

# Attractions

## MANAGEMENT

@attractionsmag

Volume 27 Issue 3

**Lotte World  
Adventure**  
Busan's first  
theme park

**Celebrating  
freedom**  
National  
Juneteenth  
Museum is  
taking shape

**Back  
together**  
The best of  
IAAPA Expo  
Europe

*Are seasonal  
special events  
worth the  
investment?*

**Stranger  
Things**  
experience  
comes to  
London

# BERNARD DONOGHUE

*Leading the industry through the pandemic p30*



**40**  
**years**

OF TRANSFORMATIVE,  
HUMAN EXPERIENCES.



**BRC Imagination Arts** is a full-service, strategic design and production company that translates brand and cultural stories into transformative, human experiences. For 40 years, we've stood on the front lines, helping our clients build more meaningful, enduring relationships with audiences around the globe.

Our unique body of work has earned us over 400 awards for some of the most respected and acclaimed brand and cultural destinations in the world.

Learn more: [www.brcweb.com](http://www.brcweb.com)



# DJWILLRICH LTD

FOR THE TECHNOLOGY BEHIND **YOUR STORY**

DJW offer a way to interpret your story through the use of technology. We can provide Audio Visual consultancy, system design, supply, installation and provide a bespoke control system to suit your needs.

[djwillrich.com](http://djwillrich.com)



©David Capeman Photography



CONSULTANCY  
PROJECT MANAGEMENT  
CONCEPT



SYSTEM DESIGN  
SHOW CONTROL  
LIGHTING DESIGN  
INTERACTIVES & MULTIMEDIA



TAKING TECHNOLOGY FURTHER

# Creative partnerships

Despite ongoing challenges, it feels as though the industry is ready to move forwards. Now's the time to take forward the risk-taking and creativity of the past couple of years



In September, I attended IAAPA Expo Europe, and saw the energy and excitement of an industry that's daring to think big again after the difficulties of the past two and a half years. Many attractions are still grappling with the longer term consequences of the COVID-19 pandemic of course. Visitor numbers are still down for many, particularly those that rely heavily on overseas visitors, and it will take a long time for many businesses to repair their balance sheets. Just as we're emerging from the pandemic, the cost of living crisis and petrol prices are forcing consumers to think carefully about their leisure spend, and operators have been hit by rising energy costs. There's no doubt though, that there was a real feeling of optimism in the air at IAAPA Expo Europe, with operators announcing major projects and developments.

You can't go forwards without looking back though. For this issue, I interviewed Bernard Donoghue, CEO of the Association of Leading Visitor Attractions. Donoghue has done an amazing job of leading the UK attractions industry through the pandemic, lobbying government, providing advice and clarity for the sector and commissioning and sharing invaluable research.

It's been a difficult, traumatic couple of years, but as Donoghue points out, it has also allowed organisations to take risks, with some amazing results.

Organisations have been bold, and got creative with partnerships. Donoghue points to Historic Royal Palaces teaming up with family-friendly Bestival with its Tudors on Tour event – reaching a different audience and telling its story in a different way. He also highlights open air museum Beamish teaming



Interesting partnerships are driving the industry

PHOTO: HISTORIC ROYAL PALACES / RICHARD LEAHAR

**Organisations have been bold and got creative with partnerships**

up with department store Fenwicks to sell old fashioned sweets made at the museum.

The Louvre has partnered with Airbnb to offer a series of special experiences, including a 'once in a lifetime' overnight stay at the museum, and this year has auctioned time alone with the Mona Lisa and a walk along its historic rooftop to bring in much-needed funds and try to drive up visitor numbers after drops of up to 75 per cent due to lockdowns.

The pandemic has forced organisations to get truly creative in order to survive. The way ahead is surely to keep hold of that bold, risk-taking spirit as we move forward.

Magali Robathan, editor



ALVA's Bernard Donoghue

30



68

Do celebration events pay off for attractions?



Annabel Karim  
Kassar at the V&A

10

### 05 Editor's Letter

Unexpected partnerships can lead to interesting results, says Magali Robathan

### 10 People: Annabel Karim Kassar

On eliciting emotion with her Lebanese House exhibition

### 14 John Marx

A new kind of art gallery launched at Burning Man 2022

### 18 Gordon Morrison & Nat Taplin

Good Journey partners with ASVA to cut car journeys

### 22 News

The top news stories from the Attractions Management news feed

### 30 Bernard Donoghue

When COVID-19 hit, ALVA's CEO stepped up. He talks us through lobbying government, getting results and supporting the sector through incredibly tough times

### 38 Long walk for freedom

As architects BIG unveil their designs for the National Juneteenth Museum in Texas, partner Douglass Alligood tells us why it's one of the most important projects of his career

### 46 On a roll

More than 30 years on from the opening of the highly successful Lotte World theme park in Seoul, we take a look at its new sister park

### 52 IAAPA Expo Europe

The industry came together in London to meet, celebrate and plan. We round up some of the show's highlights

### 60 Going global

Taking a museum or attraction's retail offer international can have profound and sometimes surprising results, says retail design expert Callum Lumsden



38

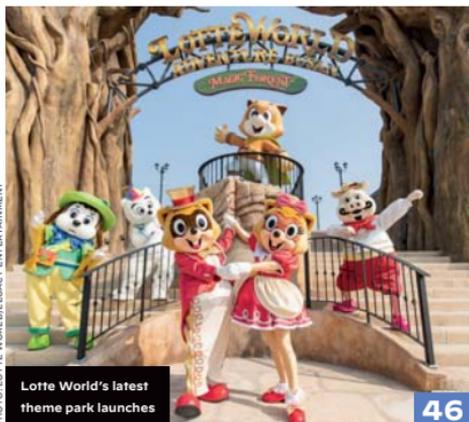
PHOTO: MARCUS MOERK

Guardians of the Galaxy: Cosmic Rewind



80

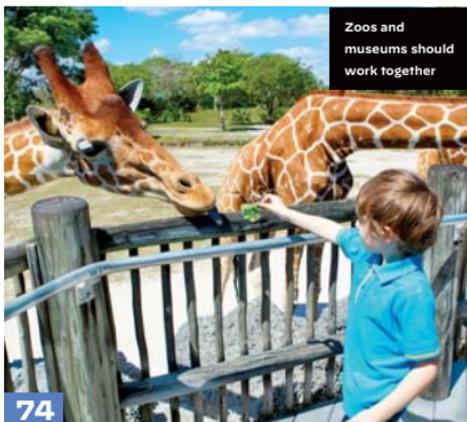
PHOTO: WALT DISNEY WORLD/NET PHILLIPS



Lotte World's latest theme park launches

46

PHOTO: LOTTE WORLD/LEGACY ENTERTAINMENT



Zoos and museums should work together

74

PHOTO: BINA WILMAUKSHUTTERSTOCK

### 66 Stranger and stranger

Nerflix has partnered with live entertainment discovery platform Fever to launch a *Stranger Things* immersive experience, and it's proving popular

### 68 Time to celebrate

Are celebration and special events worth the investment for attractions? Kathleen LeClair looks at the numbers

### 74 The missing link

Zoos and museums should work more closely for the benefit of all, according to new research from Yale University

### 80 Creating the magic

Disney Imagineers have shared some of the secrets that went into creating the long-awaited Guardians of the Galaxy: Cosmic Rewind attraction at EPCOT

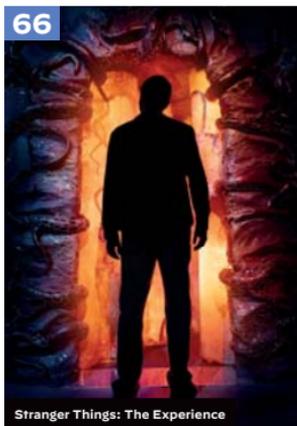
### 86 Product innovation

From a new gym at Warner Bros Studio Leavesden to projection mapping at upcoming immersive arts experience Frameless and a new launch from Convivous - we check out what's new in the world of product design

### 90 AM Directory

Companies supporting the industry

66



Stranger Things: The Experience



### Choose how you read Attractions Management

#### PRINT

Attractions Management is available in print on subscription at [leisuresubs.com](http://leisuresubs.com)

#### DIGITAL/DESKTOP

Read free online and enjoy extra links and searchability  
[attractionsmanagement.com/digital](http://attractionsmanagement.com/digital)

#### ONLINE/MOBILE

Each issue of AM can be read online at  
[www.attractionsmanagement.com](http://www.attractionsmanagement.com)

#### PDF

A PDF edition is available to read offline  
[attractionsmanagement.com/pdf](http://attractionsmanagement.com/pdf)

### Other resources from Attractions Management

Attractions Management website  
[www.attractionsmanagement.com](http://www.attractionsmanagement.com)

Attractions Management Handbook  
[www.attractionshandbook.com](http://www.attractionshandbook.com)

Attractions Management  
Ezine & Instant News Alerts  
[www.leisuremedia.com/signup](http://www.leisuremedia.com/signup)

Buyer search engine  
[www.attractions-kit.net](http://www.attractions-kit.net)

Leisure Media  
[www.leisuremedia.com](http://www.leisuremedia.com)

# Attractions MANAGEMENT

## MEET THE TEAM



EDITORIAL DIRECTOR  
Liz Terry  
+44 (0)1462 431385



EDITOR  
Magali Robathan  
+44 (0)1275 464192



SALES SUPPORT  
Tyler Landry  
+44 (0)1462 431385



HEAD OF NEWS  
Tom Walker  
+44 (0)1462 431385

#### DESIGN

Ed Gallagher  
+44 (0)1462 431385

#### WEB

Tim Nash  
+44 (0)1462 471917

#### CIRCULATION

Michael Emmerson  
+44 (0)1462 471932

#### SUBSCRIPTIONS

+44 (0)1462 471910

#### FINANCE & CREDIT CONTROL

+44 (0)1462 431385

For email use: [fullname@leisuremedia.com](mailto:fullname@leisuremedia.com)



COPYRIGHT NOTICE Attractions Management magazine is published by The Leisure Media Company Ltd, First Floor, 2 Railton Road, Woburn Road Industrial Estate, Kempston, MK42 7PN, UK. The views expressed in this publication are those of the author and do not necessarily represent those of the publisher. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by means, electronic, mechanical, photocopying, recorded or otherwise (please) without the prior permission of the copyright holder, Cybertrek Ltd. Printed by The Manson Group Ltd. Distributed by Royal Mail Group Ltd and Whistl Ltd in the UK and Total Mail Ltd globally. ©Cybertrek Ltd 2022 ISSN 1479-9154 (print) ISSN 2397-2416 (digital). To subscribe, log on to [www.leisuresubs.com](http://www.leisuresubs.com), email subs@leisuremedia.com or call +44 (0)1462 431385. Annual subs rates UK £48, Europe €65, rest of world €94, students (UK) £25

# LSM LAUNCH COASTER



Talga Linnaamäki, Finland



Scan QR-code for  
more information.  
[intamin.com](http://intamin.com)

# Attractions **People**



PHOTO: ED REIVE

## “This is an emotional project for me”

Annabel Karim Kassar, founder, AKK Architects

**F**rench-Lebanese architect Annabel Karim Kassar is giving a talk at the V&A London about her exhibition *The Lebanese House: Saving a Home, Saving a City* that explores the aftermath of the catastrophic 2020 Beirut port explosion.

The exhibition, which opened in June at the V&A South Kensington, features a 5m-high recreation of the facade of a traditional Lebanese home that was built in the museum by Beruti craftsmen using sandstone shipped from the Lebanon. It also features a series of emotional and thought-provoking specially commissioned films that explore the social and emotional impact of the explosion, which killed more than 200 people, injured more than 7,000 and destroyed part of Lebanon's cultural heritage.

“This exhibition is special to me,” Karim Kassar told *Attractions Management*, speaking at the V&A. “An architecture installation is very different to an architecture project, when you’re working for a client. Architecture installations are very personal, and allow me to express my ideas and convey my message, which is social, emotional and artistic.”

The aim of the exhibition, said Karim Kassar, was to provide a space for visitors to sit and reflect on the impact of the bombing and its aftermath, as well as the wider issue of preserving the memories of a city via its architecture.

Karim Kassar designed the exhibition to echo the design of a traditional Lebanese home; it invites visitors to sit and relax on a divan in a reconstruction of the Lebanese ‘Liwan’ – a small salon within a larger entrance hall of a Lebanese home.

**Annabel Karim  
Kassar designed  
the exhibition**



Traditional materials were shipped from Beirut

"I wanted to experiment with the idea that people should be able to sit comfortably and properly in a museum, rather than having to stand or sit on uncomfortable chairs," said Karim Kassar. "I wanted to offer a comfortable and beautiful place to take in the exhibition."

Karim Kassar is known for her architecture work in Beirut, where she has worked on both new buildings and the conservation of historic buildings, including the reconstruction of the city's traditional Souks at the heart of old Beirut.

"This is an emotional project for me," said Karim Kassar. "I love Beirut. It's such a creative city. I have an office there, and a home there, not far from the port. Both were damaged, and I know people who died in the explosion. I want people to be aware of what happened, and of how people are still suffering; I wanted to elicit an emotional response in visitors."

"People are fascinated; they respond to the emotion of the video and the facade. It makes me happy to see visitors sitting and staying for an hour or more." ●



PHOTO: ED REIVE



Karim Kassar wanted to elicit an emotional response

PHOTO: ED REIVE

A traditional divan provides a space for visitors to rest





PHOTO: JOHN MARX

In the Gifting Shop visitors could leave gifts for other people

“We wanted to design an art museum where visitors could be creators and artists too”

John Marx, architect and artist and Absinthia Vermut, artist



PHOTO: JOHN MARX

The Museum of No Spectators was launched at Burning Man 2022



**Absinthia Vermut and John Marx aim to challenge the perceived elitism of art museums**



rchitect and artist John Marx and artist Absinthia Vermut launched their Museum of No Spectators at this year's Burning Man Festival in Nevada, USA, with the aim of rethinking the notion of art museums and moving away from "art as an elitist sport".

The 1,400sq ft temporary museum was designed by Marx and Vermut and built from tube steel frames and aluminium Dibond panels by a team of 30 volunteers at the festival.

Inspired by Banksy's critique of modern museums' emphasis on 'exiting through the gift shop,' Marx and Vermut instead invited participants to enter the museum through the 'Gifting Shop,' where they were invited to create their own art as a gift. They then entered the main museum, which showcased a constantly changing selection of artworks created at the festival.

The idea was originally conceived for Burning Man 2020; when the festival was cancelled due to the COVID-19 pandemic, the design team developed an interactive digital version of the Museum of No Spectators as part of

Burning Man 2020's digital events series.

Here Marx talks exclusively to *Attractions Management* about why he feels it's time for a new kind of art museum and how festival-goers responded to the installation.

### Why do we need alternatives to traditional art museums?

The aim of this project was to challenge the notion that museums are neutral spaces for exhibiting what artists do. While many museums are changing, many still function as elitist, not least because 'museum grade art' is put on a pedestal as if it's beyond all other art. Investment grade art has a very important function in society, but there's a lot of creativity beyond that hard bubble that deserves a voice.

We need alternatives to traditional art galleries and museums that embrace qualitative issues but also provide accessibility and break the need for economic justification. This led us to imagine an art museum where visitors could be creators and artists, too – hence the name, Museum of No Spectators. Here you can touch the art, respond to the art, make art and add art or comments directly to the walls. ▶

► **Why did you choose to bring this museum to life at Burning Man?**

A participatory ethos is the driving spirit of Burning Man. Here, people are no longer passive consumers of art, but active participants in the creative process. This provides the perfect launching spot for a museum like this.

**What was the Gifting Shop?**

There were several key aspects of a normative museum experience we wanted to challenge – the idea that you can't touch the art, you can't make art and you need to buy things in the gift shop to support the museum. Decommodification is one of Burning Man's core principles. In an homage to Banksy's 2010 film *Exit through the Gift Shop* we decided to change the nature of a gift shop and have people enter through the Gifting Shop. In the Gifting Shop you come to receive gifts – we gave away 5,000 postcards by 10 well known Burning Man photographers and 500 pieces of jewellery.

Alternatively, visitors could leave gifts for other people, which started to happen more and more.

Every day we had several artists in residence who took participants through the ritual of making a gift of art. The result was profound and people flocked to the museum to participate.

There was a great diversity of artists and emotions exhibited in our eight galleries. Some pieces were playful, while others moved people to tears.

**What could traditional art galleries learn from the Museum of No Spectators?**

We have aspired to show how to challenge the normative practices of a fine arts museum to have a greater relevance to the communities it serves. While MoNS is unique in its desert setting with a community that specifically prides itself on self-expression and participation, our goal was to test ideas of inclusivity and access in order to see how creativity and art can become a catalyst for change.



People flocked to the Museum of No Spectators to participate



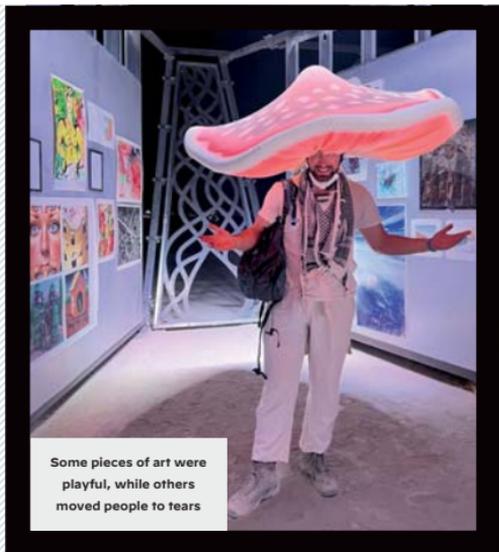
Artists in residence took participants through the ritual of making a gift

Most museums offer a series of exhibitions of artists to inform and inspire their communities, but they don't open this hard bubble to the average artist. While western societies value art from a distance, imagine how much deeper that appreciation might go if they also were part of the culture of art – much like the weekend soccer player, who enjoys the game, but doesn't feel third rate because they lack the talent and salary of the professional player. Their enjoyment and respect only deepens because of their involvement.

#### What's next?

Based on what we learned this year, there's still much more work to do in order to fully understand the potential for an alternative museum. Specifically, how to increase outreach to the community and get more people making art on site.

We intend to bring MoNS back in 2023, with additional spatial definition, increased event programming and a greater outreach to artists. We will also have a stage at the end of the museum for spoken word and performance art, which we weren't able to provide this year. ●



Some pieces of art were playful, while others moved people to tears



PHOTO: NEW FOREST NATIONAL PARK AUTHORITY

Car free visitors spend 20 per cent more than car visitors, says Good Journey



PHOTO: ASVA



PHOTO: GOOD JOURNEY

Gordon Morrison, CEO of ASVA (left) and Nat Taplin, director of Good Journey (right)



## Welcoming car-free visitors is a win-win for all involved

**Nat Taplin, director,  
Good Journey and  
Gordon Morrison,  
CEO, ASVA**



The Association of Scottish Visitor Attractions (ASVA) has teamed up with car free leisure champion Good Journey to encourage more people to visit attractions all over Scotland without driving.

ASVA's CEO Gordon Morrison said the association was keen to partner with Good Journey to help its members support their environmental goals and boost visitor numbers.

"We are urging ASVA attraction members of all types throughout Scotland to make the most of these great terms offered by Good Journey to boost the welcome they offer to car-free visitors, join the movement for green travel, and support the growth of sustainable tourism," said Morrison.

According to Good Journey, 24 per cent of UK households don't have access to a car, and the majority of international visitors don't hire one whilst holidaying in Scotland, meaning that providing access via rail, bus, bike or on foot can boost business.

The organisation also argues that car-free visitors spend around 20 per cent more than car visitors.

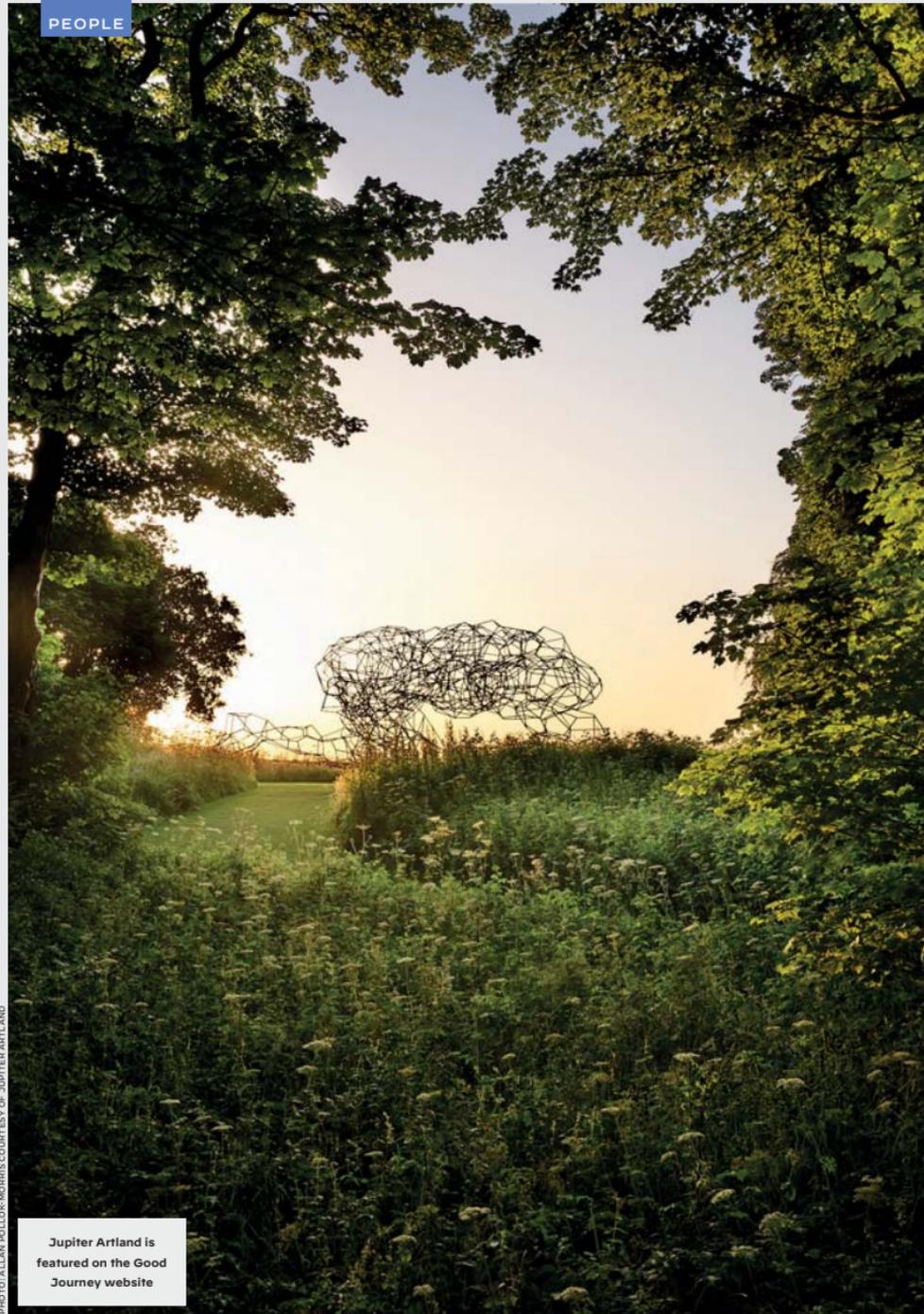


PHOTO: ALLAN POLLOK-MORRIS COURTESY OF JUPITER ARTLAND

Jupiter Artland is featured on the Good Journey website



**Good Journey offers advice on how to get around the UK car-free**

► “Welcoming car-free visitors is a win-win for all involved,” said Nat Taplin, director at Good Journey. “You’ll be opening your doors to the huge number of potential visitors, from both within the UK and overseas markets, who don’t have access to a car, as well as helping to cut carbon and reduce traffic and congestion on roads and at leisure sites. So while you are helping to keep Scotland and its wonderful natural environment special, you’re also supporting the growth of your business and the success of your local economy.”

The Good Journey website offers guidance on how to get around the UK without a car – providing visitors with simple-to-use journey planners and destination guides highlighting travel

options for places of interest to visit by rail, bus, shuttlebus, fixed-price taxi, bike or on foot.

The partnership allows ASVA attraction members to take advantage of special introductory terms to sign up to Good Journey (two years’ subscription to Good Journey for the price of one). Subscriptions to join range from £75 to £450 depending on visitor numbers.

A wide range of attractions have already joined Good Journey including Blenheim Palace, which has increased car-free visitors by over 25,000 in just two years, with 500 people a week using Blenheim’s Good Journey page to plan car-free journeys. The attraction promotes 30 per cent off entry for car-free visitors, using the Good Journey Mark throughout its marketing. ●

## BELGIUM

### Merlin to open Legoland Resort in Belgium by 2027

Merlin Entertainments Group has revealed plans for a new Legoland theme park near Charleroi Airport in Belgium.

Set to open to guests by 2027, Merlin has signed a partnership agreement with two investment funds – SOGEPA and SFPI – and SORESIC, the Charleroi-based organisation specialising in redeveloping the region's industrial sites.

The park will be located in Gosselies on an industrial site formerly used for the building of heavy construction machinery by global giant Caterpillar.

The park and its infrastructure will initially cover an area of 70 hectares, with a further 20 hectares

being set aside for future extensions or developments. The development is estimated to cost between €370m and €400m.

John Jakobsen, Merlin's COO for Legoland Resorts Group, said: "This is another exciting 'building block' laid for bringing a potential Legoland Resort to the many Lego fans across Wallonia, Benelux and Northern France.

"We will continue to work closely with the Walloon Government and the City of Charleroi and our stakeholder partners at SOGEPA, SFPI and SORESIC to hopefully make this vision an awesome reality."

More: [http://lei.sr/j6K5H\\_T](http://lei.sr/j6K5H_T)



The project is set to cost between €370m and €400m



PHOTO: MERLIN

“

We will continue to work closely with the Walloon Government

John Jakobsen

## US

### Universal's Epic Universe in Orlando set to open in 2025

“

Epic Universe will offer an entirely new level of experience that will forever change theme park entertainment – it will be the most immersive and innovative park we've ever created  
*Universal Resorts*

Building work on Universal's Epic Universe – a new theme park at the Universal Orlando Resort in Florida, US – is advancing and the park is set to open to visitors in 2025.

The park, whose construction was severely disrupted by the COVID-19 pandemic throughout 2020 and 2021, was initially set for a 2023 opening.

When open, it will become Universal's third theme park in Orlando and is located on a 750-acre (300 ha) site south of Sand Lake Road and east of Universal Boulevard.

Work on the development is led by Universal Creative.



Epic Universe is Universal's third theme park in Orlando

As well as a theme park, the site will include an entertainment centre, hotels, shops, restaurants and more.

"Epic Universe will offer a new level of experience that will forever change theme park entertainment," Universal said.

"Guests will venture beyond their wildest

imagination, travelling into beloved stories and through vibrant lands on adventures where the journey is as astounding as the ultimate destination.

"Epic Universe will be the most immersive park we've ever created."

More: [http://lei.sr/q2P9d\\_T](http://lei.sr/q2P9d_T)

## CHINA

### Triotech to supply rides for Puy du Fou Asia

Triotech has secured a deal to supply its interactive ride technology for the SAGA Experience, an immersive attraction being developed in the heart of Shanghai, China, by Puy du Fou Asia.

Themed according to Shanghai's "golden period" in the 1930s, SAGA covers more than 40,000sq m and will host more than 3,500 visitors per day.

Guests will be immersed in a journey through time in a large walkthrough experience, choosing their path through 26 possible routes.

Triotech's technology will act as an introduction for guests entering SAGA, which is Puy du Fou Asia's first project in China.

Canada-based Triotech's European division, CL Corp, has signed a deal with Puy du Fou to design and build seven dynamic platforms that will simulate a real-size train and other transportation vehicles with numerous special effects and media to transport visitors into the Shanghai experience.

Nicolas de Villiers, president of Puy du Fou, said: "We're proud that our new 'SAGA' concept is coming to Shanghai.

"This is our first creation in China, which calls for other projects on which we are actively working with our French and Chinese teams."

More: [http://lei.sr/q4k8X\\_T](http://lei.sr/q4k8X_T)



SAGA is set to cover more than 40,000sq m

PHOTO: PUY DU FOU



PHOTO: PUY DU FOU

“

We're proud that our new SAGA concept is coming to Shanghai  
Nicolas de Villiers

## ICELAND

### World's longest zipline attraction to open in Iceland

A 1km-long zipline, offering riders top speeds of up to 120km/h, is set to open in Iceland later this year.

Called Mega Zipline, the project is the brainchild of Iceland-based Kambagil Ehf, which has now partnered with two visitor attractions specialists to create the experience.

Mega Zipline will offer two 1km "flights" over the natural landscape of Svartagljufur Canyon, a popular tourist attraction near the capital city Reykjavik.

The zipline will be fitted with what Kambagil describes as the "most

advanced technologies currently available in the world of ziplines".

Kambagil Ehf is working together with Canada-based Skyline Ziplines on the project, whose proprietary systems will be used for safety as well as RFID monitoring.

Mega Zipline will also be the first zipline in Europe to be equipped with a next-generation video system developed by Kool Replay, which captures the highlights of a rider's experience from multiple viewpoints.

Halli Kristinnsson, Kambagil Ehf's project leader, said:



Mega Zipline will offer riders speeds of 120km/h

PHOTO: MEGA ZIPLINE

"Our goal has been to develop a visitor attraction in Iceland that gives visitors a dose of adrenaline and a unique view of the country's stunning natural landscape.

"Mega Zipline will also have the highest standards of safety and a unique video replay experience. We've been working with Skyline

and Kool replay on the project, with both companies having demonstrated a unique edge in their specialist areas."

Construction of the attraction is now nearing completion, with the first guests set to take the flights in autumn 2022.

More: [http://lei.sr/5U4x3\\_T](http://lei.sr/5U4x3_T)

UK

## Merlin takes over UK's largest indoor waterpark

Merlin Entertainments has secured a contract to operate Blackpool Sandcastle, the UK's largest indoor waterpark.

The visitor attractions giant will take over the day-to-day management of the property, which is owned by Blackpool Council, a local authority.

Based in South Beach, Blackpool, the indoor park sustains a tropical 84-degree climate and houses more than 18 slides, rides and attractions.

It will become Merlin's ninth property in Blackpool, joining the likes of Blackpool Tower, Madame Tussauds Blackpool and Sea Life Blackpool in its portfolio.

Blackpool Council leader, Lynn Williams, added:

"The Sandcastle Waterpark is one of the Council's big success stories.

"Over the years, it has received significant investment to enable it to retain and grow its immense popularity with visitors and residents alike."

According to Kate Shane, regional director for Merlin, the deal for Sandcastle supports Merlin's wider strategy to establish clusters of family-friendly attractions in key strategic locations.

"With eight top attractions already in Blackpool, we're excited to put on our armbands and add a ninth to our guest offering."

More: [http://lei.sr/W5a4n\\_T](http://lei.sr/W5a4n_T)



“  
Sandcastle Waterpark is one of Blackpool Council's success stories  
Lynn Williams

UK

## Decommissioned oil rig transformed into art attraction

“

Within the wild garden, guests will find hidden routes to explore the rehabilitated See Monster, where embedded throughout will be new approaches to a more sustainable and greener future

An oil rig that spent three decades in the North Sea before it was retired last year has been transformed into an interactive art installation in Weston-super-Mare, UK.

Called See Monster, the 450-tonne structure is the brainchild of design company News substance.

Described as a "celebration of the great British weather and eccentricity", visitors have the opportunity to travel up and inside the structure, which features a waterfall, a slide, a seated amphitheatre and an art installation.

The exterior features shimmering aluminium



scales, while the rig is covered in trees and plants.

News substance said: "Guests pass behind the thrashing cascade of a 12m waterfall, and under the scales into the cavernous underbelly of the beast.

"Within the wild garden, they can find hidden routes

to explore the rehabilitated See Monster, where embedded throughout are new approaches to a more sustainable future.

"They may encounter sudden showers of rainfall from above too."

More: [http://lei.sr/h9e2m\\_T](http://lei.sr/h9e2m_T)

## FRANCE

### Tangled attraction among Disney's Paris additions

A Tangled-themed family ride is among a range of new attractions revealed for the Walt Disney Studios Park at Disneyland Paris Resort, France.

While exact details for the Tangled attraction are to be confirmed, the concept art released by Disney seems to suggest it's a spinner ride with wooden boats spinning around lanterns.

Disney did confirm that the ride is set to be located along an entirely new promenade being built for the park, which will offer guests access to another new arrival – the upcoming Frozen-themed land.

The new ride and the Frozen land form part of

the transformation of Walt Disney Studios Park, which this year is celebrating its 30th anniversary.

Among other additions in 2023 will be a brand-new show at the Studio Theater, called Pixar: We Belong Together, which will invite guests to take part in "an emotional journey" with some of Pixar's most popular characters.

Elsewhere, a new Toy Story Garden will transport guests to the world of Woody and Jessie and their friends, while offering a new way to discover the Toy Story Playland nearby.

Disney also provided an update on the progress made in the construction of the Frozen land.



"Groundworks are also continuing on the lake itself and the new Frozen-themed area that will welcome Disneyland Paris guests in the near future," Disney said.

"Imagineers from around the world are already working

together to immerse fans of all ages in the Kingdom of Arendelle. It will be home to a new attraction that will take guests on an unforgettable journey with Elsa and Anna."

More: [http://lei.sr/z8C3d\\_T](http://lei.sr/z8C3d_T)

## EGYPT

### 'World's most anticipated museum' to finally open

The Grand Egyptian Museum is set to finally open its doors after a design and construction project which has taken more than 20 years to complete.

Touted as the world's most anticipated museum – thanks to both its unique design and the treasures it will house – the attraction was first announced to the world in 2001.

A design competition in 2002 received more than 1,500 entries, from which Heneghan Peng Architects were selected for the development in 2003. After a delayed start, ground

was finally broken in 2005 and the building of the museum has taken nearly 15 years – with the COVID-19 pandemic adding further disruption to the process.

Opening in November 2022, the Grand Egyptian Museum (GEM) will house, display, and preserve some of the world's greatest ancient treasures – including King Tut's entire treasure collection, which will be available to the public for the very first time.

GEM will be the largest archaeological museum complex in the world and is set to house more than 100,000 artefacts.



As well as King Tut's collection, the numerous galleries will exhibit pre-historic times through Egypt's many thousands of years of pharaonic civilization through to the ancient Greek and Roman periods of Egyptian history.

The museum has been designed as a cultural

complex of activities devoted to Egyptology and will contain 24,000sq m of permanent exhibition space, a children's museum, conference and education facilities, a large conservation centre and extensive gardens on the 50th site.

More: [http://lei.sr/14U2C\\_T](http://lei.sr/14U2C_T)

## SAUDI ARABIA

### Foster + Partners designs Red Sea marine life centre

The Red Sea Development Company (TRSDC), the developer behind the AMAALA tourism project on the shores of the Red Sea, has revealed detailed plans for a marine life institute.

Designed by architects Foster and Partners, the institute will function as both a scientific research centre and a tourist destination, with 10 zones providing a range of experiences, from augmented reality to submarine dives.

The 10,340sq m institute will be built on three levels – one above ground and two below – and offer panoramic views of the Red Sea and marina.

Inspired by the Red Sea's coral formations, the glass-

reinforced concrete being used to build the institute will be intricately moulded to resemble reef patterns.

John Pagano, Group CEO of TRSDC, said: "We wanted to design a first-of-its-kind facility that extends far beyond any existing marine life attraction. With 10 zones that provide everything from augmented reality experiences to night diving and spaces for the scientific community to effectively progress their environmental projects, the facility is undeniably unique.

"It will drive global green and blue innovations and help put Saudi Arabia on the map for travellers.

More: [http://lei.sr/M735x\\_T](http://lei.sr/M735x_T)



The institute will be a research centre and visitor attraction

PHOTO: FOSTER + PARTNERS



PHOTO: TRSDC

“

This project will drive global green and blue innovations

John Pagano

## FINLAND

### Brad Pitt makes sculpting debut at Finnish museum

“

Pitt's work at the exhibition includes a moulded plaster panel depicting a gunfight narrative scene, cast using multiple impressions of the human body

Hollywood superstar, Brad Pitt, has made his debut as a sculptor as part of British artist Thomas Houseago's first ever exhibition in the Nordic countries.

The actor visited The Sara Hildén Art Museum in Tampere, Finland, to open the exhibition personally.

Pitt launched the display alongside Houseago and Australian musician, Nick Cave.

The three are long-time friends and the exhibition also acts as Cave's sculpting debut.

According to media reports, Pitt got interested in sculpting



Nick Cave (left), Thomas Houseago (middle) and Brad Pitt

PHOTO: JUSTIN O'CONNOR

after his divorce from fellow Hollywood star, Angelina Jolie, in 2017 and spent long periods of time at Houseago's Los Angeles studio.

Pitt's work at the exhibition includes a moulded plaster panel depicting a gunfight narrative scene, cast using multiple impressions of the human body.

There is also a series of plinth-mounted, house-shaped sculptures moulded in clear silicone that each has been shot with a different gauge of ammunition, revealing its trajectory and freeze-framing the destructive motion.

More: [http://lei.sr/M6g9B\\_T](http://lei.sr/M6g9B_T)

## GLOBAL

### Heygo enters attractions with live-streaming tours

Live-streaming platform Heygo has ventured into the cultural visitor attractions sector by partnering with a number of museums in the UK and US.

Launched during the COVID-19 pandemic, Heygo uses live-streaming to offer guided tours across the world, with a mission to “create unforgettable experiences” for anyone looking to discover something new – but who might be unable to do so in person.

The tours feature famous locations and landmarks around the globe and are free to join.

Heygo is now expanding beyond travel destinations and into the attractions

sector, after signing a partnership deal with University College London’s Museums, which operates the Grant Museum of Zoology, Petrie Museum and the UCL Art Museum. The first live-streamed Heygo museum tours are set to kick start in November 2022.

Heygo CEO and co-founder, John Tertan, said: “Heygo was started to help everyone experience and get the benefits of travel. It’s been remarkable how the platform has helped make travel a much more accessible experience by breaking down the barrier of distance and money.”

More: [http://lei.sr/NzR8g\\_T](http://lei.sr/NzR8g_T)



Grant Museum of Zoology, London, will offer Heygo tours

PHOTO: LIME/ANDREW TERTAN



“Heygo has helped make travel a more accessible experience”  
John Tertan

## GLOBAL

### Team develops video games that adjust to player emotions



“Our approach doesn’t rely on external sensors”  
Kyung-Joong Kim

Korean scientists have developed a way to adjust the difficulty of video games by estimating the players’ emotions based on in-game data.

Until now, most developers have relied on ‘dynamic difficulty adjustment (DDA)’ to balance a video game’s difficulty – deemed essential to provide players with a pleasant experience.

Using DDA, the difficulty of a game adjusts purely on player performance, not on how much fun they are having – but a team at the Gwangju Institute of Science and Technology



The method could have a major impact on ride technology

(GIST) decided to put a twist on the DDA approach.

Instead of focusing on the player’s performance, they developed DDA agents that adjusted the game’s difficulty to maximise one of four different aspects related to a player’s satisfaction: challenge, competence, flow, and valence.

Professor Kyung-Joong Kim, who led the study, said the method could have a major impact on tech and simulation-type rides at visitor attractions, adding: “Our approach does not rely on external sensors, such as electroencephalography.”

More: [http://lei.sr/r3F7v\\_T](http://lei.sr/r3F7v_T)

UK

## Horniman Museum returns 72 looted artefacts

The Horniman Museum in London, UK has agreed to return a collection of artefacts looted in the 19th century from the Kingdom of Benin.

The objects were forcibly removed from Benin City during the British military incursion in February 1897 and were among thousands of artefacts taken out of the country, which eventually ended up in 150 museums and galleries all over the world.

The Horniman's 72 objects – which include 12 brass plaques known as the Benin Bronzes – will now be transferred to the Nigerian government.

Horniman becomes the first museum receiving funding

from the UK government to say that it will return its haul from the Kingdom of Benin – a former nation which has no historical relation to the modern republic of Benin and is located in what is now Edo state, Nigeria.

It follows the Horniman receiving a request from the National Commission for Museums and Monuments (NCMM) in January 2022.

The Horniman has since undertaken detailed research of its objects from Benin to establish which are in the scope of the request.

The Horniman has also consulted with community members, visitors, schoolchildren, academics, heritage professionals and



The returned items include the famous 'Benin bronzes'

PHOTO: HORNIMAN MUSEUM

artists based in Nigeria and the UK. All of their views on the future of the Benin objects were considered, alongside the provenance of the objects.

A final decision to return the objects was

made by the Horniman trustees in August 2022, with the full backing of The Charity Commission, the UK regulator for the charitable sector.

More: [http://lei.sr/M2B5f\\_T](http://lei.sr/M2B5f_T)

GLOBAL

## IAAPA recognition for Blackpool Pleasure Beach



PHOTO: IAAPA

Blackpool Pleasure Beach has been honoured for its historic relationship with IAAPA.

The UK theme park joined the association in 1923 when founder, William G. Bean, attended an annual IAAPA meeting and became the first member from outside of North America.

During the recent IAAPA Expo Europe, Blackpool Pleasure Beach's current CEO, Amanda Thompson OBE, was awarded with a 75+ Year Member Ribbon.

Thompson said: "Blackpool Pleasure Beach and IAAPA have a long and illustrious history together.



Blackpool Pleasure Beach joined IAAPA in 1923

PHOTO: BLACKPOOL PLEASURE BEACH

"Not only did I serve as chair in 2020 and 2021, the first European woman to do so, but my father also held the same position.

"Our shared history goes right back to my great-grandfather, WG Bean, who spoke at an early IAAPA meeting almost 100 years ago. I look forward to

continuing this relationship and working with IAAPA for many more years."

Blackpool Pleasure Beach was founded in 1896 by AWG Bean and his partner John Outthwaite and has been family owned and operated since its inception.

More: [http://lei.sr/C7E2E\\_T](http://lei.sr/C7E2E_T)

“  
Blackpool Pleasure Beach and IAAPA have a long and illustrious history together  
Amanda Thompson

YOU ARE NOT JUST *DESIGNING MEDIA CONTENT FOR YOUR ATTRACTION.*  
*YOU'RE PLANNING A DREAM EXPERIENCE.*

Make sure it comes true.

How can you be sure that the CGI content you need will meet your expectations in terms of **quality, costs, and lead time?**

You can with the CGI Magic Chain, our standardized production process: it will show you exactly how we will work and what you can expect, **before you commit to the agreement.**

Send the request for proposal of your media content project at [rfp@redraion.com](mailto:rfp@redraion.com)



**RED RAION**<sup>®</sup>

The CGI studio specialized in media based attractions



Donoghue's daily bulletins were a lifeline for many in the industry

# BERNARD DONOGHUE



“

I don't think my work has ever been under more scrutiny and accountability. It was a terrifying responsibility

**When COVID hit, the CEO of ALVA stepped up, with nightly bulletins, free research and advice and tireless lobbying of government that got great results for the sector. Magali Robathan finds out how it was for him**



When I meet Bernard Donoghue, CEO of the Association of Leading Visitor Attractions (ALVA), he is about to

take some well earned time off to breathe and relax after the most hectic two and a half years of his career. He is not planning to lie on an exotic beach reading a book though – instead he is staying in the UK and visiting “as many amazing visitor attractions as I can, because that’s just what I love doing”.

This genuine passion for attractions is what makes Donoghue such a powerful advocate for the sector. As chief executive of ALVA – an umbrella body that represents the UK’s largest museums, galleries, heritage sites, stately homes, cathedrals, gardens, parks, zoos, performance venues and leisure attractions – Donoghue has worked tirelessly through the pandemic, lobbying government, speaking to the media, commissioning and sharing research and supporting members

(and non-members) with bulletins, online webinars, information and guidance.

Lobbying efforts resulted in a package of financial help from the government that included a temporary reduction in VAT to 5 per cent for visitor attractions, the continuation of furlough and the creation of the Cultural Recovery Fund – a fund offering financial support to cultural institutions struggling due to the pandemic that currently stands at £2.1bn.

Donoghue’s efforts were officially recognised in June 2022 when he was awarded an OBE in the Queen’s Birthday Honours for services to tourism and culture. “It was a great honour and surprise,” he says. “Tourism and culture have had the most turbulent, challenging few years and the public have been reminded of how important they are to our lives, so it’s an enormous privilege to be able to contribute to their recovery, growth and dynamism.”

Donoghue has been CEO of ALVA since 2011, and in that time has doubled its membership. He is also the London Mayor’s Ambassador

► for Cultural Tourism, co-chair of the London Tourism Recovery Board and chair of the People's History Museum, the Museum of Democracy in Manchester, of the National Trust's Regional Advisory Board for London and the South East and of the Bristol Old Vic theatre, where we meet for our interview.

## SPIRIT OF OPENNESS

When the COVID-19 pandemic hit in 2020 and lockdown restrictions forced all non-essential venues to close in March, Donoghue and ALVA made an immediate decision to support the industry as a whole, sharing visitor sentiment research free of charge and opening up ALVA's webinars and bulletins to everyone, whether or not they were a member.

"That spirit of openness and generosity and sharing was vital for a sector in trauma and shows that we are better together," says Donoghue. "ALVA is an extraordinary organisation where people share data and insights and trends really openly, but under COVID that went to a higher level. The capacity and willingness of people to share and be open was really humbling."

Donoghue spent long days working from home, advocating for the sector in meetings with government and, armed with data from the sector, was able to make strong arguments about the value of culture and attractions.

"What became very apparent even in the early days of COVID, is that we in this sector have really good data – about membership numbers, average transaction value, dwell time, the economic impact of a visitor attraction in their local economy," he says. "That was gold. It enabled us to open doors and have quick and influential conversations with DCMS and Treasury officials. We were able to show very clearly the economic worth of tourism – and attractions at the heart of that – and that made all the difference."

From February 2020 until earlier this year, Donoghue delivered a daily bulletin to members, reporting on the latest information for the sector and trying to make sense of the government's ever-changing rules. It was invaluable for so many during that turbulent and confusing time, but it must have been exhausting unpicking the government's often mixed and complicated messages on a daily basis. ►

The spirit of openness and generosity within the sector and the support of the British public was humbling, says Donoghue





Outdoor attractions bounced back more quickly as people looked to reconnect with nature

## LATEST VISITOR FIGURES

### Visits made in 2021 to visitor attractions in membership with ALVA

Rank	Site	Total visits	Charge* / free	In/ outdoor	% +/-	Area	Group
1	Windsor Great Park	5,400,000	1	Outdoor	-8%	Eng excl Lon	
2	Royal Botanic Gardens, Kew	1,963,171	3	Mix	61%	London	RBGK
3	Chester Zoo	1,601,327	3	Outdoor	35%	Eng excl Lon	
4	Natural History Museum (South Kensington)	1,571,413	2	Indoor	21%	London	NHM
5	RHS Garden Wisley	1,410,785	3	Outdoor	42%	Eng excl Lon	RHS
6	British Museum**	1,327,120	2	Indoor	4%	London	
7	Tate Modern	1,156,037	2	Indoor	-19%	London	TATE
8	Somerset House	984,978	2	Mix	36%	London	
9	Science Museum	955,873	1	Indoor	11%	London	SMG
10	Jeskyns Community Woodland	878,626	1	Outdoor	17%	Eng excl Lon	FE
11	V&A South Kensington	857,742	2	Indoor	-2%	London	V&A
12	Moors Valley Country Park	803,867	1	Outdoor	22%	Eng excl Lon	FE
13	Southbank Centre	786,911	2	Indoor	16%	London	
14	Longleat	727,800	4	Outdoor	47%	Eng excl Lon	
15	The National Gallery	708,924	2	Indoor	-41%	London	

\*Charges: 1) Free to all. 2) Free except special exhibitions/events. 3) Free to members, charge for non-members. 4) Charged

\*\*Reduced ticketing capacity applied when site was open



PASA/OLOH

Donoghue says the creativity of the sector has been amazing

- ▶ “That whole period was exhausting,” Donoghue agrees. “I don’t think my work has ever been under more scrutiny and accountability. People have been very kind and said my daily bulletin was a lifeline, but they were also saying, let’s not make any decisions until we hear what Bernard has to say at 6pm. That was a pretty terrifying responsibility.”

## THE HIGHS AND LOWS

When I ask Donoghue what the toughest points of that time were, he says: “There were two. One was a real sense of frustration when the government said museums and galleries had to stay shut while saunas could reopen. You just wanted to say, show me the epidemiology here that justifies a sauna staying open but not the Turbine Hall of Tate Modern, one of the largest rooms in the country. The inconsistencies were frustrating.

“The other was Omicron hitting during the winter of 2020/2021. During the first phase of the pandemic, the adrenaline saw me through, but the winter of 2020 was really depressing and draining.”

What about the positives of that whole period?

“The last couple of years of chaos and madness let organisations take risks and say to themselves: ‘What’s the worst that can happen?’” he says. “We’ve seen some amazing examples of creativity over this period.”

I ask for some examples of this creative thinking and Donoghue picks out an online, interactive challenge by Oxford University

PHOTO © TRUSTEES OF THE BRITISH MUSEUM



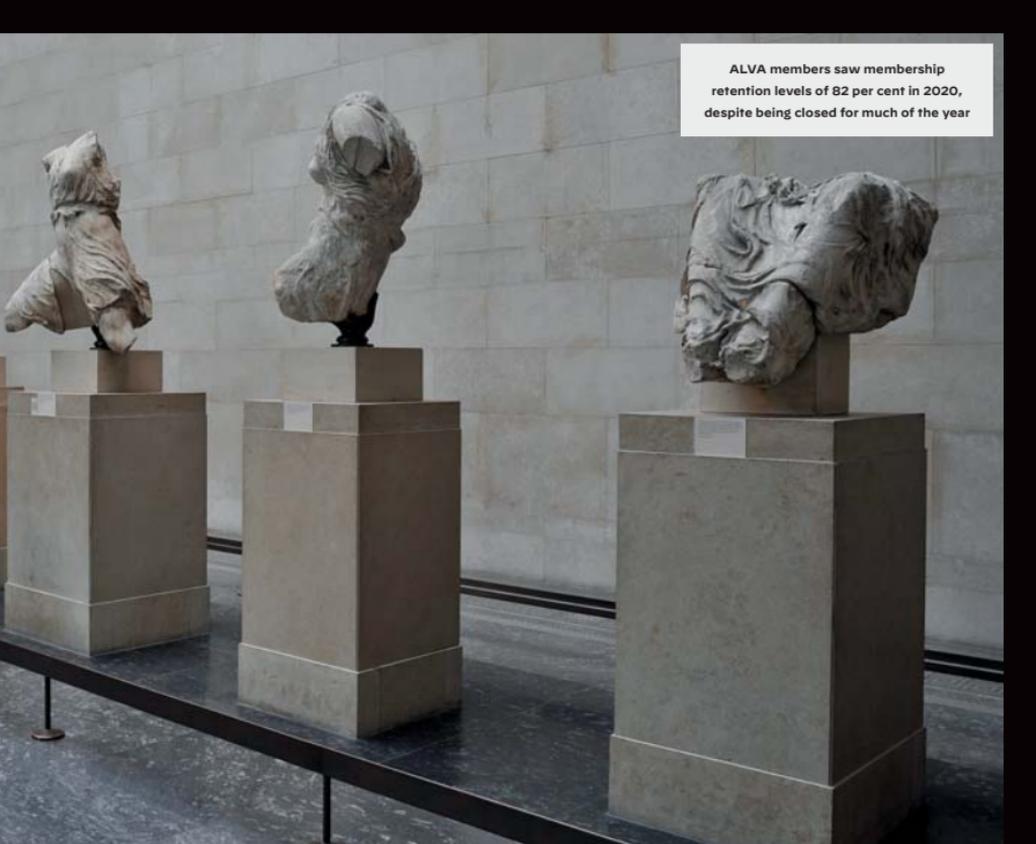
Museum of Natural History. Mystery at the Museum took place in December 2020 and was devised by wildlife presenter Steve Backshall and escape room creator Agent November. “They took a risk on it and it worked brilliantly,” says Donoghue. “It was a fundraiser, it developed new audiences, it was fun and it was phenomenally successful.”

The operators of regional open-air museum Beamish, the Living Museum of the North in Durham, UK, also impressed Donoghue with their flexibility and creativity. “They managed to put in new exhibitions, a 1950s street, and launch interesting partnerships – they now make heritage sweets on site and sell them through Fenwick department store.”

London Zoo’s streamed virtual bedtime stories, Tails from the Zoo, also caught his eye. “It was a brilliant idea,” he says. “I just loved seeing the explosion in interesting digital activity across the sector.

“People realised it was okay to take risks and amazing things happen when you do. You rarely get an opportunity in a career to draw up a blank piece of paper and say ‘this is how we’re going to change’ – the last two years have given us that.”

Another big positive says Donoghue, was the support of the British public for the industry.

A photograph of three abstract sculptures made of a light-colored, textured material, possibly stone or plaster. Each sculpture is mounted on a rectangular, light-colored stone pedestal. The sculptures are arranged in a line from left to right, with the largest one on the right. The background is a light-colored wall with a grid pattern.

ALVA members saw membership retention levels of 82 per cent in 2020, despite being closed for much of the year

"I learned a lot about British people during that whole time," he says. "In 2020 we did a survey and found that membership retention rates among our members was an astonishing 82 per cent, despite the fact that attractions were closed for much of that year. That wasn't laziness, or people forgetting to cancel direct debits, that was people realising how important culture was to them. When visitor attractions reopened, people came back with generosity and love. It was startling and humbling to witness.

"The challenge now is, how do we as a sector reciprocate that love? The public turned up for us when we needed them, now it's our turn."

### INCREASING DIVERSITY

Donoghue has some words of advice for attractions looking to do just that.

"Be generous," he says. "Deliver a warm welcome. And challenge yourself to reopen your doors to people who are different from those you closed them to in March 2020.

"The Cultural Recovery Fund has been an absolute lifeline for so many in the sector and it was funded by the British taxpayer. If the people coming through your door don't look like the taxpayers who live in your community, you've got a problem, because they bailed you out."

How is the industry responding to this challenge, I ask Donoghue.

"They're responding in various ways and at various speeds. All of them completely appreciate that in order to have a credible mandate to exist, they must look like the population in which they sit. More than that, they need to have programming and collections and events which reflect the diversity of where they are housed.

"One of the really interesting things over the past two years for me has been the confluence of the murder of George Floyd and Black Lives Matter and COVID, where we sat at home and were confronted with the reality of racial and social injustice and the continuing legacy of slavery, which permeates every part of society." ▶

ALVA publishes annual visitor numbers for UK attractions – a ‘Top of the Pops’ for tourism



## ▶ A MIXED PICTURE

So, I ask Donoghue. What’s the picture looking like now for attractions in the UK?

“The honest answer is, really variable,” he says. “Some, particularly outdoor attractions – parks, gardens, zoos, stately homes’ gardens and outdoor spaces – are doing really well. The first thing people wanted to do after lockdown was breathe, heal and reconnect with nature, and that’s still a really powerful motivation.

“Indoor attractions, by contrast, are slow to recover. Most museums and galleries are reporting that they’re at about 75 per cent of 2019 visitor figures and that’s without the huge return of inbound visitors.

“There are two groups struggling most of all, those are the ones that are usually highly dependent on overseas visitors – they probably won’t be back to pre-pandemic levels until 2024 – and theatre and performance venues.

“It’s a really mixed, complicated picture. Throw into the mix the cost of living crisis, energy costs and petrol costs – we always predicted that this year could be more financially challenging than last year and unfortunately that’s proving to be the case.”

## RECIPE FOR SUCCESS

In March each year, ALVA publishes visitor numbers for the previous year – a “Top of the Pops for tourism,” says Donoghue. “Almost every year it’s a play off between the British Museum and Tate Modern at number one and number two. This year’s figures were completely

different – Windsor Great Park was at number one, Royal Botanic Gardens Kew at number two and Chester Zoo at number four.”

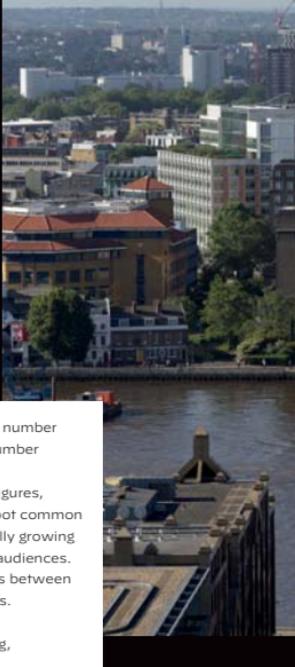
As well as publishing these annual figures, Donoghue analyses them to try and spot common behaviours in organisations successfully growing visitor numbers and diversifying their audiences.

“There absolutely are commonalities between the attractions doing this well,” he says.

“One is provocative and disruptive programming that is thought-provoking, a bit jarring and a bit surprising.

“A great example of this was Historic Royal Palaces’ Queer Night at Whitehall Palace a couple of years ago, telling the story of the queer court of King James VI and his male lovers. It was brave and extraordinary and fascinating and so well appreciated by the LGBT community who suddenly saw themselves and their history being told with panache and joy.

“Successful organisations are bold, they take risks and they foster creative partnerships with unusual suspects – museums and galleries working with theatre companies to tell their stories in different ways, Beamish working with Fenwicks, for example. They really stretch their brand and get involved in cultural conversations, events and programming. One of my favourites is Historic Royal Palaces going to Bestival, doing Tudors on Tour. That outreach work is fascinating.”



Donoghue was frustrated when saunas could reopen but not the vast Turbine Hall of Tate Modern



Donoghue is an optimist by nature and enjoys focusing on the positive, but he admits the sector is facing a challenging period.

"Just as we thought we thought we were coming out of the pandemic, the cost of living crisis is coming in," he says. "People are having to make tactical judgements about their leisure spend. So far, they don't seem to be sacrificing day trips to leisure attractions, which is heartening, but as petrol prices increase, they will start to make decisions about whether they can afford to go to more rural locations."

The plan for the coming months is to carry on doing what Donoghue and ALVA have been doing – supporting the sector through tricky times.

"We're getting our meetings back in real life, which is great," he says. "We'll keep on commissioning our visitor sentiment research

for as long as it's needed – we're still in a very unpredictable, highly variable environment and people really want good data.

"And we're continuing with our advocacy and lobbying efforts – reminding politicians that COVID isn't over and some parts of our sector are experiencing the tourism equivalent of Long COVID and they won't repair their balance sheets until they get overseas visitors back and repay their loans."

Donoghue ends on a positive note. "It's just so lovely going back out now and meeting up with members and seeing how they're recovering and how optimistic they are," he says.

"What I really want is for people to hang on to that and keep the best bits of the last two years – that boldness, flexibility, responsiveness and creativity." ●

The museum is the brainchild of activist Opal Lee, known as the Grandmother of Juneteenth

# LONG WALK FOR FREEDOM

The brainchild of the 'grandmother of Juneteenth' Opal Lee, the National Juneteenth Museum has been a long time coming. Architect Douglass Allgood speaks to Magali Robathan about the responsibility and privilege of creating a fitting celebration of the freedom of enslaved people in the US



Architect Douglass Allgood has described the project as one of the most rewarding of his career

## ***This project is about black history, and by saying that, I mean that this project is about a part of American history that is coming under increasing challenge to erasure from history books***

 On 19 June, 1865, enslaved African Americans in Galveston, Texas, received the news that slavery had been abolished, and they were free. Since then, 19 June – or Juneteenth – has been celebrated across the US to commemorate the end of slavery, but it took decades of campaigning for it to finally be declared a federal holiday in 2021.

Activist and former teacher Opal Lee – known as the Grandmother of Juneteenth – spearheaded the movement to make June 19 a national holiday, leading 2.5 mile walks each year to raise the profile of the campaign (representing the two and a half years it took for news of the abolition of slavery to reach Texas). In 2016, at the age of 89, she rose to national prominence when she announced plans to walk 1,400 miles to Washington DC to plead her case.

When President Joe Biden signed the bill making Juneteenth a federal holiday on June 17 2021, he said, “Over the course of decades, [Opal

Lee] has made it her mission to see that this day came. She’s walked miles and miles, literally and figuratively, to bring attention to Juneteenth.”

Now another of Opal Lee’s dreams is becoming a reality, with details released of the National Juneteenth Museum in Fort Worth Texas. The museum will celebrate the legacy of freedom announced on 19 June 1965 with immersive galleries, a theatre, a black box flex space, a food hall for local vendors and a business incubator.

Located in Fort Worth’s Southside neighbourhood in Texas, the museum is being designed by architecture studio BIG, with Black-owned architecture studio KAI Enterprises acting as the architect of record.

The 4,645sq m (50,000sq ft) mass timber museum is arranged around a nova star-shaped central courtyard with a five point star engraved in gold into the ground to represent Texas – the last state to acknowledge the freedom of enslaved peoples across America and to celebrate the freedom of African American people across the US. ▶



- Here Douglass Alligood, partner at BIG, talks to *Attractions Management* about this significant project.

### What are the aims of the National Juneteenth Museum?

The museum will be dedicated to preserving the history of Juneteenth and the legacy of freedom. Working alongside the architect-of-record, African American-owned design and build firm, KAI Enterprises – and with Ms Opal Lee, the ‘Grandmother of Juneteenth’ at the helm – we’re designing the museum to be the epicentre for the education, preservation and celebration

of Juneteenth nationally and globally, hosting exhibitions, discussions, and events about the significance of African American freedom.

The location is really important in the larger context of the museum. The Historic Southside of Fort Worth, Texas is one of the South’s most underserved communities. The Fort Worth area was divided by the I-35W highway in the 1960s – a time when major infrastructure projects slashed through neighbourhoods of predominantly low-income communities of colour across the country. The museum seeks to provide a cultural and economic anchor for this neighbourhood and act as a catalyst for ensuring its future vitality.

The museum is arranged around a nova star-shaped courtyard space



### What is special about this project?

Juneteenth is about freedom, which in many ways is a universally understood concept. What makes this project special is that it has the possibility of speaking to people from many different perspectives on the value of freedom.

The most unique aspect of this project is the concept of creating much needed space for community activities and economic empowerment. The business incubator will provide a launching pad for entrepreneurs as well as educational opportunities. The food court will also provide an opportunity for local restaurant owners to get a start or increase their profile

in the community. Each element of the project will be geared toward enhancing community participation and activation while organised around the central spirit of empowerment.

### What does this project mean to you personally?

I have worked on a variety of project types in my nearly 40 year career. Each project is special in its own way, but it is rare enough for me to have a black client – and even rarer to have a black client proposing a project focused on the black experience. As a black person in a predominately white industry, it is rare to work on ▶



The architecture team worked closely with Opal Lee on the design of the museum

***Opal Lee was adamant that the museum is not about her, noting that 'it's about all of those whose backs we came up on'***



It's hoped the museum will act as a catalyst for development for Fort Worth's Southside

- ▶ a project where research on the project engages a black person's perspective on space-making.

This project is about black history, and by saying that, I mean that this project is about a part of American history that is coming under increasing challenge to erasure from the history books. The history of Southside is reflected in many black communities over the past century where a highway is driven directly through a once thriving neighbourhood. After years of economic neglect and lack of follow-through on investment, this privately-funded project holds the promise of development without displacement.

#### How will the architecture support the aims of the museum?

Opal Lee always reminds us that the museum is about freedom. The museum will have a permanent exhibit dedicated to the 12 freedoms gained after slavery. For us, the 12 pointed nova star on the Juneteenth Flag was the perfect form to reinforce that vision.

In our meetings with community leaders, they specifically asked for a design with a wow factor. They wanted a building with prominence, but of a scale that is relatable to

the neighbourhood. We feel that the rising peaks of each segment of the nova star, articulated by the exposed timber framing, will create a forced perspective and resolve into a spiritually uplifting moment at the communal central courtyard.

#### What was the starting point for the design?

The design was driven by the goals of the entire campus to create a spirit around Juneteenth. Each of the five programmes – immersive galleries, a business incubator, food hall for local vendors, black box flex space, and a theatre – wants to have its own identity, yet clearly be part of the greater whole. As such, we gravitated towards a massing organised around a central courtyard.

#### How closely have you worked with Opal Lee?

We were brought into the project by Jarred Howard who introduced us to Opal Lee at our first meeting in December 2021. She is incredibly charismatic and clear about her vision. We have worked with Opal Lee through multiple meetings where she set forth her vision for the museum. ▶

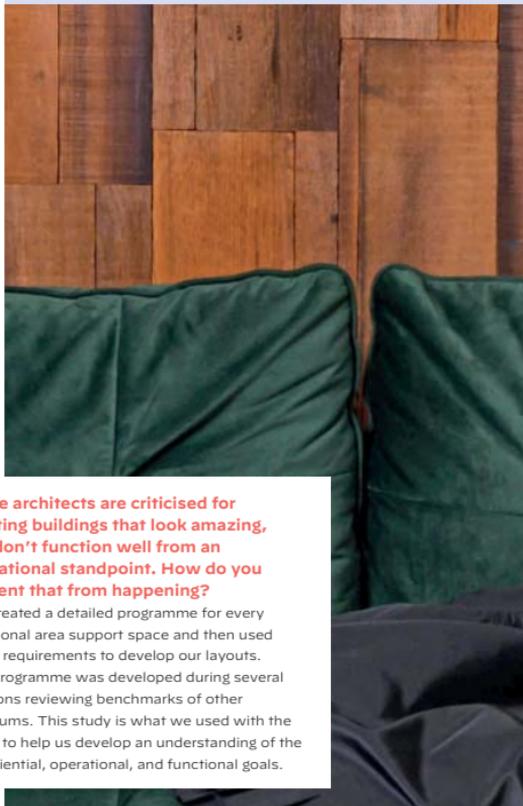
- She was adamant that the museum is not about her, noting that 'it's about all of those whose backs we came up on.' Every surface should be for art, every space should be for performance.

### Can you talk through the five point star at the centre of the courtyard?

The museum's undulating roof creates a series of ridges, peaks, and valleys of varying heights that combine to create a nova star-shaped courtyard in the middle of the museum. Meaning 'new star,' the nova star represents a new chapter for African Americans looking ahead towards a more just future.

At the centre of the courtyard, this 'five point' star is engraved into the terrazzo pavement in gold, featuring 'starbursts' of varying warm concrete colours.

In addition to representing Texas, the last state to adopt and acknowledge the freedom of African American slaves – the star nods to the American flag's 50 stars that represent all 50 US states, representing the freedom of African Americans across the country.



### Some architects are criticised for creating buildings that look amazing, but don't function well from an operational standpoint. How do you prevent that from happening?

We created a detailed programme for every functional area support space and then used these requirements to develop our layouts. The programme was developed during several sessions reviewing benchmarks of other museums. This study is what we used with the client to help us develop an understanding of the experiential, operational, and functional goals.

The museum has been designed as a flexible space that can change over time





**Opal Lee insisted that the museum be built in Fort Worth's Southside**

Museums do change over time; what we have done here is to create a community centre with interpretive and multifunctional spaces to provide a flexibility that isn't centred around the one exhibition that you may visit once. It's about a dynamism of programmatic qualities that you come back to, time and time again. It's as much about the exhibits as it is about the gathering of people.

It wasn't obvious to the BIG team initially, but it was of critical importance to the client and Opal Lee that this museum is built in the

African American community of the Historic Southside, as opposed to being in the museum district. This project is for a community that might not have enough representation within the museum world – thus, we are increasing the community it can serve. People who want to see the great museums in Fort Worth will make the trip to the Historic Southside to visit the National Juneteenth Museum. ●

# ON A

More than 30 years on from the opening of Lotte World in Seoul, its sister park has opened, and it's very different from the original. We find out how the first few months have gone

# ROLL





pened in March, Legacy Entertainment's second Lotte World theme park, Lotte World Adventure Busan, has been five years in the making.

Legacy Entertainment – which designed the park together with Lotte World – announced that more than half a million guests visited the theme park in its first 100 days, equating to around one in seven Butan residents.

The original Lotte World theme park, which opened in Seoul in 1989, is one of Asia's most popular attractions, with between 5m and 7m visitors a year. Lotte World Adventure Busan was deliberately designed to look very different from the original park, with

a colourful garden aesthetic “conceived to contrast with the grey-toned architecture of Busan's densely packed urban districts.”

The new park features six themed zones, including Rainbow Springs, featuring live performances on the Garden Stage; Queen Lorry's Royal Garden, home to the park's iconic castle; and Joyful Meadows, with rides and attractions designed for young children.

The park is the flagship of Busan's Osiria Tourism Complex – a 900-acre development designed to raise the city's profile as an international leisure destination.

“The last decade has seen an influx of joyless, soulless parks all around Asia, and Lotte World Adventure Busan is proof that it doesn't ▶

**Lotte World Adventure  
Busan was designed by  
Legacy Entertainment**





Giant Digger is the first launched rollercoaster in South Korea

PHOTO: LOTTE WORLD/LEGACY ENTERTAINMENT



PHOTO: LOTTE WORLD/LEGACY ENTERTAINMENT

▶ have to be that way," says Legacy owner and Lotte World Adventure Park creative director Taylor Jeffs. "In Busan, we wanted to create environments that would be timeless, and that meant not adhering to any particular place. Our goal was to give our guests a stage upon which they could step away from reality and forget the pressures of their everyday lives."

The summer saw the launch of two new additions – the Roller Coaster Restaurant, in which food is served to diners on an elaborate network of roller coaster-style tracks, and Ogre's Flume – a log flume ride created by ABC Rides and inspired by the popular Korean fairy tale Ogre's Magic Club.

Here Lotte World Adventure Busan official Kim Min-gyu answers our questions.

### **How would you sum up the design of Lotte World Adventure Busan?**

Themed as a fairytale kingdom, Lotte World Adventure Busan offers six thematic zones. Each zone consists of different characters and building types which fit its own theme, but they also come together to create one storyline, which can be heard from the Talking Tree, located in the centre of the park.

### **Can you highlight any particularly innovative features of Lotte World Adventure Busan?**

The newly opened Food Drop Restaurant is the first 'rollercoaster restaurant' in Korea, and the 10th in the world – it's a unique restaurant that combines food and fun, where dishes are ▶



Giant Splash by Mack Rides is in the Magic Forest zone

THEME PARKS



A cast of Lotte World characters welcome visitors to the park



Lotte World Adventure Busan took five years to design and build

The Giant Swing thrill ride offers visitors views of the coast of Gijang



► served on a rollercoaster rail. It serves western-style food suitable for the whole family.

#### Which rides are proving particularly popular with guests?

The so-called 'three Giants' are the must-ride attractions at Lotte World Adventure Busan.

Giant Digger is the first launched rollercoaster in South Korea, which features improved speed and acceleration when compared to traditional chain or cable lift coasters. It runs at speeds of up to 105 km/h on a track that is 38 m-high and about 1km-long. It's a thrilling ride that becomes even more thrilling when the track rotates 360 degrees while the vehicle rotates 360 degrees at the same time.

Giant Splash (Mack Rides) is a steel launched rollercoaster that's proving very popular, and is perfect for a commemorative photo.

Our Giant Swing thrill ride lifts visitors 45m off the ground, offering them a view of the coast of Gijang. It has a central axis of about 28m rising to up to 120 degrees from left to right, moves at a maximum speed of 110km/h and has a radius of rotation of about 120m, giving visitors a strong sense of weightlessness. It is also a popular photo spot as it passes narrowly as if to reach Giant Digger on the left and Jamstone Dining (Lotteria) on the right.

#### What does the opening of Lotte World Adventure mean for Busan?

The park is expected to play a key role in promoting tourism in this region of South Korea. As the only theme park in Busan, it will contribute to the local economy through employment. ●

# IAAPA EXPO



IAAPA Expo Europe returned to London for the first time since 2011



IMAGE COURTESY OF IAAPA

# EUROPE

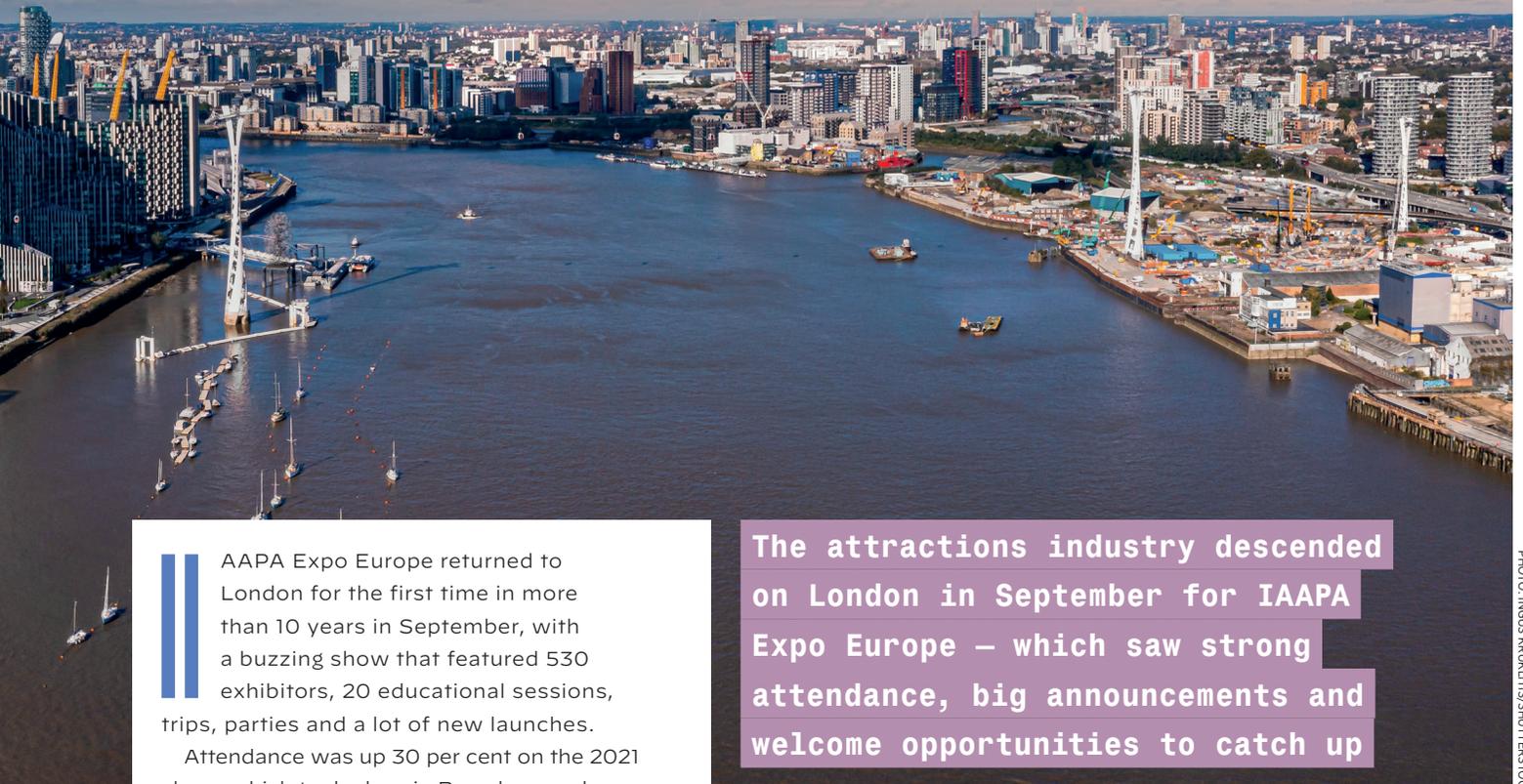


PHOTO: INGUS KRUKLITIS/SHUTTERSTOCK

IAAPA Expo Europe returned to London for the first time in more than 10 years in September, with a buzzing show that featured 530 exhibitors, 20 educational sessions, trips, parties and a lot of new launches.

Attendance was up 30 per cent on the 2021 show, which took place in Barcelona and was the first following COVID-19 shutdowns. Last year, the industry celebrated being back together, but with travel restrictions in place and delegates wearing masks and social distancing, the focus was still heavily on finding a way through the pandemic.

This year, the show was busy, energy levels were high and delegates and exhibitors all seemed to be positive and upbeat. The mood was one of celebration and excitement, with new launches and plans shared over the four days.

## EDUCATION SESSIONS

More than 100 speakers presented at 20 education sessions covering topics ranging from crisis planning to celebrating the industry's finest attractions. Highlights included European Theme Park Legends, with speakers including John Collins OBE, Blackpool Pleasure Beach's Amanda Thompson and former Euro Disney CEO and current president of

The attractions industry descended on London in September for IAAPA Expo Europe – which saw strong attendance, big announcements and welcome opportunities to catch up



IMAGE COURTESY OF IAAPA

“

## **Triotech has partnered with Puy du Fou to supply its interactive ride technology for the SAGA Experience in Shanghai**

- ▶ Giddiya, Philippe Gas, discussing what makes theme parks successful, their triumphs and mistakes and the future for the industry.

Other sessions included Brave Investments, which shared results from the latest IAAPA Economic Impact Study and offered advice to operators looking to invest; the Zoos and Aquariums Panel, which asked what sets these attractions apart and discussed how to connect emotionally with visitors; and New UK Attractions You Need to Know About, featuring speakers including Wake The Tiger's Graham MacVoy, ITV Studios' James Penfold and Little Lion Entertainment's Tom Lionetti-Maguire.

### **PRESS ANNOUNCEMENTS**

As always, there were some major news announcements at the show. One of the

biggest was Triotech's deal with Puy du Fou to supply rides for Puy du Fou's first Asian attraction. The Canada-based attractions specialist has partnered with Puy du Fou to supply its interactive ride technology for the SAGA Experience in Shanghai, China – set to open in 2023. More details on p21.

Another big announcement came from Dave & Busters, with the news that the chain will open 11 units across KSA, UAE and Egypt. This is the first international franchise partnership for the brand and was announced in partnership with Al Hokair Holding Group.

Waterpark manufacturer Whitewater held a press conference at the show, showcasing several new products and giving an update about its plans, including growth across the EMEA region. Ireland-based The Giant Company revealed the ▶

The latest in VR and AR was on show over the four days



IMAGE COURTESY OF IAAPA



Exhibitors attended from right across the industry



IMAGE COURTESY OF IAAPA



Billings Productions  
designs animatronic  
dinosaurs and bugs

IMAGE COURTESY OF IAADA



Attendees had the  
chance to experience  
new ride technology

IMAGE COURTESY OF IAADA

# OPEN FOR BUSINESS!



The education sessions featured industry leaders and covered a wide range of topics

IMAGE COURTESY OF IAAMA

“

***We saw first-hand that our industry is resilient and ready to come back together***

- ▶ first cities that will host The Giant, a new visitor attraction in the form of a 10-storey high moving statue, which can take the form of any person, thanks to its programmable LED pixels 'skin'.

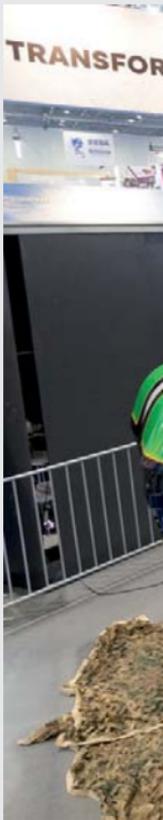
Leisure entertainment solution provider Fun Spot is now part of the same group as BigAirBag, airbag manufacturer for the adventure sports and leisure market, following parent company ABEO's acquisition of BigAirBag. The two companies shared a stand at IAAPA Expo Europe and announced more details of the partnership at a press conference.

There were also press conferences at the show from AromaPrime, Dronisos and the Government of Quebec.

The Giant is a 10-storey high moving statue which can take the form of any person



PHOTO: THE GIANT COMPANY



MING WATER PARKS

PROSLIDE  
TECHNOLOGIES

The Monster Jam  
Grave Digger by  
DOF Robotics



IMAGE COURTESY OF IAAPA

## POSITIVE FEEDBACK

"The feedback for IAAPA Expo Europe was very positive," said the show's organisers. "Attendees and exhibitors alike appreciated being back together for one of IAAPA's signature events. It was our first time back in London since 2011 and even though we faced difficult circumstances with the passing of Her Majesty Queen Elizabeth II, we saw first-hand that our industry is resilient and ready to come back together."

For the IAAPA team, the focus is now on IAAPA Expo 2022 in Orlando, Florida in November.

"We currently have more than 1,000 exhibitors booked for the trade show and we're expecting a positive event," said the organisers.

"EDUSessions such as The Future of Entertainment & Leisure in the Middle East, UAE and Abu Dhabi and The Water Theme Park: Insights from the Qiddiya Development Team will highlight the latest developments in the

IMAGE COURTESY OF IAAPA



The exhibition showcased changing technologies

industry across the globe. IAAPA Expo 2022 ushers in the return of popular region-based ticketed events not offered at IAAPA Expo 2021. This year's agenda includes the Asia Pacific Breakfast, Latin America Lunch and Learn and Canadian Breakfast, which features the incoming IAAPA chairman, Jim Pattison Jr., president of Ripley Entertainment Inc. These regional-based events present great opportunities for member-to-member connections, and we're elated to have them back within our offerings." ●

# OUT OF THIS WORLD

Valeria Rizzo, business development director of Red Raion shares insights into the growth and direction of the business

## You exclusively work with digital content. Why is that?

Attraction-goers search for extraordinary experiences that can't be replicated in real life: they want to dive into the story and be the protagonists.

CGI gives the power to create new worlds by exceeding what's possible in real life, creating out-of-this-world adventures.

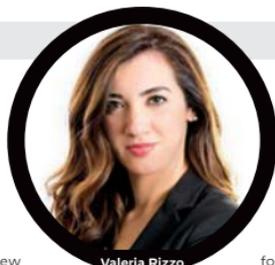
It was the potential of the technology that inspired us to dive into it. That's how Red Raion was born and found its identity – as a CGI studio specialising in media-based attractions.

## What makes you different?

When we stepped into the industry eight years ago, we analysed companies producing digital content for media-based attractions – from generic outfits to Hollywood studios.

They had one thing in common – none were making content exclusively for media-based attractions.

When we started talking to potential clients, we realised this lack of specialisation had led to situations where they sometimes had to



Valeria Rizzo

carry extra costs and accept content that wasn't of the quality they expected.

We knew if we wanted to build a brand from scratch, we'd need a skilled team, an exclusive focus on media-based attractions and to always be there for clients to answer questions and anticipate and resolve their doubts.

## What's your delivery process?

We've developed a standardised process we call the CGI Magic Chain.

Clients don't have to deal with distributors, we take care of all aspects of content creation in-house, from pre- and post-production to on-site installation.

We help clients find CGI content that fits their venue and have also created a series of reports that identify common mistakes operators make: it's free to download at [www.bit.ly/am-redraion](http://www.bit.ly/am-redraion).

It's a useful tool for potential clients to understand what they need, even before we meet, so we start our relationship aligned and it goes smoothly from the beginning.

It's our biggest achievement to have never missed a deadline or gone over budget – even during the worst moments of the pandemic.

## Some of your competitors are Hollywood studios. How do you compete?

Hollywood studios are the best at creating top feature films, but the feature film industry is completely different from the attractions sector.

Hollywood studios work on dozens of productions every year, following multiple pipelines, working on films, commercials,



CGI is created by the in-house team





“

## Operators can invest in the creation of their own unique IPs

TV shows and animated movies. As a consequence, their production times for CGI content for media-based attractions can be long, causing delays and price increases.

It isn't a question of whether they're able to do it, but more whether it makes sense to ask Hollywood to do this work, instead of a specialised company focused on this kind of project, that delivers the same results at a reasonable price.

### What are your goals?

Besides continuing to improve our processes and technologies, our main goal is to expand more globally.

We already work worldwide, collaborating with hardware manufacturers, such as Triotech, Kraftwerk, Simworx, Brogent and SimEx-werks.

We've produced custom CGI content for theme parks all over the world and are currently working on projects including a flying theatre movie commissioned by SimEx-Iwerks, a dark ride in Vietnam, a VR attraction for Loveland Living Planet – the American aquarium that will combine CGI with real footage – and a CGI dining experience on a cruise ship in partnership with Leisure Expert Group.

Another step forward in our expansion has been the addition of content experts to our roster of professionals. Every regional market has distinctive features, so we train

these professionals to support clients in choosing the perfect CGI content, with each focusing on the area they know best.

### What trends do you see?

Firstly, acquiring Intellectual Property for use in themed venues. This doesn't mean owners of theme parks or museums have to buy the rights to famous IPs, they can invest a smaller budget in creating their own.

It's a great way to achieve an identity without relying on already-famous IPs and gives the opportunity for operators to create stories unique to them and create sequels using existing assets, which means they can save money.

We worked on such a project when we created Miko and the Spell of the Stone, a custom CGI movie for Unlimited Snow, based on its Alpine Marmots IP.

Speaking of attractions, one of the most popular emerging formats is flying theatres. This is why we're building our own 'fly format' movie catalogue and have formed a partnership with SimEx-Iwerks – a company that's been in the industry over 30 years.

The number of licensed fly titles available isn't as high as with other formats, so SimEx-Iwerks has enriched its offering by pairing its flying theatre experience with Red Raion's growing catalogue of fly movies.

More: [www.redraion.com](http://www.redraion.com)

# GOING GLOBAL

Taking a museum or visitor attraction's retail offer international can cement its reputation, entice new audiences and increase revenue. Retail design expert Callum Lumsden offers tips on how to get it right





© JOURNAL OF THE ICA

**N**o museum or visitor attraction is complete without a retail offering, but for a select few, that can become a global phenomenon.

MoMA is the most obvious example of this in action: starting with its standalone Design Store in New York – designed by us at Lumsden – it has now opened further stores in Tokyo, Kyoto, Hong Kong and one in Germany is on the way. The New York-based museum has also launched a series of commercial spaces within Loft, one of Japan's largest department stores, including Kyoto.

But there are others who have begun to recognise the benefits of an international presence too. People may make sure your museum is a stop whenever they visit the country you are based in and visit the gift shop while they're there, but what if you could bring some of that joy closer to them? Take the V&A: in 2020 the museum launched an art deco pop-up – The Grand Time Hotel – in Shanghai, where visitors could buy cocktails and limited-edition merchandise.

People long to own something beautiful or historical and museums contain an abundance of these. In an ever-more connected world, now is the perfect time for cultural institutions to take a piece of that to a wider international audience. Elevating museum retail in this way is no easy task, but will be incredibly rewarding if done right. Here are the most important elements to bear in mind for those ready to step up. ▶



**Museums and visitor attractions are recognising the benefits of an international presence**

The centre of any international retail operation has to be brand identity

### ► Understanding the museum's brand

Successful museum stores are always the ones that aren't merely an afterthought. They reflect why people visit the museum, what it stands for and understand what people really want to buy. Once that's wrapped up, that experience can be taken around the world.

The first step is always to understand the museum's aspirations. What element of the museum do you want to take to the global audience? What will that say about the museum? Who is this aimed at? How involved can the curators be when it comes to vetting and commissioning the products in the store? What are the stories about the collection that you want to communicate with the merchandise?

I've seen museums or galleries with international reputations that tourists flock to, flounder when they open a concession store elsewhere. Why would you go to a department store to buy a poster for an exhibition you haven't been to? Or a fridge magnet representing a place you haven't visited?

### Bringing that brand to life

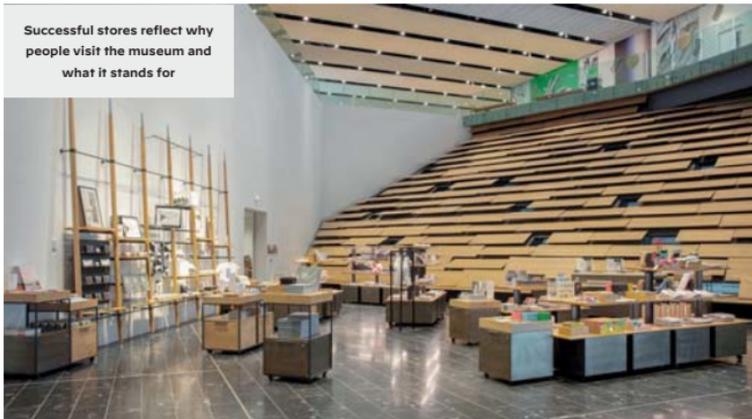
MoMA is again a perfect example: the store is for art and design-lovers as well as tourists. A tourist is looking for an item that says "I was there", a design or art lover or enthusiast wants something that looks great and has been beautifully crafted. At MoMA, even the most tourist-

orientated pieces are not only well designed, but are also made with purpose, linking back to the museum's brand, values and collection.

Any retail offering must be a strong, considered range that stands up independently of the museum setting. The products should be iconic in their own right or must be intrinsically linked to the collection, so that it's like taking away a piece of the museum in a way that people can appreciate – even if they haven't visited the museum. Having museum curators involved in merchandising is a real benefit here.

The centre of any international retail operation has to be that brand identity. Standalone stores will need to reflect that through the materials and colour palettes that are used, so that it's about bringing a piece of the museum to a new destination. The MoMA brand never loses its ties to New York, but brings it to Japan, Hong Kong and Europe, while the V&A brings its authority in, and a vast collection of, Art Deco couture and products, for example. ►

Successful stores reflect why people visit the museum and what it stands for



**“ The first step is always to understand the museum’s aspirations ”**

### ▶ Looking for new partnerships

Another tactic that savvy museums are currently embarking on is launching brand partnerships. England's National Gallery recently paired with Doc Marten to create a series of shoes featuring the work of Claude Monet, Vincent van Gogh and Georges Seurat. American skate brand Vans has partnered with Amsterdam's Van Gogh Museum so that the artist's masterpieces appear on its shoes, while watch brand Swatch has previously launched a collection with the Louvre Museum, as well as the Rijksmuseum Amsterdam and the Thyssen-Bornemisza Museum in Madrid. In 2021, the British Museum launched an eye-shadow palette influenced by ancient Egypt with Chinese makeup brand Zeesea.

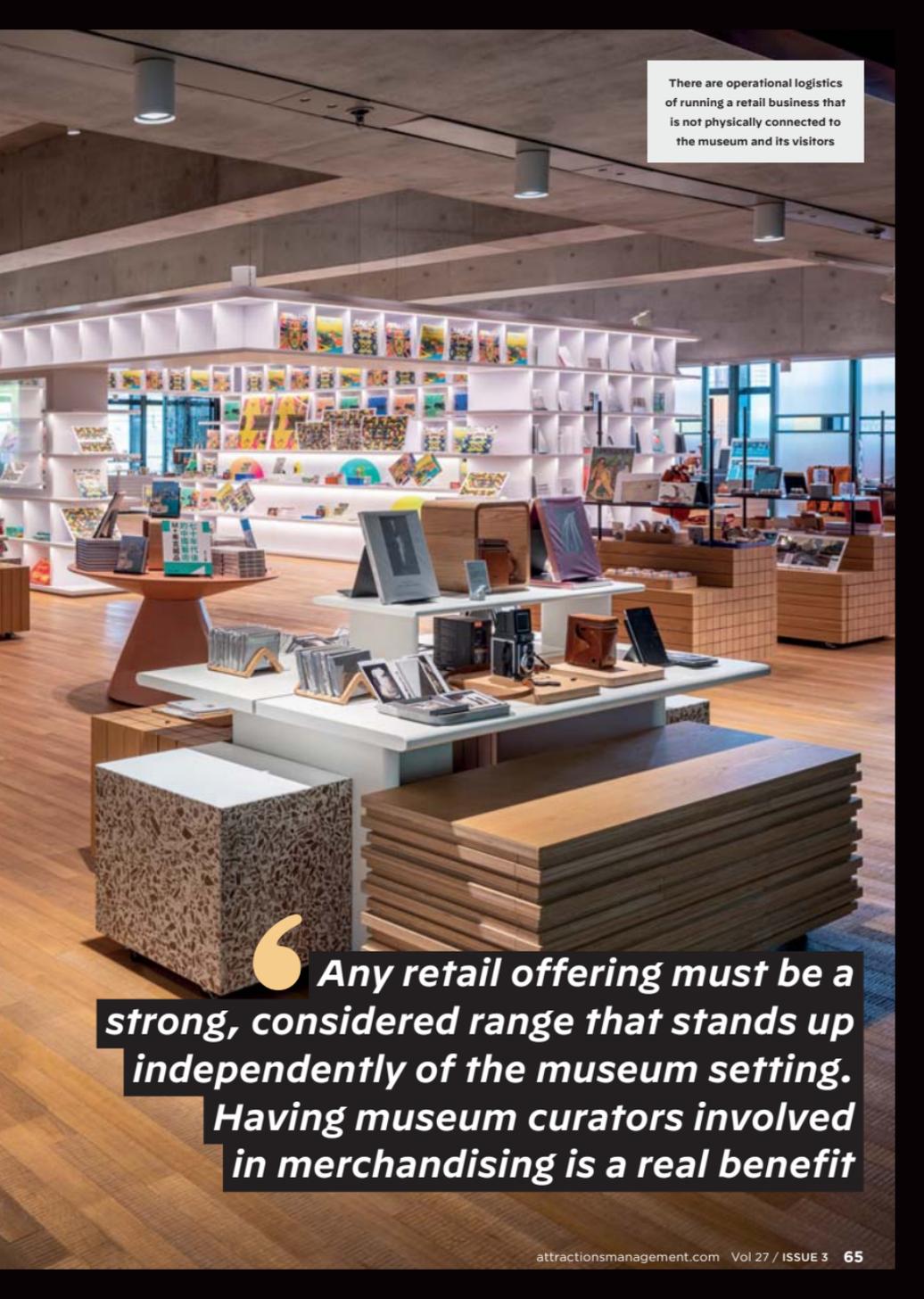
These tie-ups allow the museum to align its brand with products that catch a global market's attention and allow the museum to target certain demographics. It works both ways, of course: the brands need the museum identity as much as the other way around, linking the brands with high culture and history. Doc Martens and Van Gogh might seem like an unlikely duo, but his Sunflowers look brilliant on a DM boot – and it's been a great success for both parties.

### What to watch out for

Before diving in, any museum must be aware of the challenges. There are operational logistics of running a retail business that is not physically connected to the museum and its visitors. From overheads and staffing to stock control and deliveries, these need to be considered carefully.

The biggest challenge for every museum is to avoid the temptation to stretch themselves and water down their reputation. The museums that will be successful will be the ones that maintain the integrity of their brand.

This is crucial. For any cultural institution looking to take its retail brand global, it must first truly understand what it stands for, what its brand is. The original stores must be updated and kept in line with this ethos. Only then can it take a leap into the world of global retail. ●



There are operational logistics of running a retail business that is not physically connected to the museum and its visitors

“ **Any retail offering must be a strong, considered range that stands up independently of the museum setting. Having museum curators involved in merchandising is a real benefit** ”



Stranger Things: The Experience previously launched in the US, and has now come to London, UK



# STRANGER

The latest immersive experience to launch in London promises to immerse fans into the world of *Stranger Things*, but what does it actually offer?

**S**tranger Things: The Experience has launched in London, promising to immerse fans in the world of the hugely popular Netflix show. Co-produced by Netflix and experience discovery company Fever, the multi-media experience has previously launched in New York and San Francisco in the US, and opened at the Troubadour Brent Cross Studios in North West London in August. It features immersive sets, a range of special effects, themed F&B and exclusive merchandise.



A new storyline was written for the experience, which sees visitors tasked with saving the Upside Down



# STRANGER

A new storyline has been designed with the show's creators, which 'launches guests on a perilous adventure through the darker side of Hawkins, including the infamous Hawkins Lab and the Upside Down.' Visitors are tasked with unlocking secret powers to help save the town. This brand new storyline, developed exclusively with the show's creators, propels guests into a parallel universe where they must 'run the gauntlet of terrors lurking in the dark and unlock their secret powers to help save the town.'

After visitors escape from the Upside Down, they have the chance to visit 1980s-themed retail space the Mix-Tape – inspired by

the Starcourt Mall from the show – where they can meet characters from the *Stranger Things* world, drink a cocktail at the *Stranger Things* themed bar and hang out together at Scoops Ahoy and the Palace Arcade.

"We know our *Stranger Things* fans will embrace the chance to be the heroes of the story, working alongside Eleven, Mike and the rest of the gang to fight the evil threatening to consume Hawkins," says Greg Lombardo, head of experiences at Netflix. "Fans love losing themselves when they watch the show. Now, for the first time, they will be able to live out an episode from the series in real life." ●

# TIME TO CELEBRATE

2022 is a big year for the industry, with Efteling, Walt Disney World and Disneyland Paris all celebrating anniversaries with special programming – but are these eventsworth the investment? Kathleen LaClair, Partner at LDP, looks at the numbers



Kathleen LaClair



Walt Disney World in Florida is celebrating its 50th anniversary in 2021-22

The big operators see positive results from special events – but can regionally focused attractions benefit too?



For the attractions industry, 2022 is a year of big events. Efteling theme park in the Netherlands is turning 70. Walt Disney World in Orlando, Florida, turns 50. Disneyland Paris hits the 30-year mark. In addition to big milestone celebrations, attractions globally are adding cultural celebrations, food and wine festivals, music events, holiday programming and more, hoping to increase brand awareness, guest volumes, member satisfaction, dwell time and spending.

We assume these events have positive results in one form or another for the big operators, as events continue year after year. But what about more regionally focused attractions? Are the capital investments worth the effort to operate during off-hours and shoulder seasons? Do revenues from these events cover the costs? We take a look at the successes, challenges and the bottom line.

### Spring and summer

Spring and summer time special events continue to gain popularity. At Philadelphia Zoo, seasonal programming has proven very effective in activating new visitation patterns during historically quieter times of the year and or day, according to Amy Shearer, chief marketing and guest experience officer. The zoo initiated special events such as its annual Summer Ale Festival,



PHOTO: PHILADELPHIA ZOO

#### Seasonal programming can change visitation patterns

which is held just one evening each summer. At the Ale Festival, “guests can enjoy more than 100 award-winning seasonal craft beers and fresh, local fare from the region’s hippest food trucks”. At a time when the zoo would normally be closed, the event draws almost 5,000 guests who pay a premium admission price for access to the zoo experience as well as a wide range of beer and food samplings.

The zoo has introduced other ‘feature experiences’ which are limited engagements



PHOTO: LISEBERG

Winter events can drive spend at times there was previously none

during the core season that create an additional buzz and added experiential element to the normal zoo visit. Examples of this include Creatures of Habitat, featuring life-size animal LEGO vignettes by artist Sean Kenney and X-tink-Shun and a wild puppet experience by the Jim Henson Company, described as an interactive call to action to save endangered species. At a recent featured experience, the zoo grossed an additional €1.5m (\$1.5m, £1.3m) in special ticket revenue while at the same time driving the general admission gate and membership sales. Shearer says that on average a feature experience increases membership and daily admission sales by 15 percent.

The main challenge to hosting these events, according to Shearer, is the weather; a rainy evening or cold temperatures can make or break attendance at an outdoor event, so it's a constant concern. Marketing budgets are spent to advertise events well in advance of the actual day and staffing time used for set-up can't be recouped.

At Liseberg theme park in Gothenburg, Sweden, summer concerts attract big numbers of people, but not necessarily big profits. The average concert brings in about 250,000 guests or a total of two million during the summer season. According to CEO Andreas Andersen, though, while concerts can drive annual pass and food and beverage sales and are great at

promoting their brand, they are typically a zero-sum game when it comes to profitability. So, in some instances, while the overall financial performance of a specific special event may not contribute significantly to the bottom line, the benefit can be seen in longer dwell times, increased guest spend, creating repeat visitors and purchases of annual passes.

### Halloween and winter holiday events

Holiday events, typically Halloween and during winter, have become increasingly popular at a wide range of attractions, from theme parks to zoos. In many markets, these attractions are typically in their slower or even closed seasons; adding special holiday programming, especially in the evening, drives visits and spending when once there was none.

It's almost impossible to visit a zoo during October and not be enticed to return for an evening of Boo at the Zoo. Prior to this trend zoos would almost always be closed during evening hours, as many species are sleeping or visibility in outdoor habitats is not conducive to night-time guests. The addition of Halloween and other holiday events creates not only new revenue streams during those seasons, but also increased value to existing members or those debating joining. A review of seasonal attendance across a selected number of zoos indicates that

Seasonal events create increased value for existing members or those debating joining



Liseberg welcomes more than 400,000 people to its Christmas event each year



attendance at Halloween events typically total between five and 12 percent of overall annual visits and operators report that these events are often the highest ranked or most often mentioned in guest or member satisfaction surveys.

In 2019, Philadelphia Zoo inaugurated a cold weather experience, LumiNature, an illuminated adventure for visitors that celebrates the beauty and diversity of wildlife during the holidays. While only in its third season, the zoo is already yielding an additional \$2.5m (€2.6m, £2.2m) in sales each year and has established a special fund from its net profits to date in order to ensure LumiNature capital investments are future proofed as this program begins to take root.

Back at Liseberg, hosting holiday events has become increasingly important over the last 10 years. The park launched its Christmas event in 2000 and sees more than 400,000 visitors annually; the Halloween event, launched in 2015, sees 300,000 guests annually. On average, these visits represent between 10 and 15 percent of Liseberg's total annual attendance. The seasonal events have a significant impact on park operations and have delivered increased profitability over the years, due largely in part to strategic pricing, according to Andersen.

The profit margin on the Christmas event is on average 15 per cent; the margin for the Halloween event is even stronger – between 22 per cent and 35 per cent annually.

Another benefit is guest satisfaction. Liseberg uses the Net Promoter Score (NPS) system to rate guest satisfaction and scores during the Halloween and Christmas seasons are approximately 10 per cent higher than responses gathered in the summer season.

The approach and execution of new programming at an attraction will depend on many factors, including specific focus for the market, weather or climate, current economic conditions and lessons learned from past successes or challenges.

Andersen's advice for any attraction considering special programming? Do less – but do it right and keep focus. Don't underinvest, especially not in the beginning. Grow the events organically, otherwise operational costs will override revenues. Make sure events align with your brand. Set aside sufficient funds for marketing. And lastly, target your local market; the tourists will follow. ●

**Kathleen LaClair is with Leisure Development Partners. [www.leisuredevelopment.co.uk](http://www.leisuredevelopment.co.uk)**



LumiNature at  
Philadelphia Zoo  
generates \$2.5m  
in sales each year

“

*Natural history museums would clearly benefit from having access to the detailed life-history records kept by zoos*

The blood chemistry of a cheetah, held by zoos, could be valuable to researchers



# THE MISSING LINK

A new paper from Yale University demonstrates how zoos, aquariums and museums could collaborate for the benefit of all earth sciences, explains Mike Cummings



The animal collections housed at zoos and natural history museums – living specimens in the first case, preserved in the other – constitute an exhaustive trove of information about Earth's biodiversity. Yet zoos and museums rarely share data with each other according to new research from Yale University.

Published in the journal *BioScience*, the paper – 'Bridging the research gap between live collections in zoos and preserved collections in natural history museums' – lays out a pathway to increasing collaboration between these groups that would enhance our understanding of the animal kingdom.

"Museums have a wealth of preserved specimens that provide scientists with massive ▶



Natural history museums contain around three billion specimens worldwide

► amounts of information, but very little data about how the animals lived their day-to-day life,” says Gregory Watkins-Colwell, collection manager for herpetology and ichthyology at the Yale Peabody Museum and a co-author of the paper.

“Zoos and aquariums, on the other hand, have rich data on an animal’s life history, behaviour and health. Combining this complementary information would be a boon to scholars and serve the research and educational missions of both museums and zoos.”

### A BILLION SPECIMENS

Institutions accredited by the Association of Zoos and Aquariums hold around 800,000 living animals, primarily in the United States.

Zoos and aquariums keep extensive records for each animal in their care, including information on their life history, behaviour, health, pedigree, physiology and the husbandry protocols used during their life – such as diet and veterinary treatments. They also periodically collect and preserve biological samples such as blood, plasma and DNA.

Natural history museums house roughly 500 million to a billion biological specimens

in the United States and about three billion worldwide, according to the paper. A specimen’s records typically include information on where, when, and by whom it was collected, as well as its taxonomy and method of preservation. These records tend to capture the moment in the animal’s life immediately preceding its death but offer little information about all the time before that, Watkins-Colwell explains.

“Natural history museums would clearly benefit from having access to the detailed life-history records kept by zoos, which are largely unavailable to museums and the researchers who rely on them,” he says. “For example, the blood chemistry of a cheetah could be very valuable to a researcher. At the same time, zoos can also be important sources of preserved specimens for museums.”

Many zoos house species that are rare, endangered or even extinct in the wild, making them extremely difficult, if not impossible, for museums to collect ethically, according to the paper, whose 35 co-authors represent zoos and museums located across the US. Disposing of deceased animals is a logistical and often a legal necessity for zoos, which lack ►

PHOTO: EUROPE/SHUTTERSTOCK

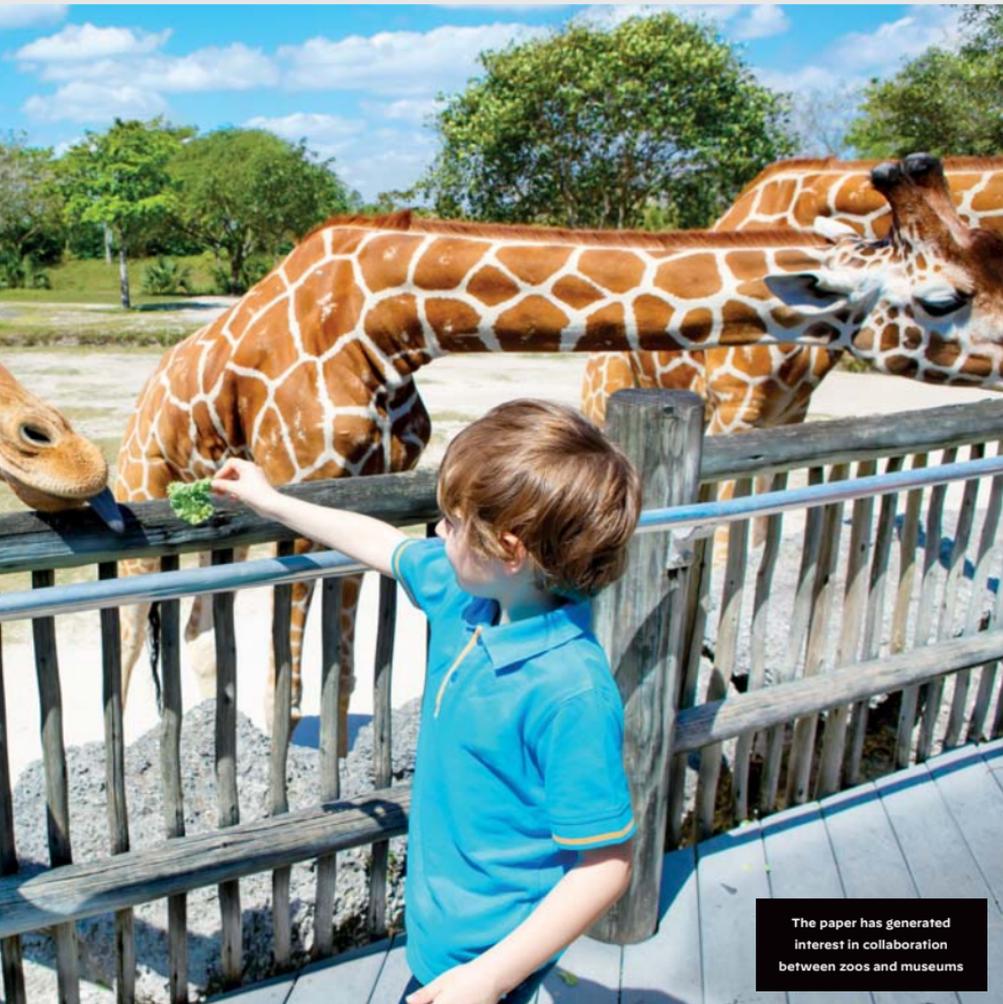


PHOTO: RINA WILKINS/SHUTTERSTOCK

The paper has generated interest in collaboration between zoos and museums

“

*Depositing a specimen from a zoo into a museum can extend the ‘life’ of that animal in perpetuity – providing research, education and conservation opportunities for years to come*



*Ultimately, enhanced collaboration will require staff at zoos and museums to build relationships and share their ideas and scientific approaches with each other*

- ▶ the expertise and facilities to house preserved specimens, the authors add. As an alternative, zoos could deposit specimens of high scientific value with natural history museums, extending the research and teaching value of their collections and strengthening their credibility as conservation-oriented scientific organisations.

#### RARE AND ENDANGERED

Depositing specimens in museums can help zoos learn more about the health of the animal while it was living under their care – perhaps an elephant had an infected tooth that went undetected while it was living – knowledge that could inform a zoo's practices and benefit its collections, Watkins-Colwell explains.

"Depositing a specimen from a zoo into a museum can extend the 'life' of that animal in perpetuity – providing research, education and conservation opportunities for years to come," says Alex Shepack, a postdoctoral researcher at the University of Notre Dame and co-author on the paper.

There are existing partnerships between zoos and museums; the Peabody Museum for example has received specimens from zoos across the United States. Since 2010, the Sedgwick County Zoo in Wichita, Kansas has donated more than 770 specimens and tissue samples to the museum. Those materials have been used



in 22 research projects and courses at Yale.

The barriers to increased collaboration are largely cultural, Watkins-Colwell says.

"When we started discussions between zoo and museum staff, we realised how little each understood of the ways we all use collections and maintain data," says co-author Steven Whitfield, a conservation biologist at Zoo Miami.

"As we worked together over three days to organise this manuscript, we saw great interest in collaborations from people who had never really been in a room together."



Studying autopsies of animals such as elephants can reveal useful scientific knowledge

### VARIED EMPHASIS, SHARED VALUE

The two types of institution vary in their emphasis on research. While many museums are heavily focused on research, zoos place more emphasis on the health and welfare of their living specimens. There can also be legal hurdles to transferring animal specimens between zoos and museums and digital record management systems are often incompatible.

“However, what should unite these institutions is a shared interest in preserving biodiversity in its various forms and contributing to our

collective knowledge of these animals,” says Sinlan Poo, senior research scientist at Memphis Zoo and lead author of the paper.

Ultimately, enhanced collaboration will require staff at zoos and museums to build relationships and share their ideas and scientific approaches with each other. The new paper, Watkins-Colwell says, is a first step in initiating that dialogue. ●

*Credit: Yale University. NB Gary P. Aronsen, a biological anthropologist and supervisor of the Yale Biological Anthropology Laboratories, is a co-author of the paper.*



Guests enter via the Galaxarium, where they learn about Xandar

# CREATING THE MAGIC

As Disney launched the highly anticipated Guardians of the Galaxy: Cosmic Rewind attraction at EPCOT, Imagineers have offered a peek into how the ride was created



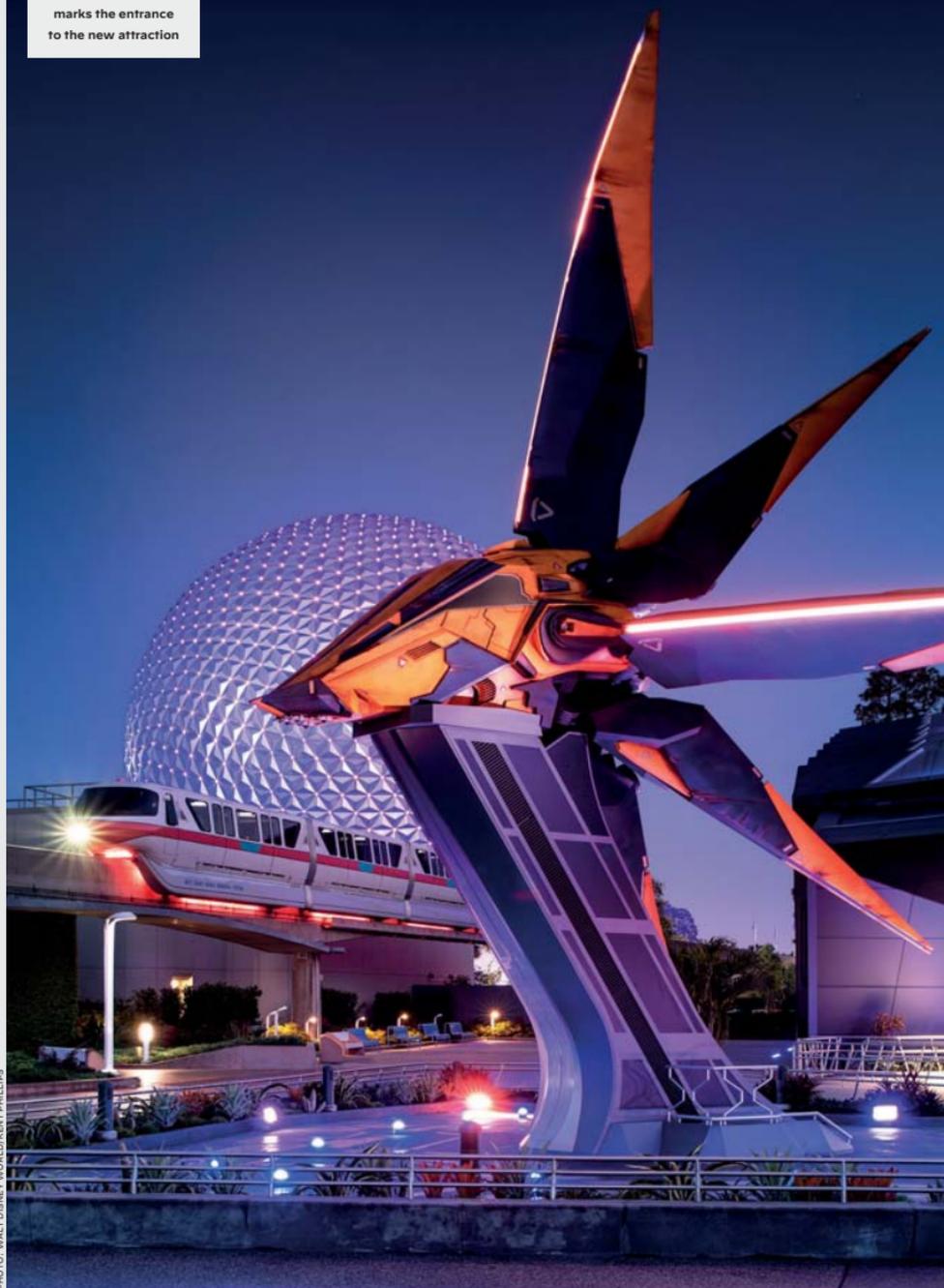
As they launched the Guardians of the Galaxy: Cosmic Rewind ride at EPCOT in Walt Disney World Orlando, Florida this summer, Disney

Imagineers shared some of the behind-the-scenes secrets of the attraction.

One of the most anticipated new rides of 2022, Guardians of the Galaxy: Cosmic Rewind 'takes guests on an intergalactic chase through time and space with the heroes of Xandar'.

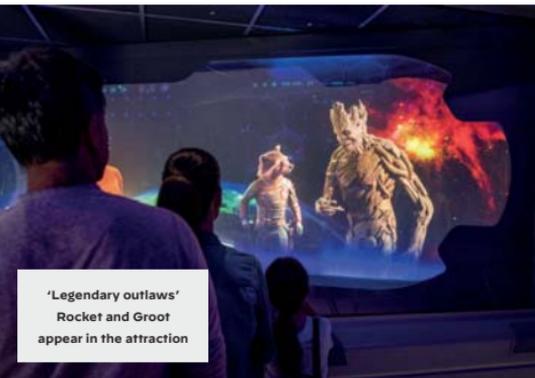
Part of the ongoing transformation of EPCOT, it is Disney's first backwards-launched roller coaster and EPCOT's first coaster, and was made by Vekoma. ▶

A full size Starblaster  
marks the entrance  
to the new attraction



“

*Actors from the Guardians of the Galaxy movies were filmed for the attraction – Glenn Close also makes an appearance as Nova Prime Irani Rael, and Terry Crews plays a new character created for the ride*



**'Legendary outlaws'**  
Rocket and Groot  
appear in the attraction

PHOTO: WALT DISNEY WORLD/KEVIN PHILLIPS

► The ride takes place in the new Wonders of Xandar pavilion, which is marked by a 51-ft tall Nova Corps Starblaster ship. It replaces the old Universe of Energy pavilion, which closed in 2017.

The adventure starts in the Galaxarium, a planetarium-style exhibition exploring the similarities and mysteries of the formation of Earth's galaxy and Xandar. While guests queue for the 'storycoaster', they learn about Xandar's culture and technologies, before Eson the Celestial arrives and tells Terrans they must help the Guardians of the Galaxy save the universe on an intergalactic chase through time and space.

Actors from the *Guardians of the Galaxy* movies were filmed for the attraction – Glenn Close also makes an appearance as Nova Prime Irani Rael, and Terry Crews plays a new character created for the ride.



**Guests at the opening of  
Guardians of the Galaxy:  
Cosmic Rewind in May**

PHOTO: DISNEY/PRESTON MACK



EPCOT guests board their Xandarian Starjumper



The Treasures of Xandar shop sells related merchandising



PHOTO: DISNEY

The attraction features the first reverse launch on a Disney coaster

*The attraction is one of the longest fully enclosed coasters in the world, and each vehicle rotates 360 degrees to focus guests on the action, including the first reverse launch on a Disney coaster*

► The attraction is one of the longest fully enclosed coasters in the world, and each vehicle rotates 360 degrees to focus guests on the action, including the first reverse launch on a Disney coaster.

Released by Disney as the ride launched, a behind-the-scenes video features Disney Imagineers Alex Wright, Bette Lombardi, Kelsey Roberts, and Evan Miga sharing insights into the inspiration, storytelling and design of the new attraction, as well as what it was like to work with the Marvel actors featured. ●

Watch the video here: [www.attractionsmanagement.com/guardiansofthegalaxy](http://www.attractionsmanagement.com/guardiansofthegalaxy)



PHOTO: WALT DISNEY WORLD/NET PHILLIPS

Guests learn about Xandarian culture in the Xandar Gallery

The Xandarian Phase Chamber is part of the pre-ride experience



# Product Innovation

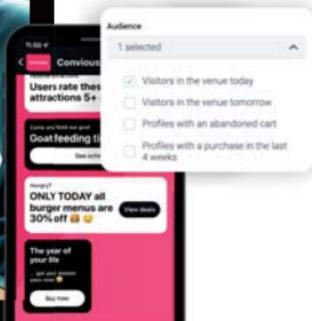
Suppliers tell *Attractions Management* about their latest product, design and technology news

For the latest supplier news and company information, visit [attractions-kit.net](http://attractions-kit.net)

Convio allows its partners to offer customised calls to action



PHOTO: RAWPIKEL.COM/SUTTERSTOCK



## Convio helps to personalise visitor experience

App and eCommerce software platform Convio has launched a new automated personalisation module, allowing destinations to enhance the customer journey with targeted messaging.

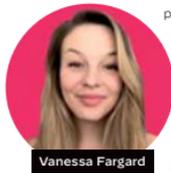
The new module is part of the Convio advanced automated marketing package. As part of the standard eCom webshop, it recognises where visitors are in their journey and tailors content accordingly to bring them the most relevant and delightful experience online.

When provided with consent, destinations can create profiles that group visitors into different audiences and deliver customised messaging which displays when they visit the website. This grouping

can include first time visitors, repeat visitors who haven't yet booked, abandoned carts and those who have pre-booked tickets and are revisiting the site in anticipation of their visit – to check details such as opening times, closures or parking.

The Convio AI collects, sorts and analyses visitor data, making it available via web and mobile platforms. This gives the ability to offer a unique experience online as well as during their visit.

Convio has also created a series of templates for 11 predefined audiences with more than 30 messages in four languages. The messaging and branding can be customised by each Convio



partner so they can quickly get up and running.

"Customers are tired of generic experiences and are more engaged when the content speaks directly to them," said Convio product manager Vanessa Fargard. "By being offered a more personalised experience, visitors find what they are looking for more quickly and with ease. With customised calls to action, visitors are more likely to make desired decisions – a win-win situation for visitors and destinations. This is data-driven marketing made simple for everyone."

[attractions-kit.net](http://attractions-kit.net) keyword

**Convio**



Frameless is spread across four immersive galleries

Just launched in London's West End, permanent digital immersive arts experience Frameless uses Panasonic projection mapping technology to deliver high definition images in a multi genre exhibition that features works by artists including Cezanne, Kandinsky, Monet, Canaletto, Rembrandt and Klimt

Frameless is spread across four immersive galleries and wider venue spaces in a new purpose built venue.

Creative Technology delivered integration services for all video systems across the attraction, while Autograph Sound supplied and integrated all audio systems.

The installation uses more

## Permanent London immersive arts experience uses Panasonic technology

than 50 of Panasonic's flagship 3-Chip DLP laser projectors, cumulatively delivering more than one million lumens of brightness across all four immersive galleries at the venue – as well as a fifth gallery which will be dedicated to corporate and educational events.

Jan Jahn, Head of Panasonic Media & Entertainment Business in Europe, said: "The thrill of seeing something unexpected or new for the first time is an experience that stays long in the memory, and we now have world class

technology to place people right at the heart of this experience. Our projection technology will enable visitors to be close enough to the imagery to truly feel part of it!"

A second layer of audio immersion, with 360-degree surround sound played over 158 loudspeakers, is supplied by British manufacturer EM Acoustics. Set to a score of specially composed music, each gallery has a bespoke soundtrack and soundscapes with interactive audio triggered by audience movement.

Using 3-Chip DLP technology, the RQ22 and RQ35 projectors used inside Frameless delivers unique levels of brightness and resolution, together with long lasting stable colour uniformity in compact smaller projectors ideal for immersive spaces.'

Panasonic will also be showcasing its MZ16 projection series, which feature liquid cooled laser diodes and a sealed phosphor wheel to protect against dust ingress.

Bespoke soundscapes are triggered by audience movement



PHOTO: TOM DUNN

attractions-kit keyword

Panasonic

PHOTO: SHARON STUBBS/ISTOCK/ALAMY



The gym at Warner Bros. Studios Leavesden was created by Liftd Design

PHOTO: SAFE SPACE LOCKERS / CHRISTOPHER BAKER

## Liftd Design procures Safe Space Lockers to install at Warner Bros' Studios Leavesden

When interior design house Liftd Design was appointed as the principle contractor for a new gym at Warner Bros. Studios Leavesden, the team chose Safe Space Lockers to install the premium changing facilities at Zone 10, the film studios' on-site fitness and wellbeing facility.

The 7,000sq ft (650sq m) space comprises a multipurpose gym floor

area, mezzanine studio, private gym and treatment room, as well as large changing facilities.

"The whole facility had to feel premium and the quality of the changing room space was central to achieving that outcome," says James Potter, founder of Liftd Design.

With 350,000sq ft of sound



stages, a 100-acre back lot, extensive workshops and office space, Warner Bros. Studios Leavesden has hosted a wide range of world-class productions since opening in 2012.

"It's an extremely busy

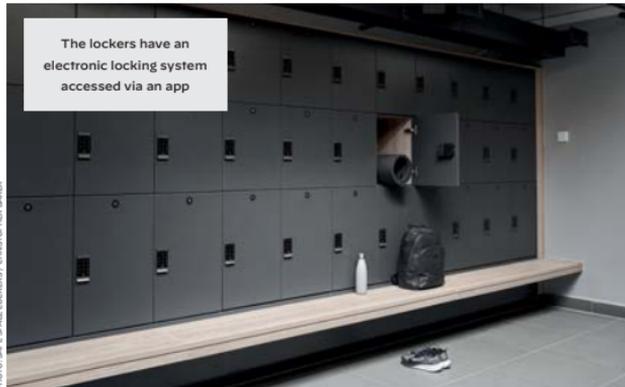
site that accommodates many people, from Warner Bros. staff to production crews, casts and contractors and so the gym and changing facilities had to cater for a wide range of users, while also providing somewhere to benefit from a serene, tranquil space," explains Potter.

The changing rooms were designed in neutral tones, with soft lighting, backlit mirrors and leather bench seating. The lockers are equipped with an electronic locking system accessed via an app.●

attractions-kit keyword

**Safe Space Lockers**

PHOTO: SAFE SPACE LOCKERS/ VICTOR VISUALS



The lockers have an electronic locking system accessed via an app

PHOTO: SAFE SPACE LOCKERS / CHRISTOPHER BAKER



# WATER. JUST ANOTHER WAY TO SAY FUN

ADVANCED WATER PLAY SOLUTIONS WITH CUSTOMIZED DESIGN: WHEREVER THERE IS WATER MYRTHA CAN MAKE THE DIFFERENCE.

# Attractions MANAGEMENT DIRECTORY

To book your space call: +44 (0)1462 431385

## MULTIMEDIA & AV



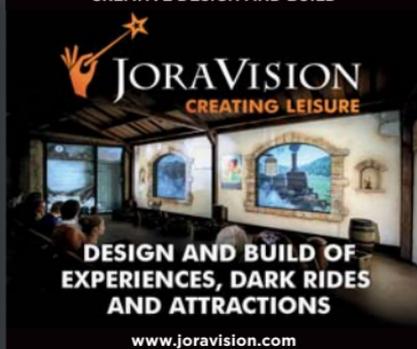
**KRAFTWERK**  
LIVING TECHNOLOGIES

WE ARE YOUR AV SPECIALIST  
FOR HIGH-QUALITY  
MEDIA-BASED ATTRACTIONS!

[www.kraftwerk.at](http://www.kraftwerk.at) | +43 7242 69269-0 | [info@kraftwerk.at](mailto:info@kraftwerk.at)

[www.kraftwerk.at](http://www.kraftwerk.at)

## CREATIVE DESIGN AND BUILD



**JORA VISION**  
CREATING LEISURE

DESIGN AND BUILD OF  
EXPERIENCES, DARK RIDES  
AND ATTRACTIONS

[www.joravision.com](http://www.joravision.com)

## CGI CONTENT PRODUCTION



**REDRAION**<sup>®</sup>

The CGI studio specialized in  
media based attractions

[www.redraion.com](http://www.redraion.com)

## IMMERSIVE RIDES & ATTRACTIONS

INTRODUCING:

### Extended Experiences™

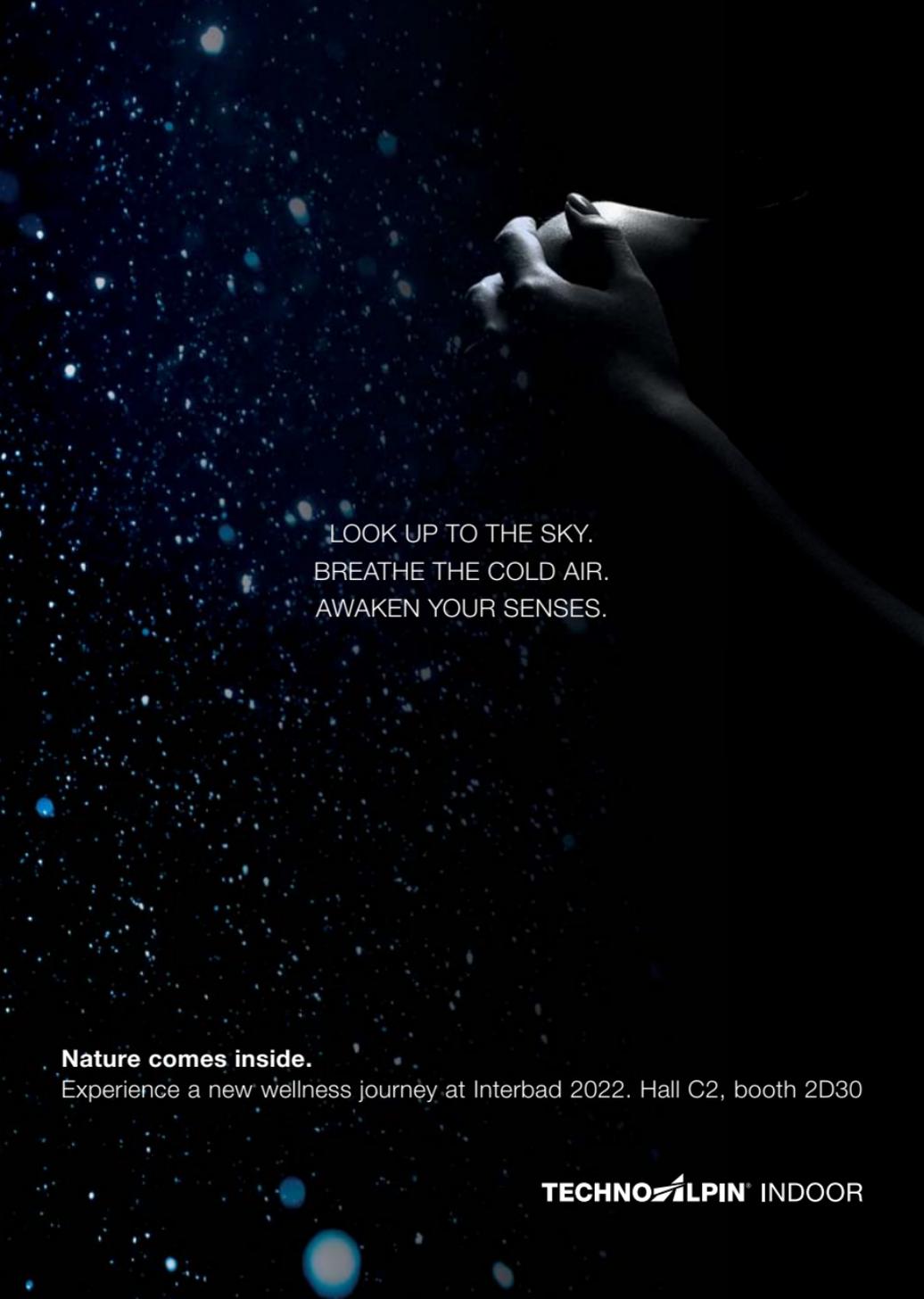
WHERE EVERYTHING IS POSSIBLE



[www.holovis.com](http://www.holovis.com)

# Attractions MANAGEMENT

To book your annual advert call the  
sales team on **+44 (0)1462 431385**

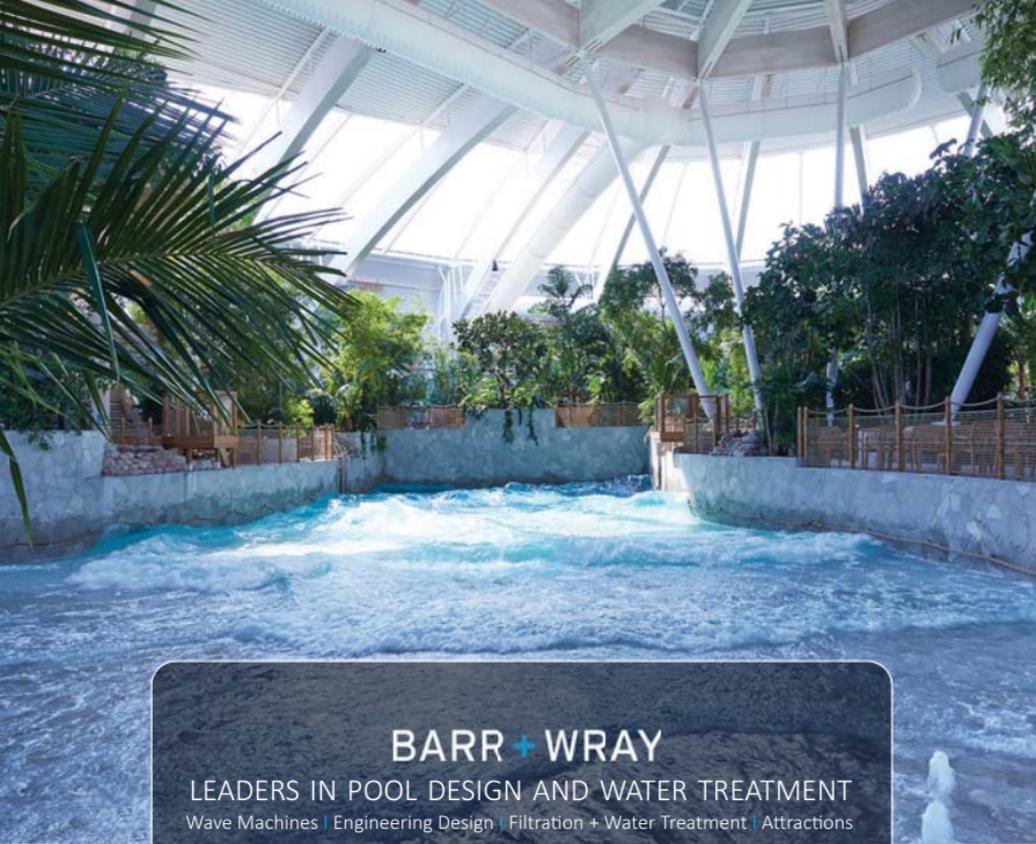
A hand is shown in silhouette, reaching upwards towards a dark blue sky filled with numerous small, bright white and light blue stars. The hand is positioned on the right side of the frame, with fingers slightly curled as if reaching for something. The overall mood is serene and contemplative.

LOOK UP TO THE SKY.  
BREATHE THE COLD AIR.  
AWAKEN YOUR SENSES.

**Nature comes inside.**

Experience a new wellness journey at Interbad 2022. Hall C2, booth 2D30

**TECHNOALPIN** INDOOR



## BARR + WRAY

LEADERS IN POOL DESIGN AND WATER TREATMENT

Wave Machines | Engineering Design | Filtration + Water Treatment | Attractions

Middle East + Asia

Barr + Wray Dubai

T: + 971 4 320 6440

E: [sales@barrandwray.com](mailto:sales@barrandwray.com)

UK + Europe

Barr + Wray

T: + 44 141 882 9991

E: [sales@barrandwray.com](mailto:sales@barrandwray.com)



[www.barrandwray.com](http://www.barrandwray.com)