

ORBITAL | GLOBAL

The Future of Tourism Digital Tech



Presenter



Peter Brady
Chief Executive Officer

Who are Orbital?

ORBITAL | GLOBAL

ORBITAL | MEDIA

Award winning
digital agency

ORBITAL | INNOVATIONS

Digital tech innovation: AI, VR, AR and
gamification

ORBITAL | RESEARCH

Digital research

Who we work with



What are we covering today

Artificial Intelligence:
Machine + Deep Learning



Immersive Tech:
Virtual and augmented reality



Gamification:
Making education fun



Holograms:
Future tech we have today



Artificial Intelligence

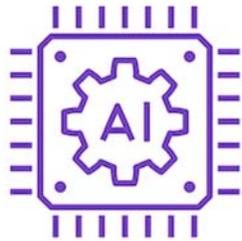
Automation and optimisation



What are artificial intelligence, machine learning and deep learning?

Artificial Intelligence

Predictive algorithms that represent human like intelligence. A broad term.



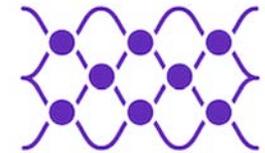
Machine Learning

Algorithms that represent human like intelligence but improve automatically with more data.



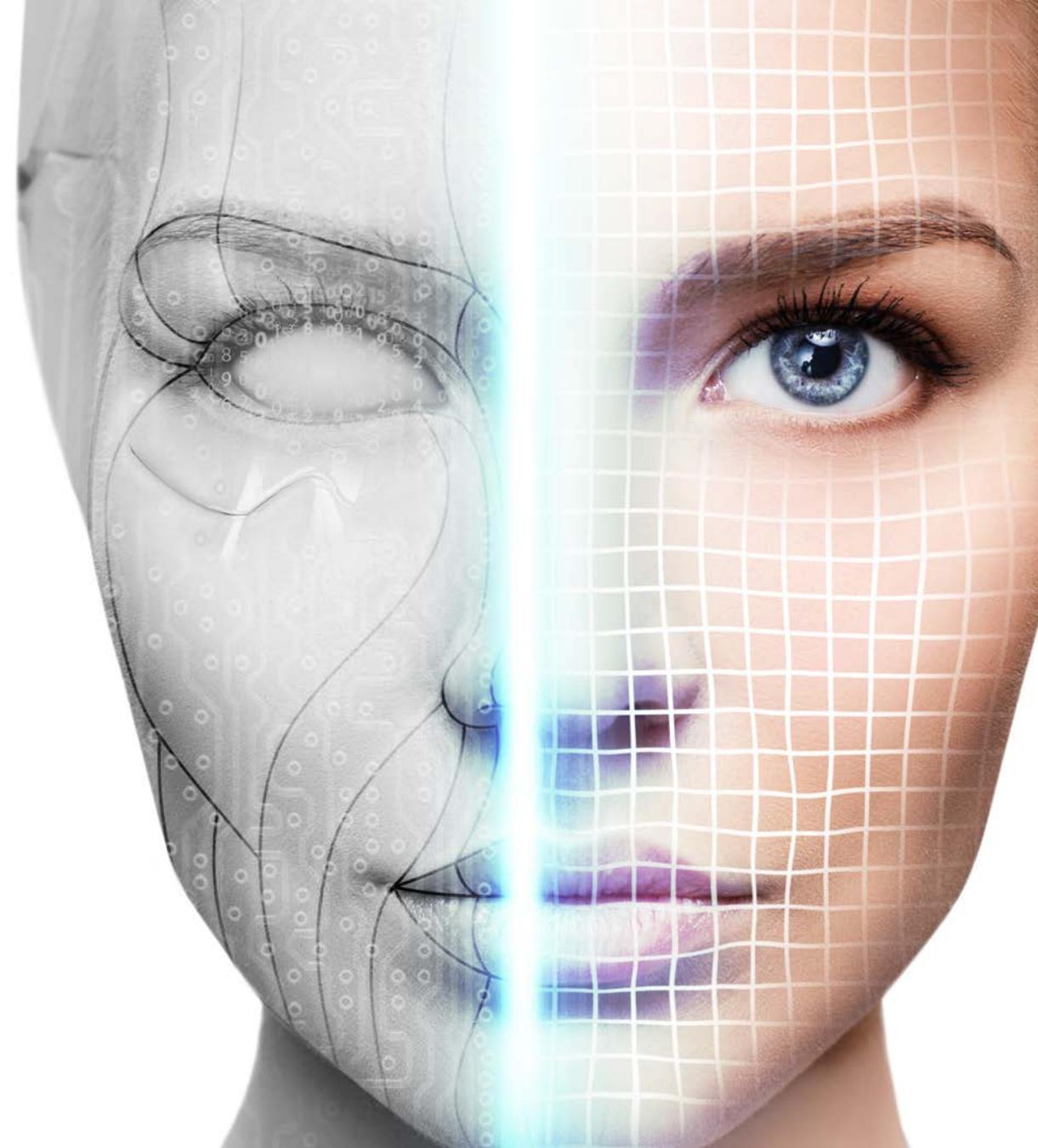
Deep Learning

Part of a broader family of machine learning based on neural networks.



Why these technologies now?

1. Advances in hardware enabling potential
2. Accessibility of technology
3. Desire to improve productivity
4. Desire to improve accuracy of delivery
5. Desire to free up employee time.



Deployment opportunities within tourism

1. Providing better more efficient information
2. Tailored recommendations
3. Enabling personalised experiences
4. Automated task management
5. Cost savings through optimising manual activity.





AI Case Study

Case study – Tommy Flowers avatar

1. Offer interactive engagement with visitors
2. Optimise tour guide time
3. Bring exhibits to life
4. Enable quick access to information
5. Enable interactive verbal / audio access to information and in different languages.



Immersive Tech

Enriching and extending reality



What are virtual and augmented reality?



Virtual reality (VR) refers to computer simulations in which a person can interact within an artificial environment using specialised headsets and motion-tracked controllers. In this simulated artificial environment, the user can have a realistic, immersive experience.



Augmented reality (AR) refers to enhancing the real world through the use of digital visual elements, sound, or other sensory stimuli, delivered through digital devices. Most modern AR involves superimposing virtual elements on top a smartphone's camera input.

Why these technologies now?

1. Growth of use. 811 million AR technology adopters in 2021
2. Readily available and cost-effective hardware technologies
3. Can produce significant efficiencies
 1. Consumers expecting more dynamic, visual and interactive experiences.



¹Yıldırım, Gürkan & Yıldırım, Serkan & Dolgunsoz, Emrah. (2019). *The effect of VR and traditional videos on learner retention and decision making.*

Deployment opportunities within tourism

1. Experiential simulations pre-visit - try before you visit
2. Enriching interactive visitor experiences
3. Enhanced information and support
4. Test simulations that can save time and money.





Immersive Tech Case Studies

Case study – Try before you fly

Individuals can virtually travel the world through 360 videos and interactive experiences.

Thomas Cook launched 'Try Before You Fly' VR experiences in 2015.

Thomas Cook reportedly experienced **a 190% uplift** in New York excursions after customers tried the 5-minute experience.



Gamification

Overlaying fun and engagement



What is gamification?

Gamification is the application of game-design elements and game principles in non-game contexts. In essence, this involves taking activities that are not games and **adding game elements**, such as scorable 'points', achievements or leaderboards.

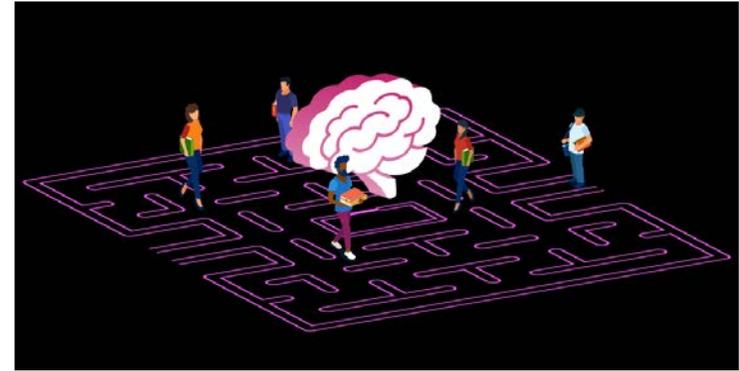
Gamification can be used for educational purposes, to promote products or services and to make tourism more fun.

Mary Poppins sums up gamification quite nicely with the quote *"In every job that must be done, there is an element of fun. You find the fun and SNAP! the job's a game."*



Deployment opportunities within tourism?

1. Enriching existing visitor experiences
2. Optimising visitor engagement
3. Sign post and drive visitors to elements they wouldn't normally visit
4. Optimising engagement and take aways from educational experiences
5. Incentivise and promote activity after visit and promote repeat visits.





Gamification Case Studies

Case study – Vincent van Gogh Experience

- Children's scavenger hunt
- Roomscale projection mapping
- Immersive audio-visual guide through museum.



Holograms

Future tech we have today



What is holography?

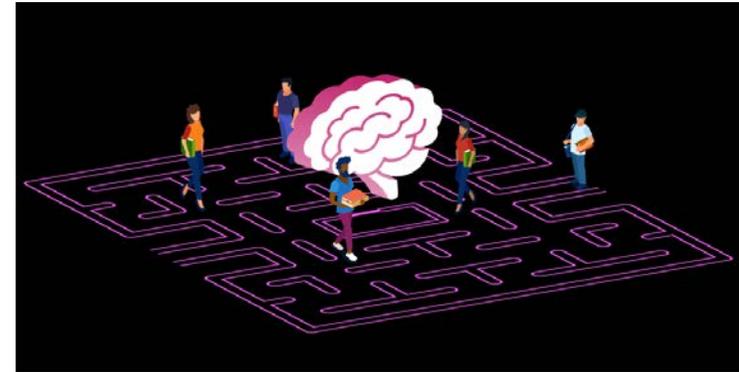
Holography is a technique that enables a light field to be recorded and later reconstructed when the original light field is no longer present. By using lasers, mirrors, and other new technologies, it is possible to create moving holograms of people and objects.

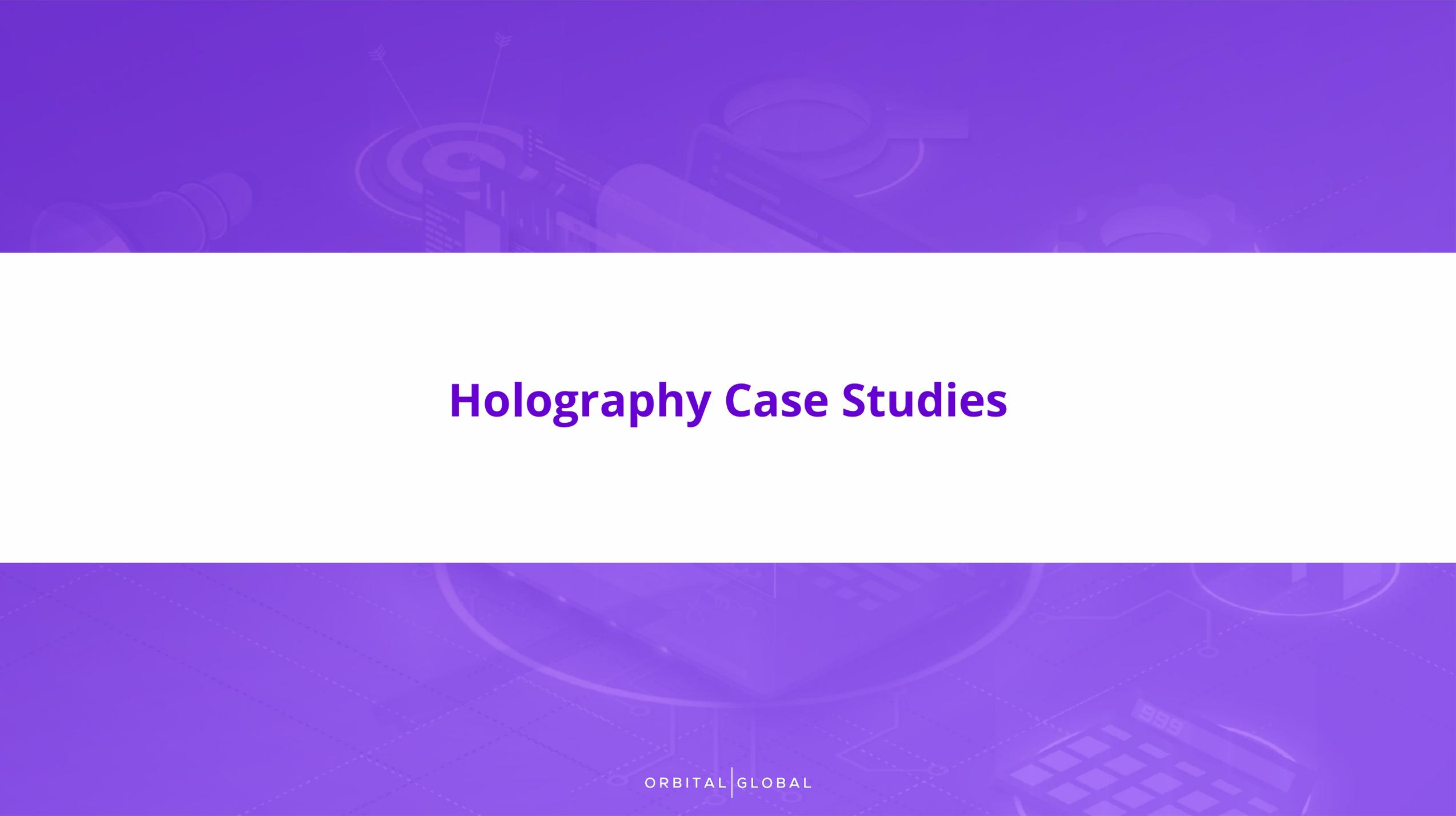
There is also **Mixed Reality (MR)**, which uses holographic headsets to blend both the physical and digital worlds, where you manipulate both physical and virtual items.



Why use holography?

1. Brings concepts to life in 3D
2. Makes learning and interaction more fun
3. Can help guide visitors in a more visually accurate way.





Holography Case Studies

Case study – HoloTour mixed reality tourism

- Virtually explore Rome or Machu Picchu
- Creates a very real sense of presence
- Virtual assistant guides you around locations
- Interactive elements which gamify the experience.



ORBITAL | GLOBAL

Get in touch

WEB

www.orbitalglobalgroup.com

EMAIL

peterb@orbitalglobalgroup.com

TEL

+44 (0) 203 411 9111