks to infectious diseases. (Rosselló, Santana-Gallego and Awan, 2017) Government limitations in the UK and other countries across the world have delayed the development of tourism for a considerable amount of time in the recent example of the coronavirus (COVID-19) pandemic, which has had a serious influence on the tourist sector in 2020 and 2021. The largest drops were seen in the lodging and tourism industries, which turnover decreased as a result of tighter restrictions during the first nationwide lockdown. (David, 2021)
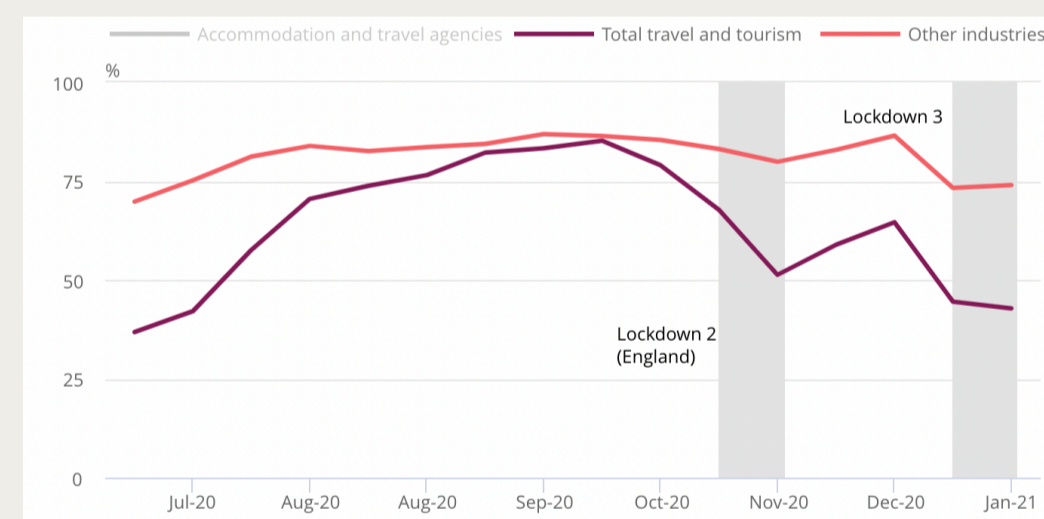
Figure 4: Turnover for travel and tourism businesses

Figure 5: The proportion of businesses

-23% TOURISTS

-42% INCOMES

Currently, immersive technology in the tourism sector has achieved a breakthrough, with immersive museums primarily in the exhibition setting representing a change from the traditional dull stereotypical explanation, through VR, AR, and other information technology, simulation and reproduction of cultural scenes, so that tourists feel as though they are travelling through time and space, from the browsing to the present-day immersive experience.
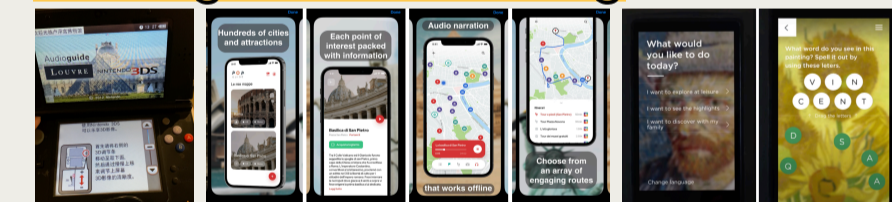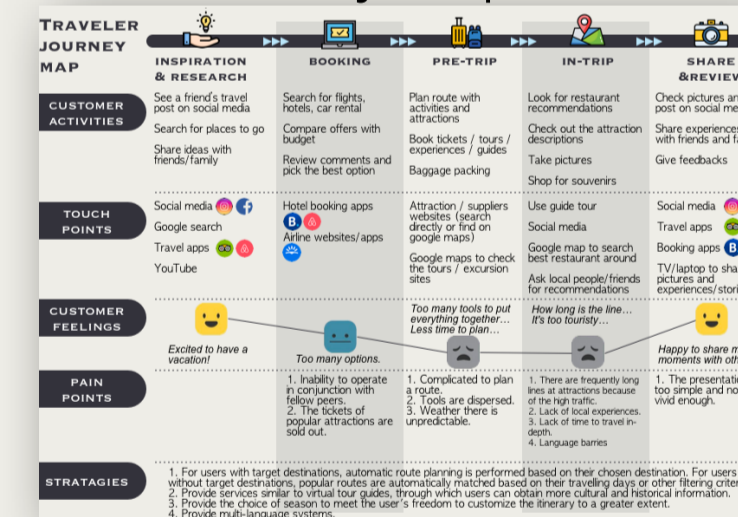
03. DESIGN
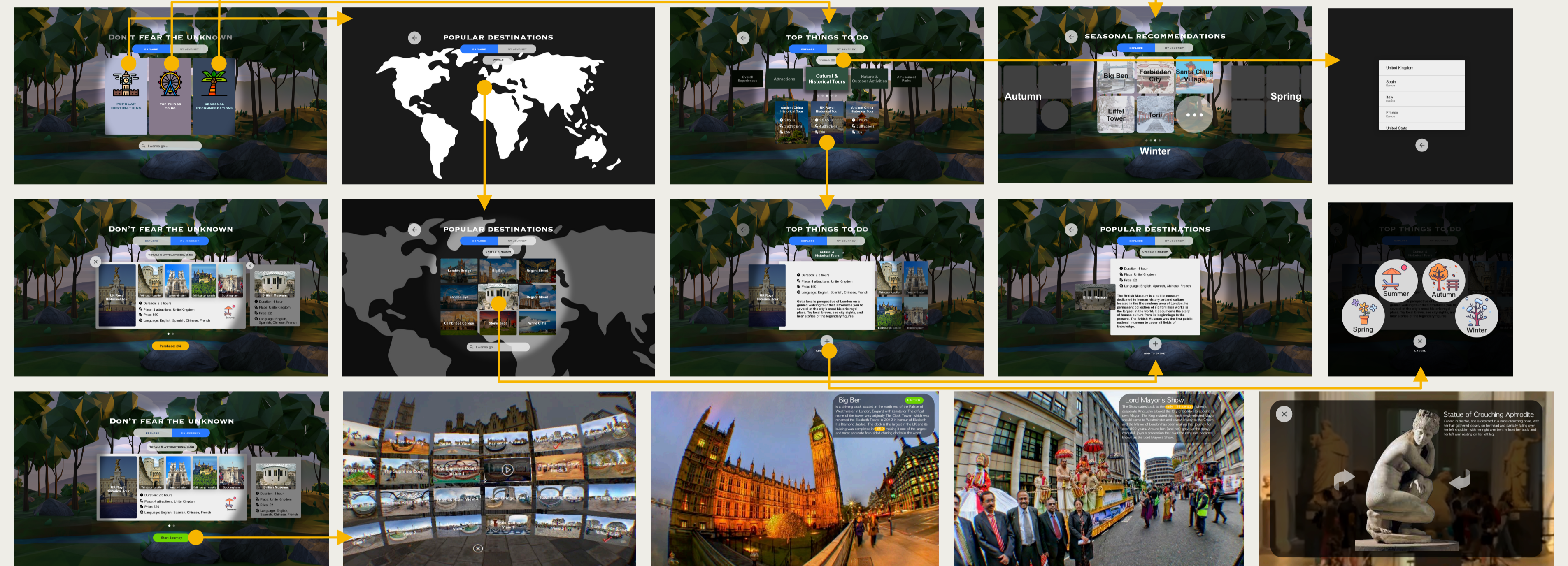
04. STUDY METHODOLOGY

Existing Product testing

User Journey Map

Contextual interview
To gather insights, anecdotes, and perspectives from travelers to identify pain points that could be potentially addressed through immersive technology.

05. TESTING & EVALUATION

Participants Recruitment

Number of participants: 8 | People with travelling experience

User testing tasks

3 Tasks

Destination Exploration + Travel Planning
User selects a destination to explore, such as a famous city, historical site, or natural wonder. User can use VR to visualize potential itineraries, check availability within the virtual environment.

Think-aloud

Sound recording

Virtual Tours + Activities
Within the chosen destination, user can navigate and explore by moving their head. User can choose to embark on a guided virtual tour of a specific attraction or activity, like visiting a museum or trying a local experience. User can interact with points of interest by looking at them or pointing, triggering additional information to appear.

06. RESEARCH RESULTS

Get information on how users navigate the virtual environment, interact with points of interest, and complete tasks such as planning. Gather insights into users' preferences for virtual travel exploration, virtual tours, interactive activities, and planning interactions. Gather feedback on the perceived advantages, disadvantages, and overall impact of immersive technology on their travel behaviors and expectations.

07. CONCLUSIONS & FUTURE WORK

This study examines how virtual reality technology can be applied to the tourism industry. Virtual reality technology provides new opportunities for the development of cultural tourism products by enabling consumers to experience other places, cultures and landscapes first-hand through virtual tours without leaving their homes, and to have a richer understanding and experience, thus enhancing the travelling experience, as well as providing more highlights and innovations for cultural tourism-related projects. However, the high cost of technology and equipment, inconsistent user experience, differences in cultural norms and difficulties in legal and regulatory requirements are some of the concurrent difficulties.

In the future, we can continue to look at how materials are made available, whether users can produce their own content, and other future extensions of the business model. When the world's biggest tech companies (Google, Facebook, Microsoft and Apple) invest billions of dollars in creating VR technology, it signals that the VR era is rapidly approaching. The first company to create a consumer-grade virtual reality product that is widely adopted will win big.