



**Holovis**<sup>®</sup>  
Transforming Sensory Experiences

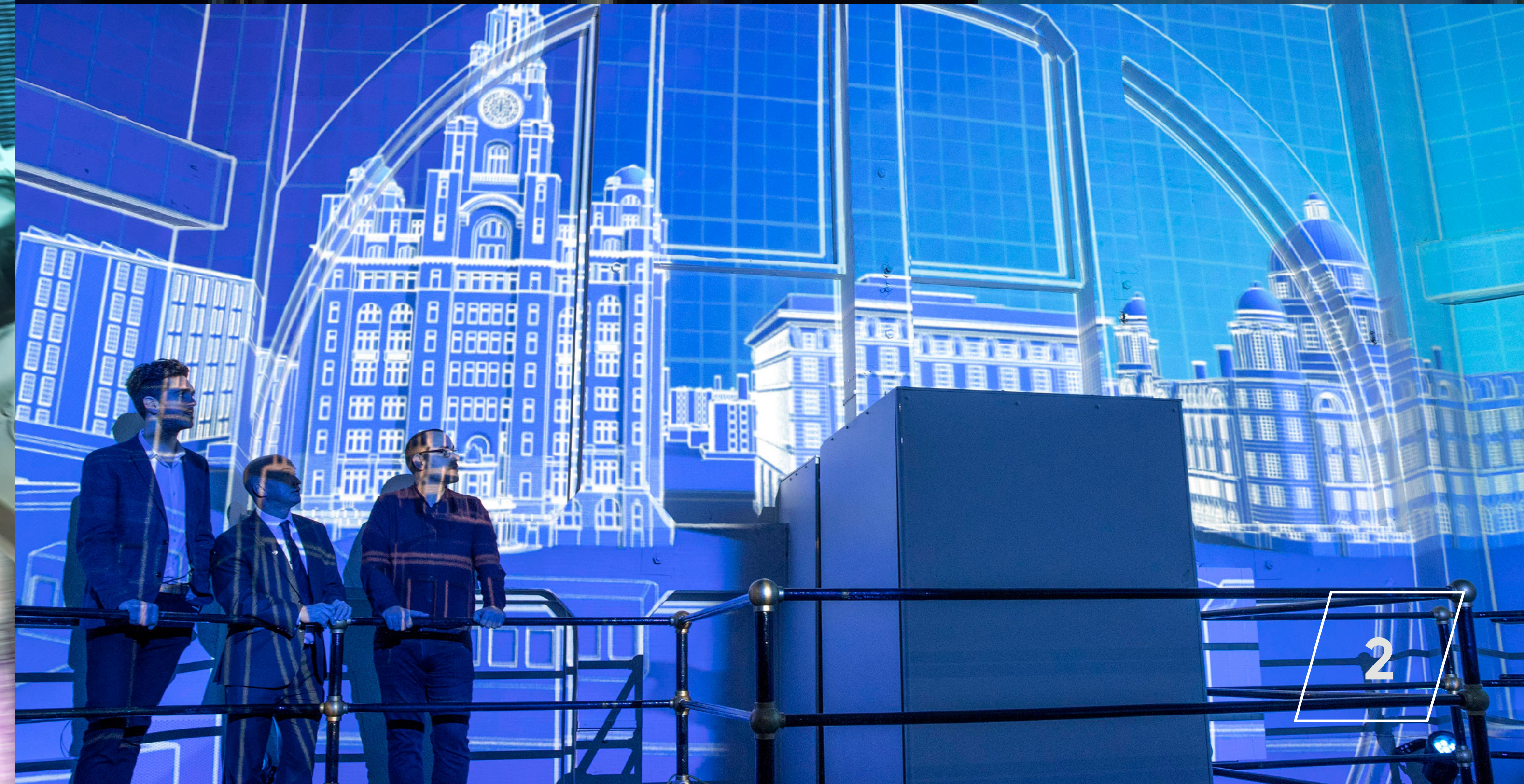
# INTRODUCTION TO HOLOVIS

HOLOVIS INTERNATIONAL LTD.  
TECHNOLOGY EXPERIENCE DESIGNERS





WE TRANSFORM REALITY





Holovis®

# ABOUT US

## EXPERIENCES DRIVEN BY TECHNOLOGY AND CREATIVITY

Holovis is a world leading innovator and solution provider of turn-key sensory experiences, attractions and solutions.

We have a team of over 150 attractions experts - including engineers, software developers and artists.

We have offices across the Globe - our headquarters are in the Midlands, UK, and we have offices in London, Orlando, Shanghai and Abu Dhabi.

We have huge demonstration and research spaces at our Midlands and Orlando offices, where we are able to build and test prototype experiences to ensure the best quality at installation.





# OUR HISTORY

2004

Holovis was established in 2004 – Our founding directors were leading experts in the field of VR automotive/aviation design and simulation platforms.

2006

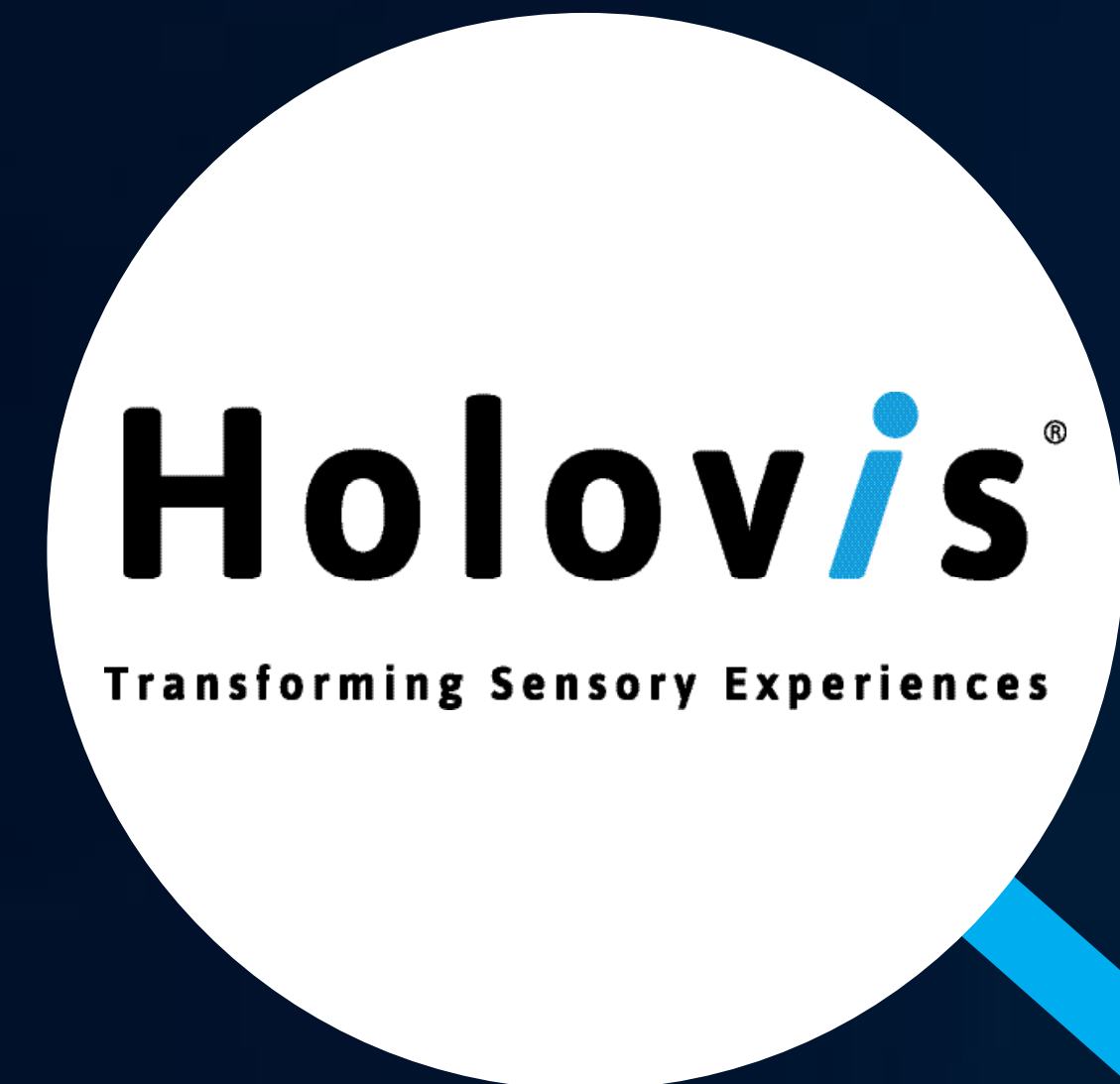
Expanded into large scale AV – Liverpool Capital of Culture, World Duty Free, Heritage and Cultural

2012

Diversified into the themed entertainment market, delivering immersive media based rides (Domes, Flying Theatres, Immersive Tunnels – Dubai Parks and Resorts, Bobbejaanland, Ferrari World

2017

Significant company growth with the opening of our Florida and Shanghai offices



Secured multiple significant Enterprise contracts, inc. JLR and McLaren, delivering VR design studios, CAVES, Power Walls, Experiential Retail

2005



Harnessed our foundation in simulation to pioneer complex Dome projection – 28 Domes delivered (Moscow Planetarium, NY AM&H), including the World's first 3D Planetarium in Switzerland

2010



Delivered large, story-based, AV-driven theme park projects, such as Mystic Timbers at Kings Island

2017



Opened our Abu Dhabi offices, delivering several large-scale experiences across the Middle East

2020

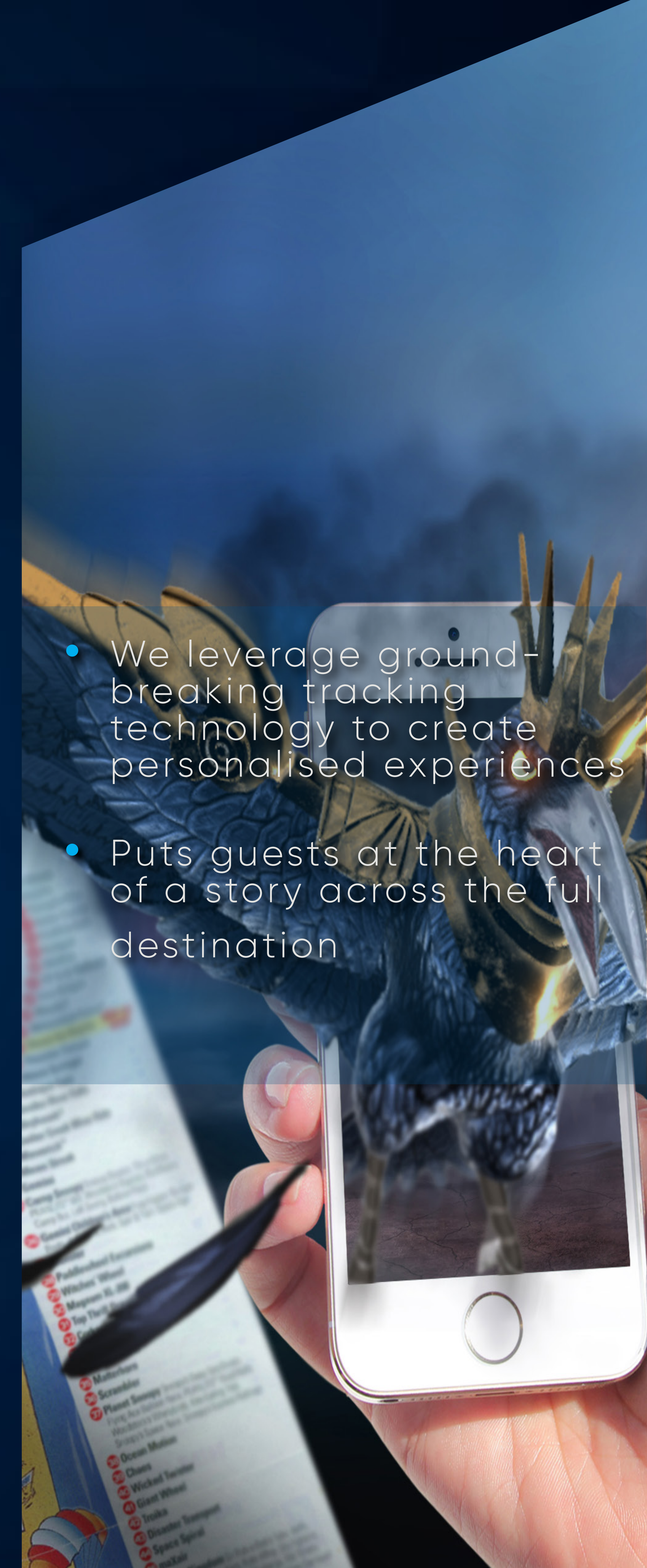




- Global attraction and experience AV experts
- Contracts over £23mil
- Full turnkey solutions from design to delivery
- Complete in-house solution



- We combine compelling narratives with next generation technology
- Full design packages from creative concepts through to final build and commissioning



- We leverage ground-breaking tracking technology to create personalised experiences
- Puts guests at the heart of a story across the full destination



# AV DESIGN

**Holovis is a multi-disciplined unit combining skills in:**

- Audio Visual Engineering
- Software Development
- Media
- Motion System Design
- Attraction/Experience Design

**Holovis can provide:**

- Highly specialist AV services from design through commissioning.
- Turn-key design and delivery blending our creative teams with our engineering teams
- Deep technical understanding and appreciation for all elements and partner trades
- Design philosophies derived from our vast client portfolio and projects delivered over time





# ENGINEERING DESIGN

## SYSTEM DESIGN REPORTS

- Concept Design through to As-Built construction drawings
- BIM design and integration with client models

## PROJECTION & LED DESIGN

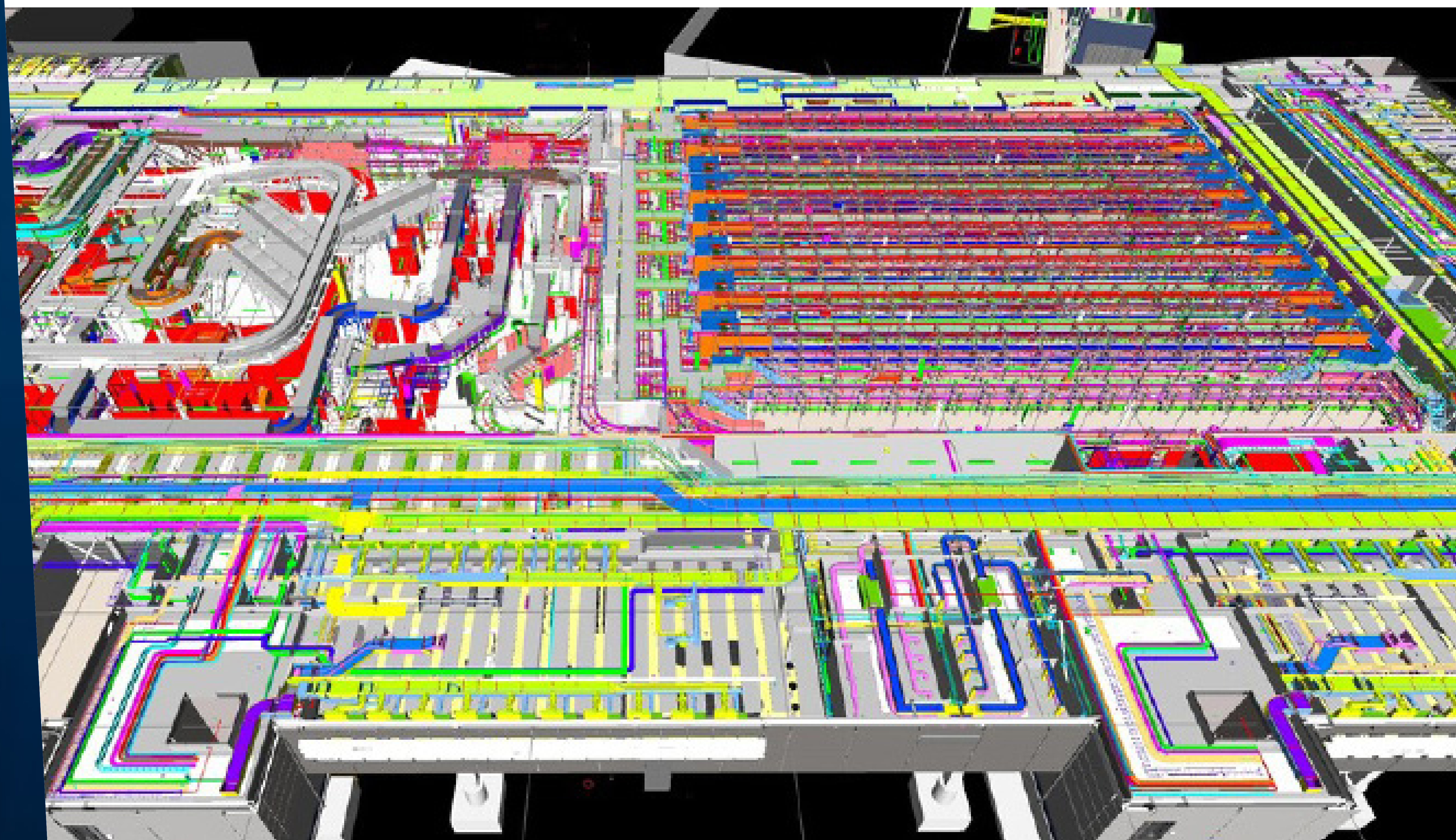
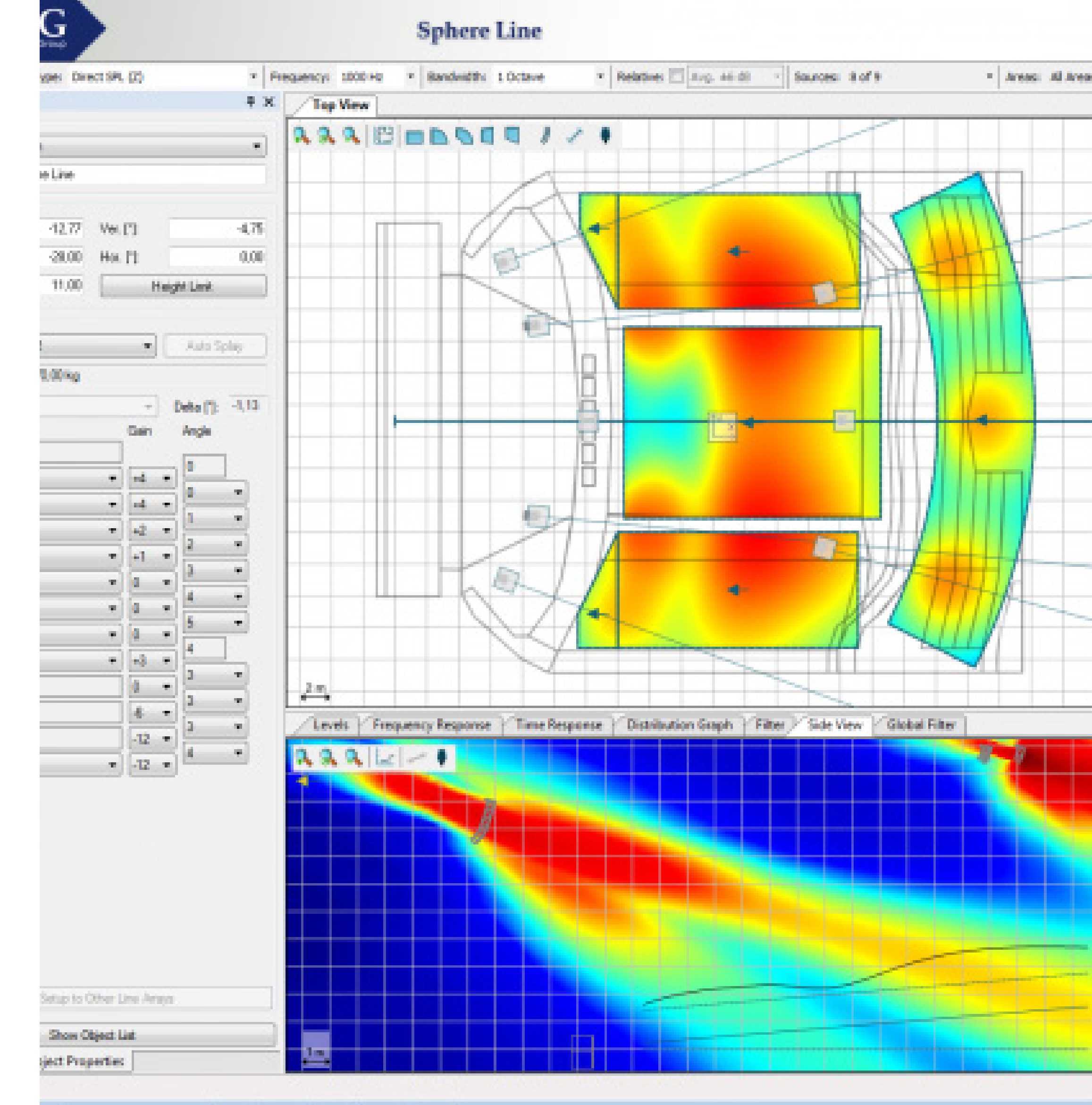
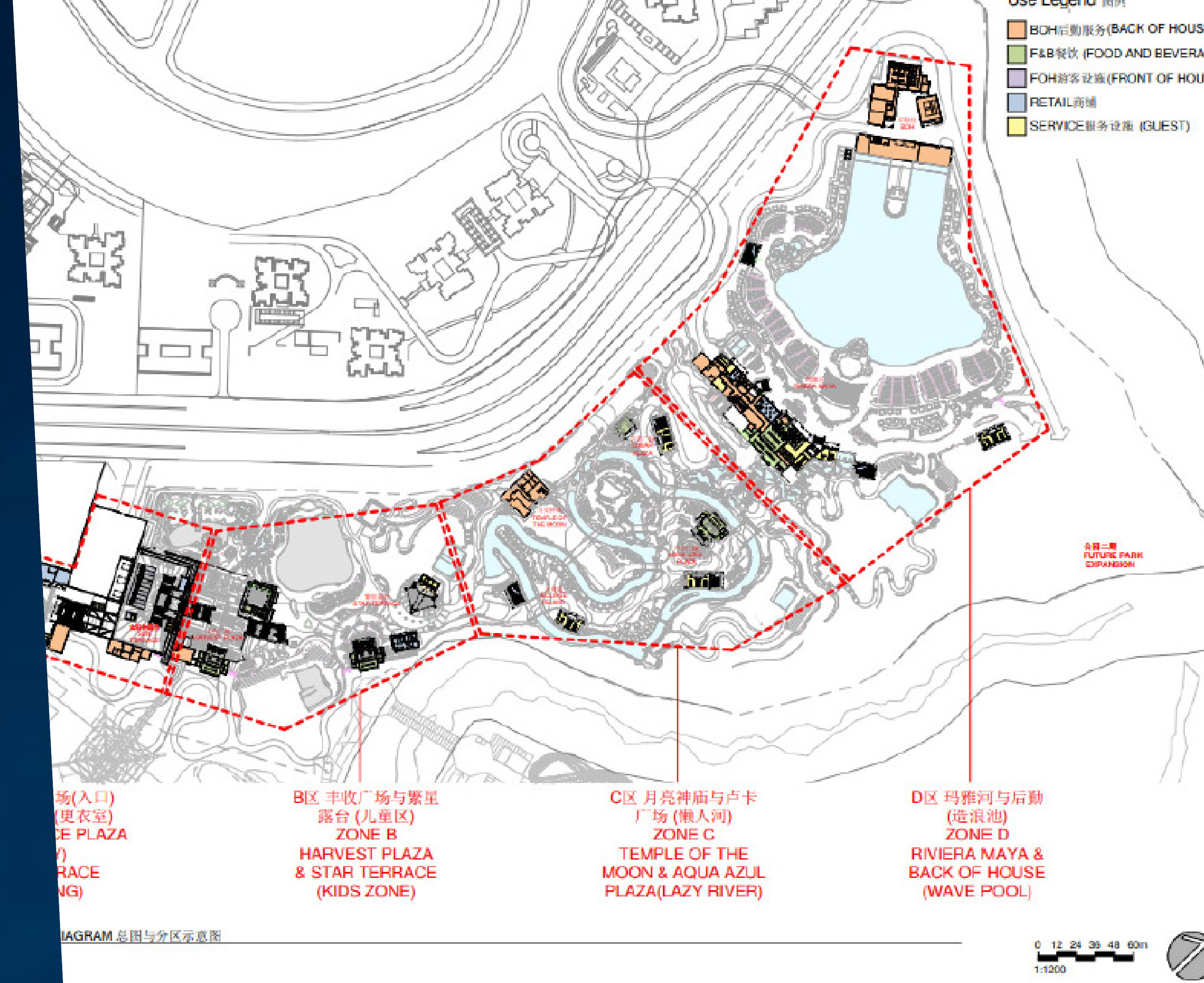
- Detailed optical design for multi-channel projection systems
- Auto-alignment system
- LED design including new product studies

## AUDIO DESIGN

- Multi-channel, immersive audio system design
- Full loudspeaker array modelling
- Design for full range of spaces
- DSP design and coding

## SHOW CONTROL SYSTEM DESIGN

- Control system design for show systems
- User-interface design and wireframing
- Network design for all connected show elements





# FABRICATION & INSTALLATION

## FABRICATION

- Workshop and fabrication facilities located in UK and Orlando
- Frequent fabrication elements for parkwide deployments
- Stringent testing and quality inspection procedures

## SITE INSTALLATION

- Best in class teams lead by our trusted Installation Supervisors
- First Fix services including cable pulling, termination and testing
- Second Fix services including large-scale AV systems

## SHOW CONTROL

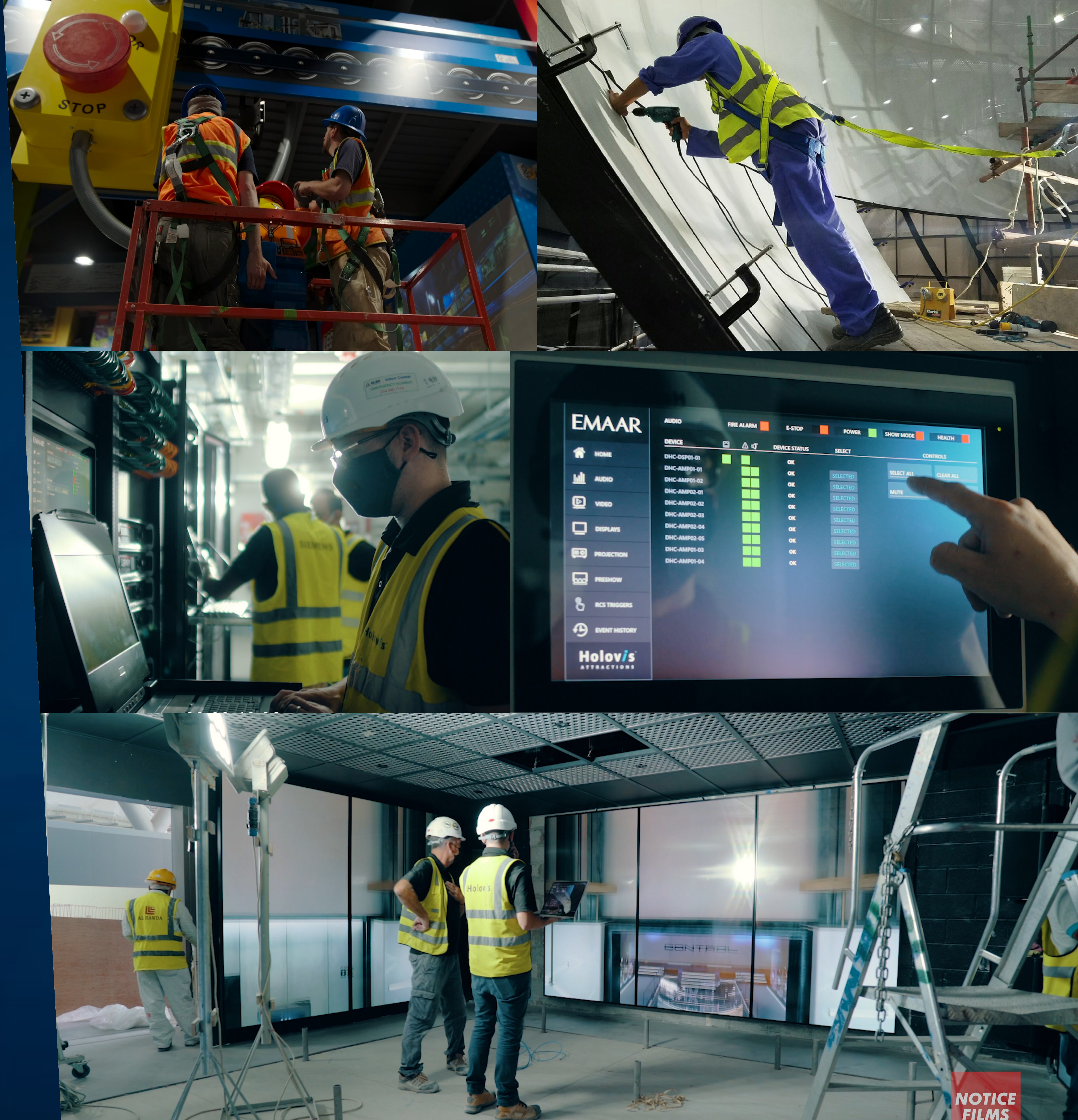
- Industry standard Show Control system design and programming
- HMI and UI creation and integration for simple maintenance
- Custom development for integration of Ride and Show

## AUDIO

- Audio DSP programming for simple, large venue or 3D immersive systems
- Frequency & room analysis, audio equalisation and system tuning

## VIDEO

- Direct-View LED alignment, balancing and commissioning
- Projection colour balancing, auto-alignment and optical blending services
- Media loading and system optimization





AED45M (£9M)

# FERRARI WORLD ABU DHABI

YAS ISLAND

## ATTRACTIONS

- Flying Aces (2016)
  - Beno's Great Race (2016)
  - Formula Rossa (2016)
  - Turbo Track (2017)
  - Mission Ferrari (TBD)
- 
- Full AV design and integration for multiple attractions and experiences for pre-shows, rollercoasters, mediacoasters and full dark-ride rollouts
  - Complex dome and projection system design
  - Full mediacoaster concept design working with creative teams to develop projection mapping, Pepper's ghost, spherical dome projection and onboard audio systems
  - Technical and creative concept design for attractions and experiences
  - Large, scale mock-ups of entire attraction scenes and intent
  - Full AV and advanced system design services from schematic design through to construction ready for fabrication & build
  - Fabrication, installation, commissioning and support including custom onboard audio systems

## PARK-WIDE & EXPERIENCES

- Italian Street (2016)





# ROYAL LIVER BUILDING 360

## PROJECTION SPECTACULAR

Holovis were engaged to turnkey an immersive, projection mapped experience inside the clock-tower of the world famous Royal Liver Building- Liverpool.

We oversaw the concept development through to commissioning, paying homage to Liverpool's vibrant and emotional history.

Holovis Scope:

- Turnkey interactive, multisensory dark ride
- Design and delivery of the complete show package
- Real-time media and personalise content
- Invisible tracking technologies
- Guests transform into Minifigures





# SPECIAL PROJECTS

We combine compelling narratives with next generational technologies to create unforgettable experiences.

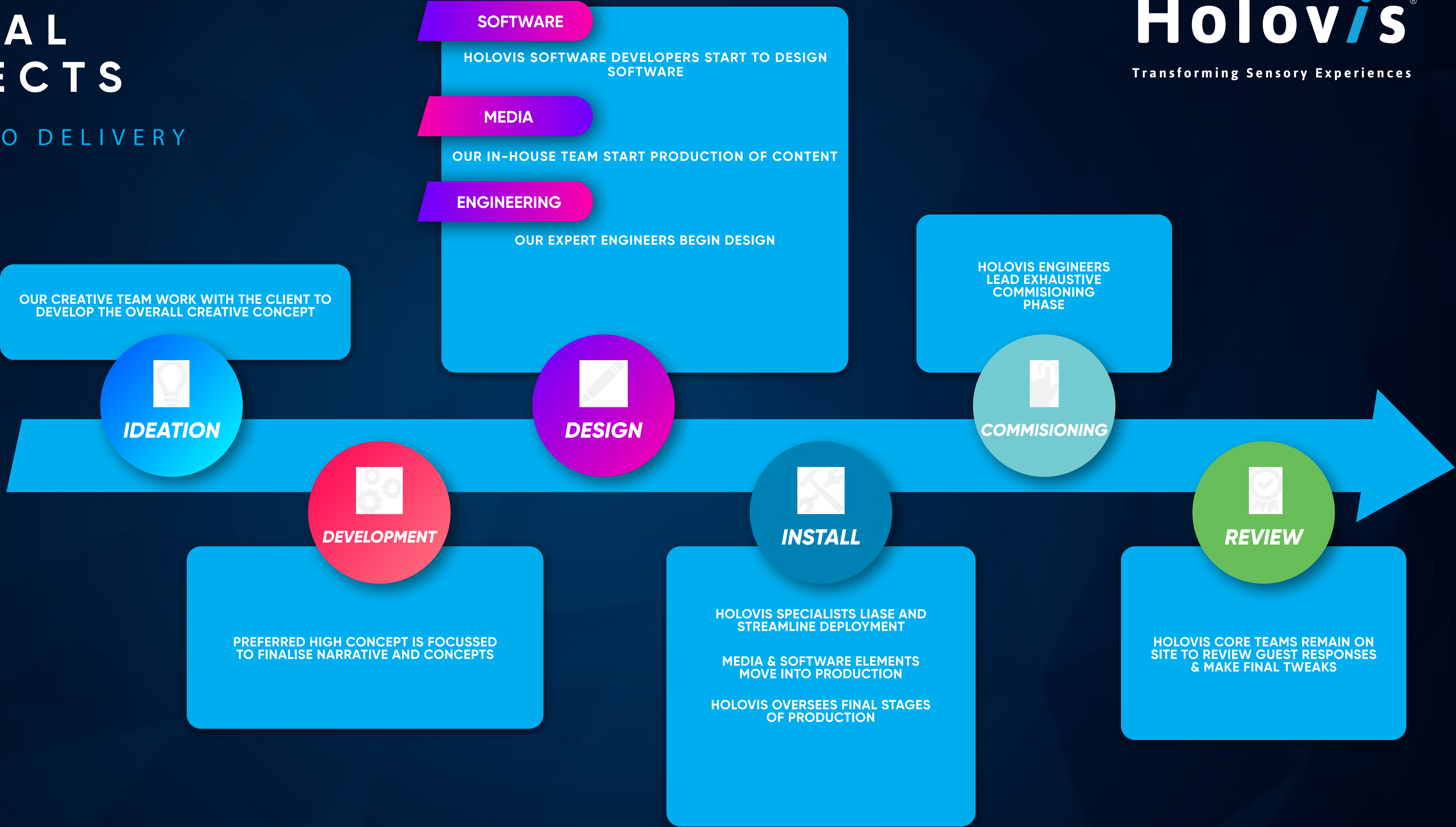
- Complex Projection/Projection Mapping
- VR/AR
- Interactive Systems
- Biometric Tracking
- Motion Systems
- Dark Rides
- Audio
- Lighting
- Big Data





# SPECIAL PROJECTS

CONCEPT TO DELIVERY



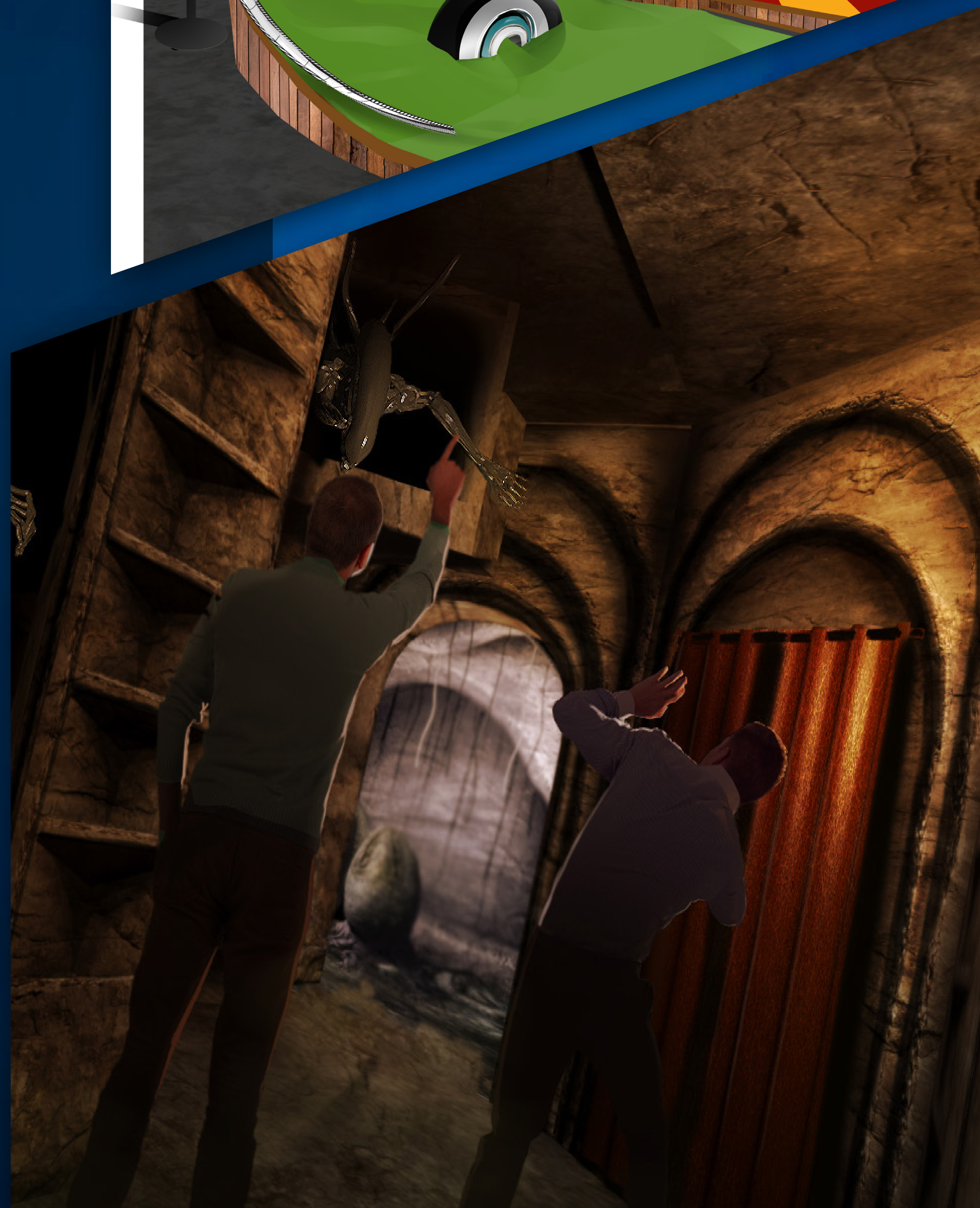
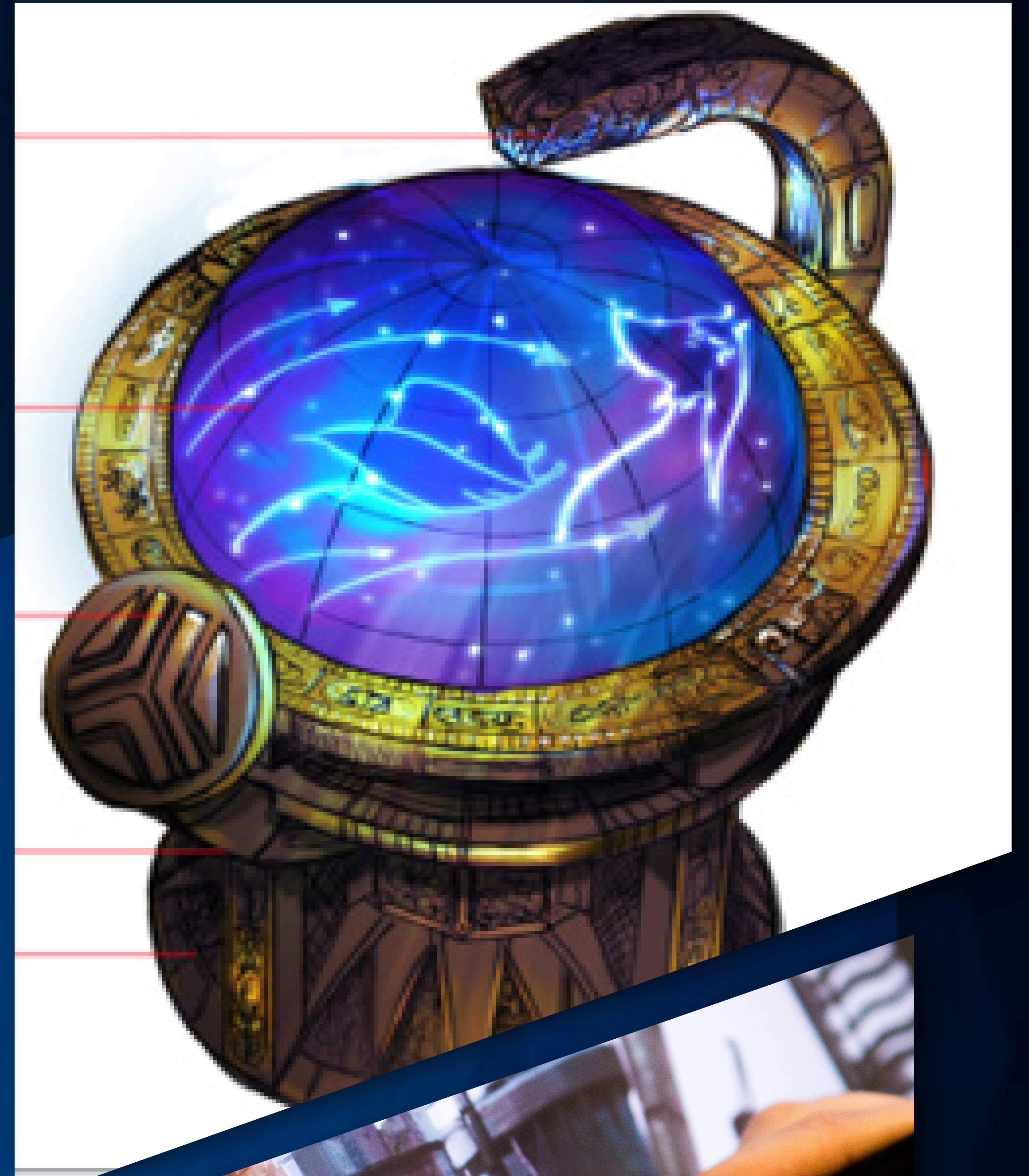


# SPECIAL PROJECTS

## CONCEPT DEVELOPMENT

Holovis create and deliver technology-led attractions, from creative concept through design and install, right up until delivery, opening day and beyond.

- Narrative Development
- Next Generational Technology Research and Development
- Storyboarding
- Concept Development through to final design
- Theming and Media Design
- Production Management



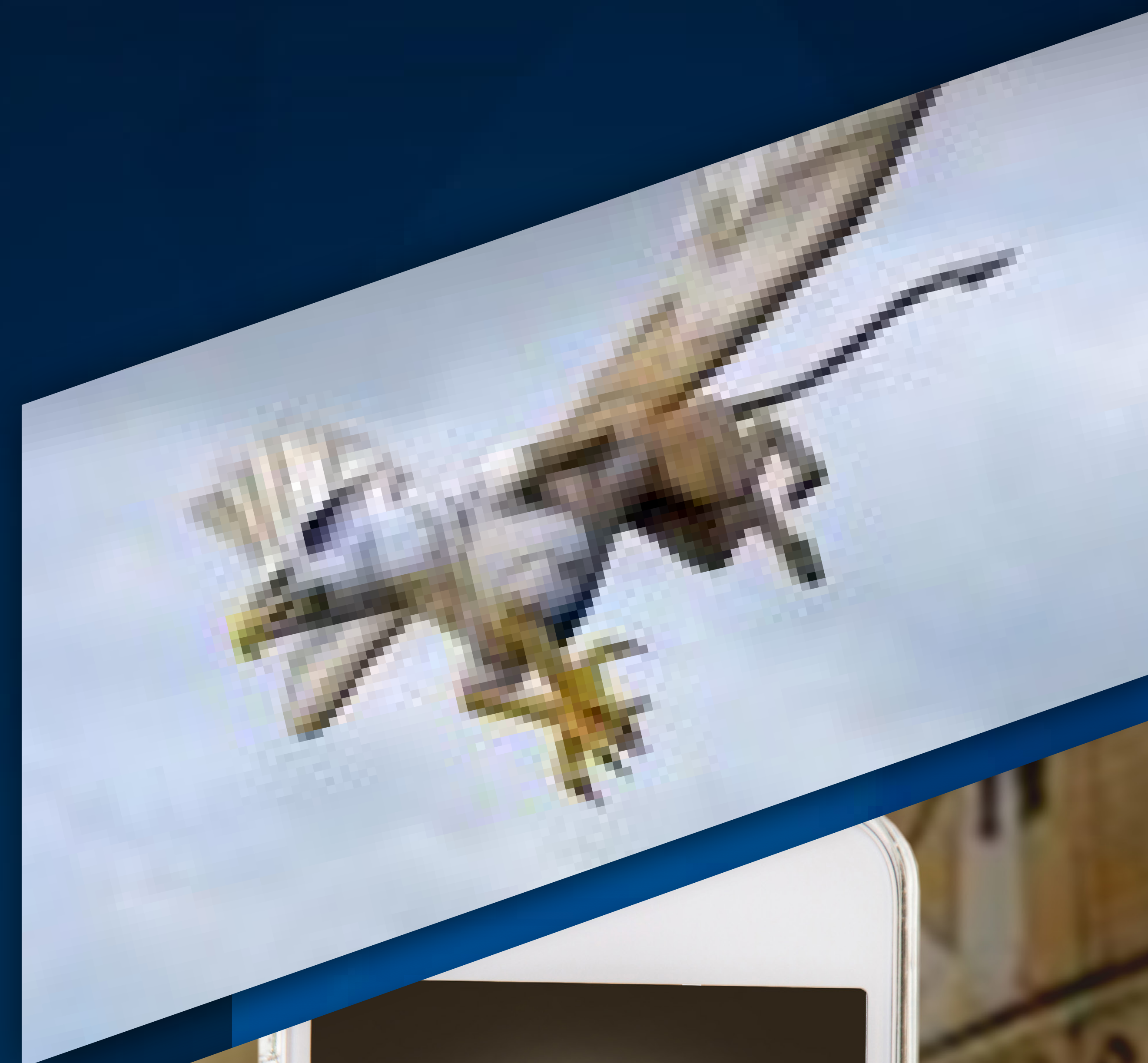


# SPECIAL PROJECTS

## SOFTWARE

Our in-house team of software developers work across a huge range of disciplines and projects

- Game Engine
- Mobile Apps
- VR/AR
- Interactive Touchscreens
- Gesture Control
- Voice Control
- Biometrics





# SPECIAL PROJECTS

## MEDIA

Holovis create and deliver technology-led attractions, from creative concept through design and install, right up until delivery, opening day and beyond.

Systems we work in:

- 2/3D animation
- Live Action
- Volumetric
- Realtime and Pre-rendered





# SPECIAL PROJECTS

## ENGINEERING

Holovis create and deliver technology-led attractions, from creative concept through design and install, right up until delivery, opening day and beyond.

Systems we work in:

- Show Control – (Alcorn, Medialon, Crestron, QSYS)
- Lighting
- Audio
- Projection
- LED Display

Design:

- CAD
- BIM
- Revit

Install:

- Safety Certifications





# THE MUSEUM OF SPACE & TIME

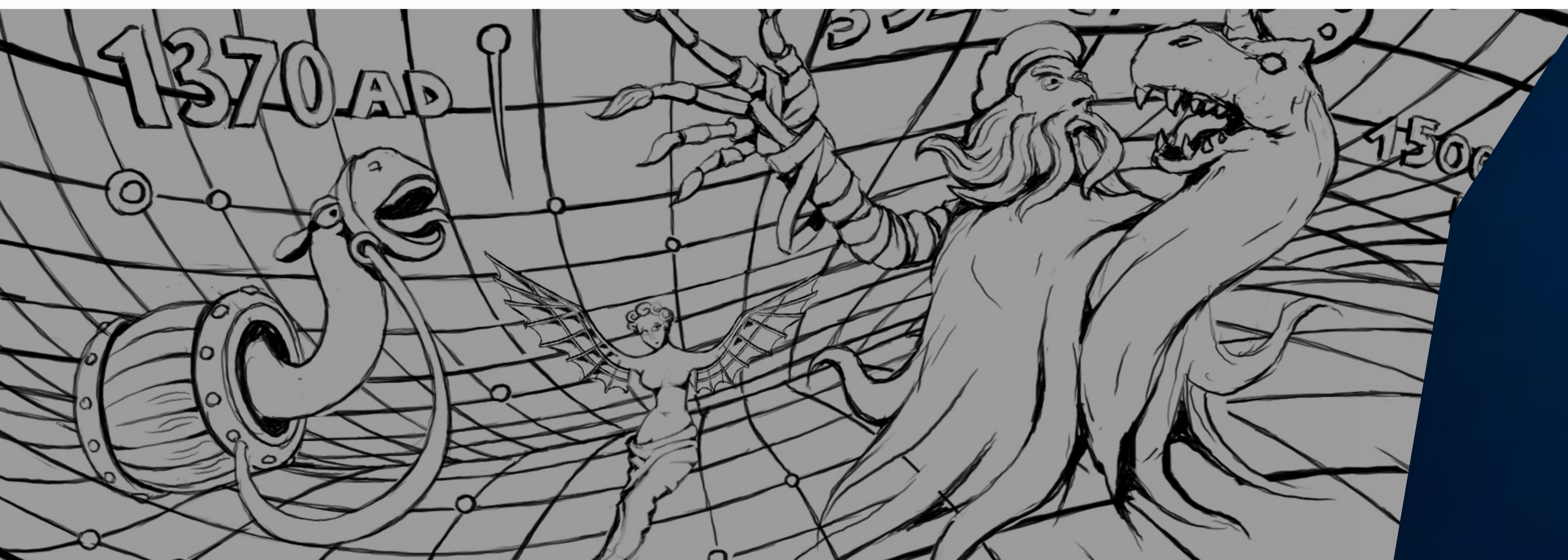
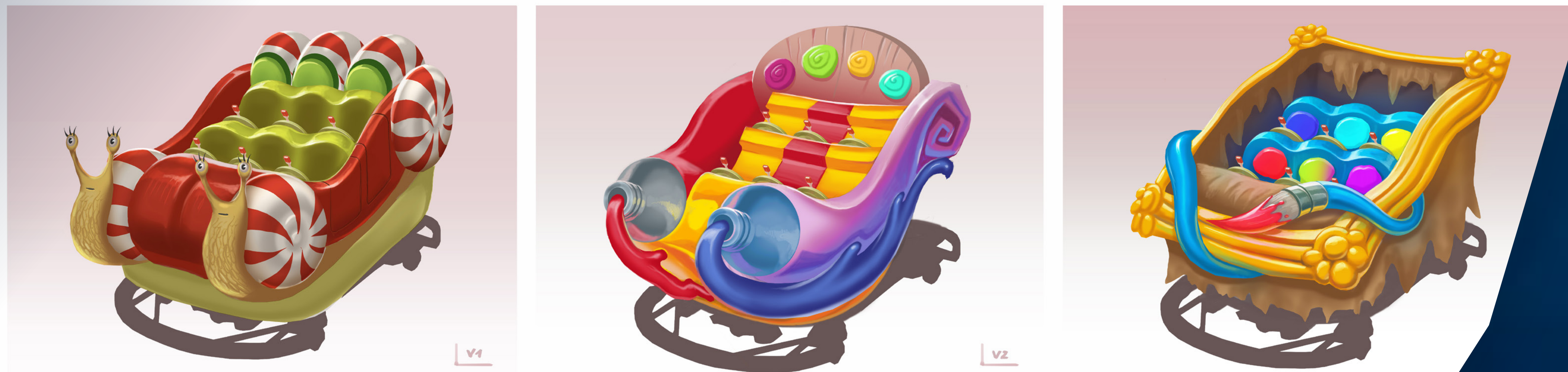
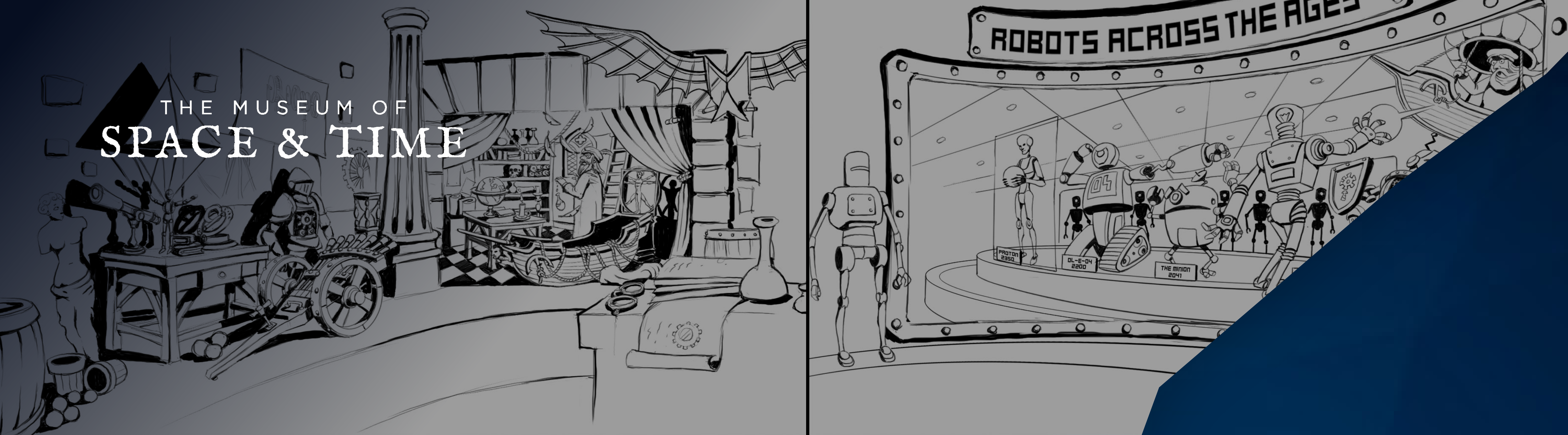
# MUSEUM OF SPACE & TIME

## IMMERSIVE DARK RIDE

Holovis are commissioned to undertake the creative development of the dark ride "The Museum of space and time" for Wuhan Commercial Real Estate Group.

TMOSAT is a dark ride which casts riders deep into history as they help the lead protagonist bring special artefacts to life using a time device. Things soon take a turn as the time device is lost, and the guests must help return the time device. By utilising the power of Holotrak, guests can interact in real-time to change the media content to shape their own destiny.

- Story Development
  - Scripting
- Guest Experience
  - Story
- Show Production
  - Technical Design
    - Elevations
- Media Design and Production
- Interactive Design & Production
  - Ride Path Design
  - Motion Profile Design
  - Interactivity Design
- Soundtrack Design & Production





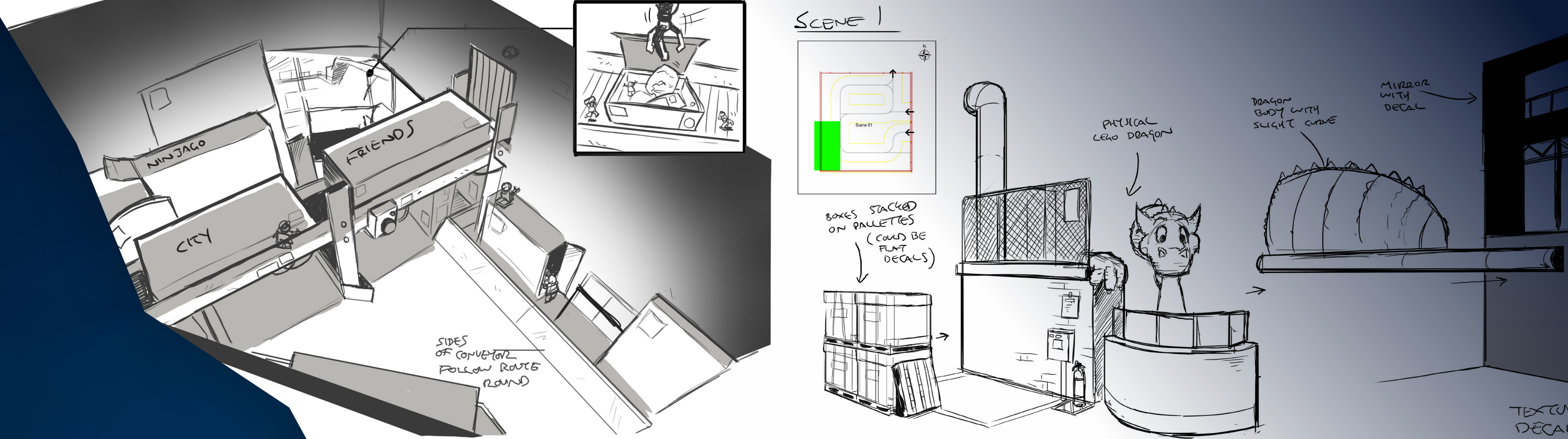


# LEGOLAND NY

## TURNKEY DARK RIDE

Holovis developed and delivered the full creative and technical package for the brand new LEGO Factory Adventure Ride. Utilising our ground-breaking HoloTrac technology we turn guests into LEGO Minifigures which they can control through motion tracking.

- Story Development
- Scripting
- Guest Experience
- Story
- Show Production
- Technical Design
- Elevations
- Media Design and Production
- Interactive Design & Production
- Ride Path Design
- Motion Profile Design
- Interactivity Design
- Soundtrack Design & Production





A L I E N  
E S C A P E

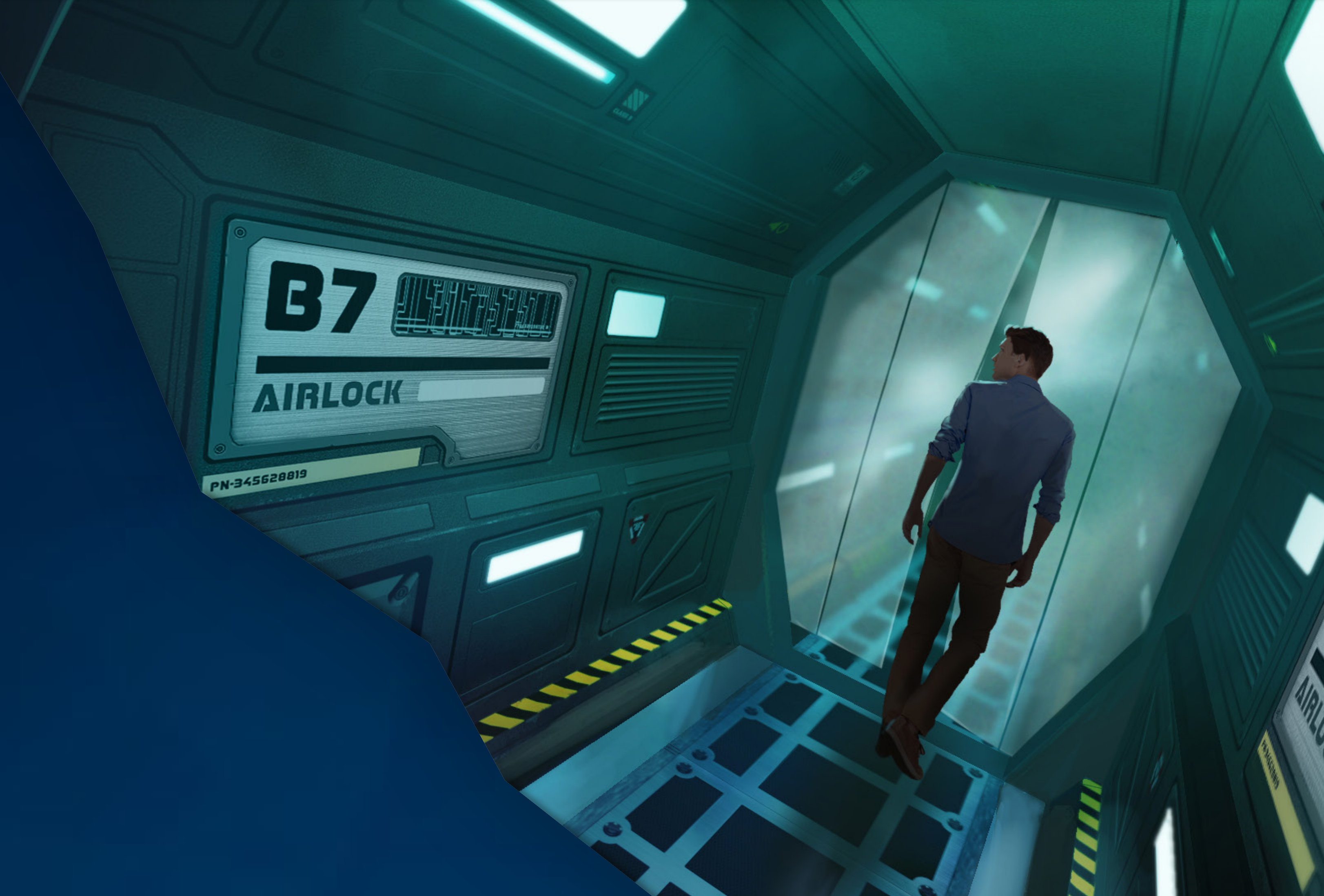
# ALIEN ESCAPE

## IMMERSIVE EXPERIENCE

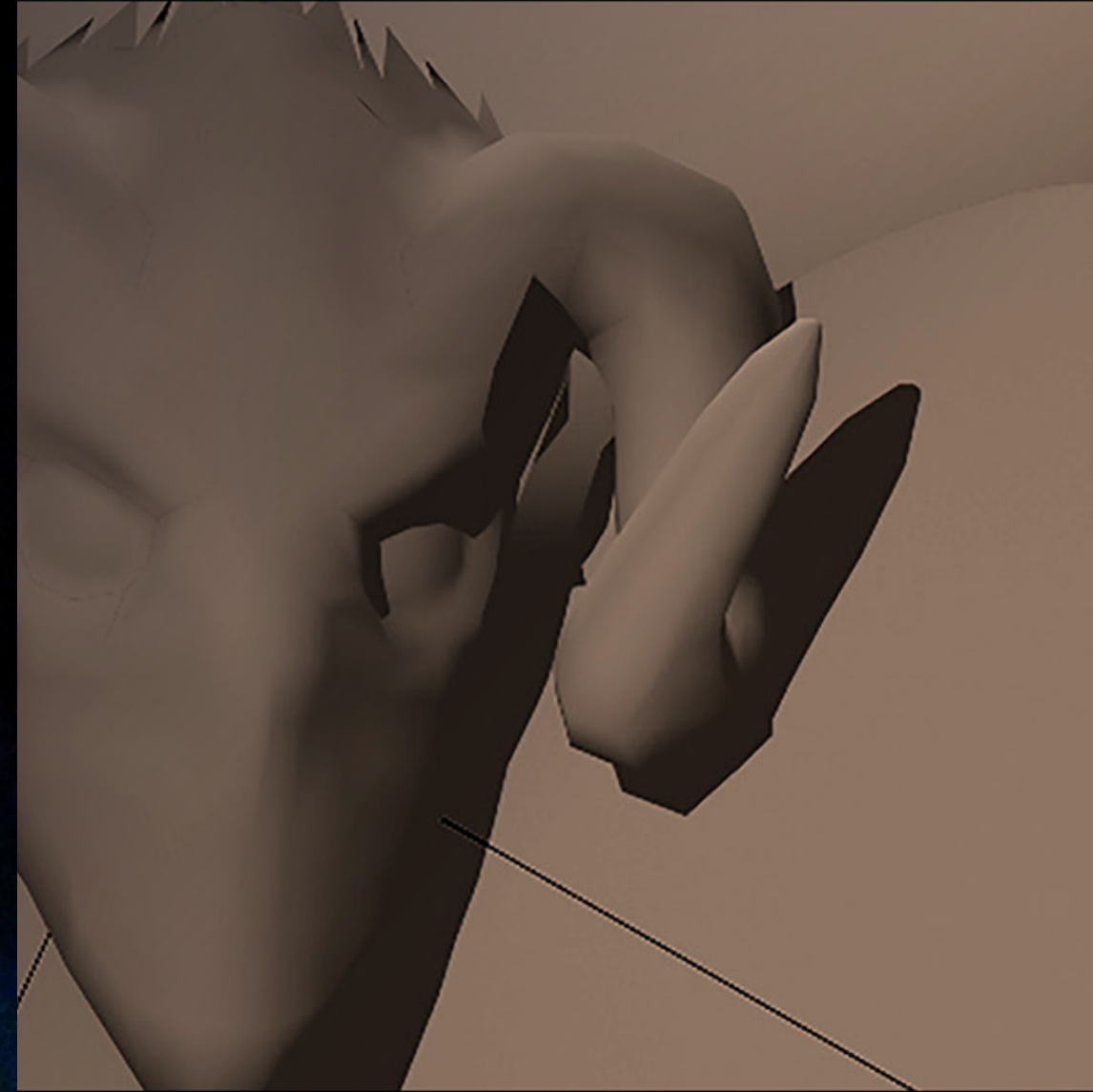
Holovis developed Alien Escape as a turnkey solution for Madame Tussauds London.

The experience flips a Madame Tussauds exhibit on its head, allowing the guest to play a lead role in the story.

- Concept Development
- Attraction Narrative
- Show Production
- Technical Design
- Media Design and Production
- SFX Design
- Theming Design







# WICKERMAN

## IMMERSIVE COASTER

Holovis developed the show package for Wickerman, the UK's most immersive 'show' coaster, including the award winning pre-show.

The Wickerman takes guests on a spine-tingling journey to the land of the Beornen, an ancient people who are searching for their next sacrifice.

The experience fuses, wood, fire and show to present a ride that is unlike anything the UK has ever seen. Holovis were responsible for the concept and delivery of all show elements (excluding theming).

- Story development
- Guest experience
- Media design & production
  - Technical design
- Projection mapping content
  - SFX design
  - Show control
- Show production







# THE WALKING DEAD: THE RIDE

## IMMERSIVE COASTER

Holovis were engaged by Merlin Entertainments to produce the technical/creative package for the Walking Dead Roller coaster at Thorpe Park.

We were responsible for the narrative, media and technical packages- ensuring the guest experience aligned with the brand expectations. We also paid particular attention to ride/media integration, upholding a seamless narrative journey on every ride, regardless of variable factors.

- Story development
- Media design & production
  - Technical design
  - SFX design
  - Show control
- Show production



# CONNECTED ECOSYSTEMS

Connect all elements of the space for deeply personalised, intelligent, experiences.

- Gesture Recognition
- Object Recognition
- User Attribute Identification
- Spatial Tracking

Personalise the experience for guests by giving them the means to embark on their own unique site-wide adventures. Real-time media and non linear storylines change depending on the decisions guests make. Puts guests at the heart of their own video game with limitless possibilities

- Interactive Mini Games
- Physical Challenges
- Quizzes
- Scavenger Hunts
- Queue Line Interaction
- Customisable Avatars
- AR Enhanced Photo and Video Capture
- Live Show Integration

Utilising:

- RFID
- Bluetooth
- Mobile Phone
- AR Headsets
- Biometric





# CONNECTED ECOSYSTEMS

We utilise big data across much of our technology and experiences, using it to deliver amazing guest experiences and to help ensure smooth park operations.

## HOLOTRAC

HoloTrac is a suite of modules that leverage advanced computer vision and tracking technologies to produce powerful data analytic visualisations fronted through the provision of guest experiences with personalised content that extends and enhances their journey.

We connect all elements of the space for deeply personalised, intelligent, experiences. HoloTrac can recognise what guests are wearing and transform them into characters in media in real-time, whilst gesture recognition allows guests to interact with content with just the wave of a hand.

Behind the scenes, HoloTrac produces powerful data analytic visualisations and insights into park dynamics and operations via its real-time intelligent tracking of people and behaviours and combines this with simulation data to deliver extensive insights into operations and security.

- Gesture Recognition
- Machine Learning
- Object Recognition
- User Attribute Identification
- Spatial Tracking
- Guest Attribution Tracking







# BATTLE FOR CEDAR POINT

## MOBILE APPLICATION

Holovis designed and developed the world's first parkwide gamification experience, the Battle for Cedar Point. The unique app lets guests pledge their allegiance to their favorite coaster and battle it out by interacting with the park.

Our in-house media team developed a range of character designs for client review. The approved designs were elevated to full, real-time textured models then optimised for in app animations.

Holovis Scope:

- Parkwide gamification and guest connectivity
- Augmented Reality based app
- Interactive mini games
- Original character, media and audio creation
- Queue lines brought to life through AR gaming





THE BATTLE FOR  
CEDAR POINT

# BATTLE FOR CEDAR POINT

## CHARACTER DEVELOPMENT

Our in-house media team developed a range of character designs for client review. The approved designs were elevated to full, real-time textured models then optimised for in app animations.





# GOLDEN TOURS

## MOBILE APPLICATION

We created London's First Ever Cross-City Augmented Reality Treasure Hunt transforms the city into an interactive adventure playground for all ages.

The narrative led adventure has users hunting for the missing crown jewels, unlocking different pieces of the puzzle as they arrive at each geofenced landmark and complete trivia related challenges. The explorer is given a paper map that, once scanned through the Golden Tours app interface, is brought to life using AR. The app will show the route they have boarded with a virtual bus circulating along the road with key sites jumping out in 3D.





# ROYAL LIVER BUILDING 360

## MOBILE APPLICATION

To create an interactive Augmented Reality app that allows guests to delve deeper into the architectural designs of the building and identify the stunning views from the 15th floor.

The free app extends and enhances the guest experience through 20 interactive moments that flow throughout the whole experience, starting in the Visitor Centre to transform photos into videos, unlock voice over narratives and more imagery from key moments in time.

On the roof top, the app acts as a guide to what guests are seeing, allowing them to hold their phone over the City-scape to reveal information and facts about the landmarks, in relation to their view. The two mythical Liver Bird sculptures can also be brought to life as guests enjoy AR moments with them, then share their images or videos directly to social media.





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