

# Attractions

## MANAGEMENT

@attractionsmag

VOL 20 Q4 2015

**simworx** Creative

**Advancing Tomorrow's Technology Today**



# simworx®

## ROBOCOASTER®

The power to move you...



**CLICK TO PLAY**

**IMMERSIVE TUNNEL - DYNAMIC SIMULATION ATTRACTIONS**

**4D EFFECTS CINEMA - ROBOCOASTER RCX - VIPER 360**

**3D/4D FILM CONTENT - AGV DARK RIDES - FLYING THEATRE**

**[www.simworx.co.uk](http://www.simworx.co.uk)**

Meet us at  
**IAAPA, Orlando**  
Booth  
**2869**

Worldwide Head Office

Simworx Ltd  
37 Second Avenue  
The Pensnett Estate  
Kingswinford  
West Midlands  
DY6 7UL  
United Kingdom

W [www.simworx.co.uk](http://www.simworx.co.uk)

E [sales@simworx.co.uk](mailto:sales@simworx.co.uk)

T +44 (0) 1384 295 733

F +44 (0) 1384 296 525

# Attractions

## MANAGEMENT

@attractionsmag VOL20 Q4 2015

### STAR OF THE SHOW

Anthony Daniels at SATE  
on the legacy of Star Wars



\* Videogame  
makers **Ubisoft** move  
into theme parks

\* Are operators  
doing enough for  
older visitors?

For full  
functionality  
please view in  
Adobe Reader



Cover image:  
Anthony Daniels  
poses with the  
original C-3PO head



VISIT OUR BOOTH #4873 & EXPERIENCE

NEW



Now available in 3D exclusively  
From nWave Pictures Distribution

nwave  
pictures


RobinsonCrusoe4D.nWave.com



CE THE ADVENTURE IN AMAZING 3D



Watch Trailer at

 /nWavePictures

**nwave**  
picture distribution

©2015 nWave Pictures SA/NV - All Rights Reserved  
nWave is a registered trademark of nWave Pictures SA/NV

nWave Pictures Distribution  
invites you to experience  
an **epic adventure in 3D** at

IAAPA  
Attractions  
Expo



IAAPA

nWave Booth

**#4873**

November 17-20, 2015



# ROBINSON CRUSOE

3D/4D



**nwave**  
picturesdistribution

## NTH/STH AMERICAN SALES

Janine Baker  
+1 818-565-1101  
jbaker@nWave.com  
California Office

Jennifer Lee Hackett  
+1 386-256-5151  
jleeahackett@nWave.com  
Florida Office

## INTERNATIONAL

Goedele Gillis  
+32 2 347-63-19  
ggillis@nWave.com

nWave.com | /nWavePicturesDistribution | /nWave | /nWavePictures | /nwavepicturesdistribution

©2015 nWave Pictures SA/NV - All Rights Reserved - nWave® is a registered trademark of nWave Pictures SA/NV.



## CUSTOMER ENGAGEMENT

Attractions have traditionally seen their ticketing and access control operations as being about little more than gatekeeping, with money exchanged for access. But today, that touch point with the customer is an opportunity to begin a whole new and transformational relationship

**V**isitor attractions of all kinds, from museums to theme parks and zoos to planetariums, have traditionally known very little about the customers who come through their doors.

Understanding visitors' motivations, needs, wants and responses has only been possible through the use of market research which few could afford or afford often enough, so it's mainly been a case of build it and they will come.

The growth of membership schemes has helped some attractions to better understand who their customers are and to develop deeper and more meaningful engagement with them, but few attractions have taken this golden opportunity and made anything of it – even those with membership schemes do very little with them in terms of customer engagement – so for the most part, the attractions industry is poor at knowing and interacting with its customers/visitors.

A few years back, I argued attractions should follow the same model as the theatre and sports markets and move to advance ticketing. We had a mixed post bag on that topic, with some arguing it would spoil the spontaneous nature of an attractions visit, or that the investment in technology wasn't justified.

The trend towards advance ticketing is now growing and on page 94, we debate the issue and look at some examples of how the implementation of advance ticketing is helping businesses to improve their financial position through more reliable ticket sales and their marketing reach and customer engagement through better customer data.

As a customer, I've repeatedly been frustrated to find attractions doing a poor job of customer engagement through tech and believe we need an industry-wide push on this front.

As a basic check list, customers should be able to easily buy timed and non-timed tickets online. They should also be able to join membership schemes with valid and useful benefits and then to have a great customer journey in relation to that scheme, with regular and sincere contact from the attraction, special offers and other types of benefits.

They should also be able to buy gift certificates which meet their needs in terms of the types of packages on offer and which are delivered in a timely fashion. The technology is available – cheaply – to enable this and it's time we grasped the nettle and implemented it.

The world is increasingly affluent: the World Bank

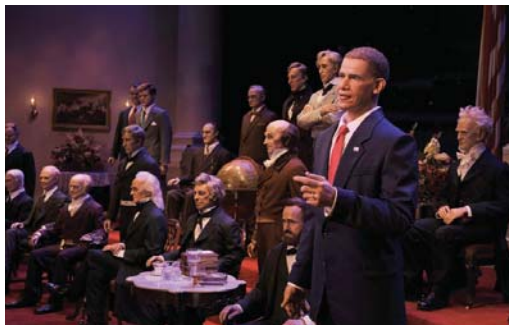
announced this month that the number of people living in extreme poverty will fall to under 10 per cent in 2015, and as previously poor nations urbanise, there will be an increasing appetite to do things rather than have things. Attractions are in completely the right place to deliver on this need.

You can make a healthy revenue stream from gifting, from memberships and from online sales and if you're geared up to do this, we'd love to hear about it, so we can share it as best practice with other readers. And if you're not, then it's really time to take action. Your customers expect and need it and it can do nothing but benefit all concerned.

**Liz Terry, editor. Twitter: @elizterry**

**Your customers should be able to buy gift certificates for your attraction which meet their needs and are delivered in a timely fashion**





■ p50 Scott A Lukas asks how themed spaces should deal with dark times in politics and history



■ p34 Jean de Rivières on Ubisoft's plans



■ p42 Looking back at Banksy's Dismaland



■ p56 The Royal Botanic Gardens at Kew has modernised its approach to audience demographics

## 07 Editor's letter

### 12 People

Meet the people making the news, from MackCreative to Two Bit Circus

- 20 Science Centres news
- 21 Visitor Attractions news
- 22 Waterparks news
- 24 Theme Parks news
- 26 Museums & Galleries news
- 28 Heritage news
- 30 Zoos & Aquariums news
- 32 Technology news

### 34 Interview

#### Jean de Rivières

Jean de Rivières, who leads the theme park division at Ubisoft, on the videogame developer's futuristic theme park

### 38 Talking Point

#### What Can We Do to Better Accommodate Older Visitors?

The 65-plus market is growing, and older family members often make the decisions and hold the purse strings. Is your attraction welcoming them?

### 42 Attractions

#### Gone, Not Forgotten

We find out what people thought of Dismaland, Banksy's twisted theme park and contemporary art attraction – and talk to one of the Dismal Stewards

### 50 Immersive Design

#### Controversial Topics

Scott A Lukas delves into the world of dark and disturbing topics in themed and immersive spaces

### 56 Analysis

#### People Power

Gerri Morris, director at Morris Hargreaves McIntyre, presents a new way of defining cultural consumers

### 62 Show Report

#### SATE 2015

Star Wars hero Anthony Daniels (C-3PO) gets this year's SATE conference buzzing

### 66 Planetariums

#### Planetariums: the Next 20 Years

Staffan Klashd of Sciss asks how planetariums can find success in the future

### 70 Mystery Shopper

#### Igniting Imagination

We visit The Hunger Games: The Exhibition and enjoy a host of interactive experiences



■ p66 Industry analysis reveals the developments and challenges facing the planetarium sector



■ p62 Anthony Daniels speaks at SATE



■ p70 The Hunger Games exhibit on tour



■ p80 Entering the curious world of Lotte, where South Korean culture and tradition is central

## 80 Theme Parks Best of the Lotte

With 7 million visitors a year, Lotte World is one of Asia's biggest hitters. We find out more about the concept

## 84 Profile Juliana Delaney

Continuum's CEO on the magic of pop culture and the cultural attraction

## 90 Waterparks Crystal Waters

We look at plans for a hybrid waterpark-theme park in Sharjah in the UAE

## 94 Ticketing Ahead of the Game

How advantageous is it to offer advance tickets online? We ask the industry experts

## 100 Zoos & Aquariums Turn over a New Reef

The Florida Aquarium is teaming up with the National Aquarium of Cuba in a bid to save and restore the region's precious coral reefs

## 102 Rides The Ride Makers

Our ride makers series returns to the fast-moving and evolving world of cutting-edge dark rides

## 110 Show Preview IAAPA Show

What's new from suppliers on the show floor in Orlando

## 116 Web Gallery A source of attractions services



On the cover: Anthony Daniels poses with the original C-3PO head from the first *Star Wars* film

Photo: Sarah Lee

**Subscribe:**

To subscribe, call: +44 (0)1462 471915 or visit [www.leisuresubs.com](http://www.leisuresubs.com)

**Web gallery:**

For suppliers of products and services in the worldwide attractions industry, turn to page 116

## the team

### READER SERVICES

#### Subscriptions

Denise Adams  
+44 (0)1462 471930

#### Circulation manager

Michael Emmerson  
+44 (0)1462 471932

### EDITORIAL TEAM

#### Managing editor

Alice Davis  
+44 (0)1462 471918

#### Editor

Liz Terry  
+44 (0)1462 431385

### NEWSDESK

Tom Anstey  
+44 (0)1462 471916  
Jak Phillips  
+44 (0)1462 471938  
Kim Megson  
+44 (0)1462 471915

### ADVERTISING TEAM

#### Publisher

Julie Badrick  
+44 (0)1462 471919

#### Advertising sales

John Challinor  
+44 (0)1202 742968  
Jan Williams  
+44 (0)1462 471909

### WEB TEAM

#### Internet

Michael Paramore  
+44 (0)1462 471926  
Dean Fox  
+44 (0)1462 471900  
Tim Nash  
+44 (0)1462 471917  
Emma Harris  
+44 (0)1462 471921  
attractions-kit.net  
product search engine  
Kate Corney  
+44 (0)1462 471922

### DESIGN

Andy Bundy  
+44 (0)1462 471924  
Ed Gallagher  
+44 (0)1905 20198

### FINANCE

Denise Adams  
+44 (0)1462 471930  
Rebekah Scott  
+44 (0)1462 471930



# Attractions MANAGEMENT

Choose how you read  
Attractions Management...



PRINT

Attractions Management is available in glossy print on subscription. You can sign up any time at [leisuresubs.com](http://leisuresubs.com)



DIGITAL

Read Attractions Management free on Digital Turning Pages and enjoy extra links and searchability



PDF

The magazine is also available as a PDF edition for readers who want to read offline or on tablet

## OTHER RESOURCES FROM ATTRACTIONS MANAGEMENT

### Attractions Handbook

The latest industry stats, trends and analysis all in one place: The Attractions Management Handbook is a reference guide and global resource for decisionmakers.

- Read it online:  
[www.attractionshandbook.com/digital](http://www.attractionshandbook.com/digital)
- Download the PDF edition:  
[www.attractionshandbook.com/pdf](http://www.attractionshandbook.com/pdf)

### attractionsmanagement.com

Attractions Management's website features daily attractions news and jobs, as well as access to digital editions of Attractions Management and links to other Leisure Media magazines and websites.

- Visit the website:  
[www.attractionsmanagement.com](http://www.attractionsmanagement.com)

### Attractions Management E-zine

The Attractions Management e-zine brings the best of the week's news and jobs to your inbox every Wednesday. Covering everything from science centres and theme parks to museums, zoos and planetariums.

- Sign up here:  
[www.leisuremedia.com/subscribe](http://www.leisuremedia.com/subscribe)

### AM2

Our sister title focuses on news, jobs and training. It has a daily website, [www.am2.jobs](http://www.am2.jobs), an e-zine and instant alerts service.

- Read it online:  
[www.am2.jobs/digital](http://www.am2.jobs/digital)
- Download the PDF edition:  
[www.am2.jobs/pdf](http://www.am2.jobs/pdf)
- Sign up for the e-zine:  
[www.leisuremedia.com/subscribe](http://www.leisuremedia.com/subscribe)

### attractions-kit.net

The search engine for buyers lists contacts and details for 5,000 suppliers. Find all the connections you need to streamline your buying and get news via the weekly e-zine.

- Visit the website:  
[www.attractions-kit.net](http://www.attractions-kit.net)
- Sign up for the e-zine:  
[www.leisuremedia.com/subscribe](http://www.leisuremedia.com/subscribe)

### Instant alerts & RSS

Get the news as it happens and find out about the latest job openings and tenders the second they're posted online, by signing up for our free, customisable instant news alerts and RSS feeds.

- Sign up here:  
[www.leisuremedia.com/subscribe](http://www.leisuremedia.com/subscribe)



# MORE TO ENJOY...

## What's hot in Leisure Media's magazines



### HEALTH CLUB MANAGEMENT

- Freerunning star Sébastien Foucan on his new venture
- Member loyalty in the on-demand economy
- The explosive growth of extreme events



### CLADMAG

- David Rockwell shares the secrets of creativity
- Wild Places: the challenges of building on the Galapagos Islands
- Pegasus Capital's Craig Cogut on Six Senses' expansion plans



### SPA BUSINESS

- Deepak Chopra on his new project with Delos and Leonardo DiCaprio
- Customised spa treatments: is it ok for staff to freestyle?
- Michael Tompkins on his next move



### ATTRACTIONS MANAGEMENT

- Ubisoft and the videogame theme park
- Scott A Lukas on dark topics in attractions
- South Korea's quiet success: Lotte World and the Lotte empire

Read all of our latest magazines & back issues online: [leisuremedia.com](http://leisuremedia.com)



### SPORTS MANAGEMENT

- Tracey Crouch, UK minister for sports, on rewriting sports strategy
- University sports centres in the spotlight
- Engaging younger, less confident kids with sport



### LEISURE OPPORTUNITIES

- VisitBritain turns to James Bond in new tourism campaign
- Premier League still EU's priest for fans
- Jamie Oliver backs plans for a "sugar tax"



### SPA OPPORTUNITIES

- Canyon Ranch sets sights on Turkish Riviera resort
- US spa staff in high demand, study shows
- Commune opens its fifth luxury property in Bali, Alila Seminyak



### AM2

- SeaWorld expansion comes at cost of breeding ban
- Greece hikes entrance fees to heritage sites
- Chinese investor backs Merlin's plans for Legoland Shanghai



Eric Gradman, left, and Brent Bushnell founded Two Bit Circus to bring science subjects to life

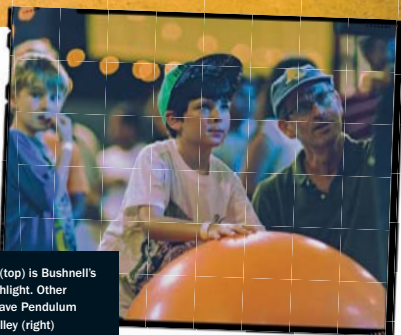
“We’ve had requests for STEAM Carnival from all over the world – the response has been awesome”

**Brent Bushnell, CEO, Two Bit Circus**

Entertainment engineering collective Two Bit Circus has been causing a real buzz in the US with its STEAM Carnival. And now that success has been recognised by a trio of venture capital firms, who are putting up \$6.5m (£5.9m, £4.3m) in investment for the high-tech circus to expand and develop the concept.

“We’re thrilled to be bringing our crazy circus to a broader audience,” says Brent Bushnell, CEO of Two Bit Circus.

The Los Angeles, California-based company was founded in 2012 by Bushnell and Eric Gradman, who wanted to create a positive narrative around the STEM (science, technology, engineering, and mathematics) subjects to “convert non-STEM kids into STEM kids”. The investment is coming from Techstars



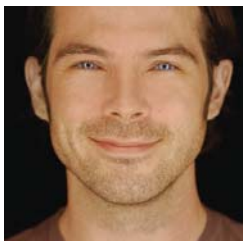
Ventures and Foundry Group, with additional funding from Intel Capital.

The funding will mainly be used to grow STEAM Carnival – a touring pop-up-style event that gets kids to engage with STEM topics plus art topics in a project-based, hands-on way – into a national brand.

The first STEAM Carnival took place in an LA warehouse in October 2014, and has gone from strength to strength. The next STEAM Carnival was planned for Pier 48 in San Francisco from 6 to 8 November.

"If LA was our prototype, San Francisco represents version 1.0 of the event," Bushnell says. "We've had hundreds of requests for the event from all over the world, so the response has been awesome, with guests staying an average of five hours in LA. We're excited to take it across the country and then scale it internationally."

**Dunk Tank Flambe (top) is Bushnell's STEAM Carnival highlight. Other activities include Wave Pendulum (left) and Big Ball Alley (right)**



"With the investment we're focusing on three core areas," he says. "First, we're scaling the carnival up across the US and building out the ecosystem around it, such as the YouTube channel. Second, we're building on our work in 360-degree video capture for VR, and we'll be creating original VR content. And third, we're completing our other out-of-home game platforms – stay tuned for more!"

Two Bit Circus is also working on home solutions and a series of interactive solutions for other out-of-home venues.



# “We should create something that builds on 4,000 years of Chinese relations with the environment”

Sir Tim Smit, entrepreneur and founder of the Eden Project

**S**ir Tim Smit looks like he will finally achieve his ambition for a Chinese Eden, after signing off on a £100m (\$152m, €135m) partnership with leading developer China Jinmao Holdings.

The contract for the project – the result of nearly 14 months of negotiations by Smit – was signed in Beijing on 20 September. China Eden is the entrepreneur's first big building venture overseas and his largest undertaking since the Eden Project opened in a former clay pit in Cornwall in 2001.

The tourism and education destination will be located in Qingdao on the east coast of China, which attracts 63 million tourists a year. The site – which overlooks the whole city – is derelict and environmentally-damaged where the land was once used for salt production and then prawn breeding. Now it will be transformed, fitting in with Eden's commitment to regeneration and its green credentials.

“We have been approached many times before to create Eden projects, but



Sir Tim Smit is working to bring Eden's special brand of hands-on environmental education to China, the world's most populous country – and one of its most polluted

have always declined as we did not wish to copy Eden in Cornwall,” Smit says.

“This opportunity is exciting because our partners share our view that we should build a project that builds on 4,000 years of Chinese relations with the environment and Eden's fresh approach to education.”

“It feels like we have been given the opportunity to do something very special and important and we are proud to take all that is best from the UK to forge new partnerships in China – for it is here above all other places on earth that the shape of our collective future will be set over the next 20 years,” Smit says.

Since opening, more than 16 million people have visited the Eden Project, which has generated £1.6bn (\$2.4bn, €2.2bn) for the wider economy. Among many awards, it was recently named the top British landmark of the 21st century.

Grimshaw, designers of the original Eden Project, has been appointed as lead architects for the new development. Plans for a site in Beijing are also in the pipeline.



# IAAPA ATTRACTIONS EXPO 2015

# NEW. NOW.

# NEXT!

**IAAPA**  
Attractions  
Expo



**IAAPA**

## **NEW** on the Scene.

Enter an inspiring world of innovation — at seminars, on the Expo floor, and all over Orlando. A feast for your senses, you can talk about, touch, and taste everything new and exciting the industry has to offer.

## **NOW** is Your Time.

Experience five days of wall-to-wall activity and opportunities vital to your success. Immerse yourself in discoveries, operations, and management events. Meet, greet, and network with the people ready to make an impact on your business.


## **NEXT** for Your Business.

Learn from distinguished leaders, exchange new ideas and proven solutions with your peers, and explore the Expo floor to experience the future — and gain insights you need now to drive your business.

**IT'S ALL AT IAAPA ATTRACTIONS EXPO 2015.**

**Conference:** Nov. 16–20, 2015 **Trade Show:** Nov. 17–20, 2015 **Orlando, Florida US**

★ [www.IAAPA.org/IAAPAAttractionsExpo](http://www.IAAPA.org/IAAPAAttractionsExpo) ★



**“It is impossible to travel  
down a slide without smiling”**

Carsten Höller, artist

PHOTO: © LINDA IVLIND

Visitors are offered a  
unique way to exit the  
gallery, travelling on the  
twisting slides





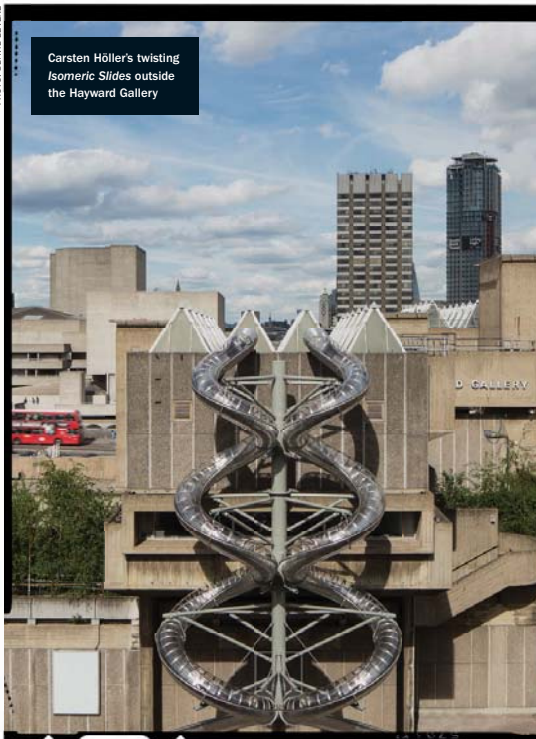
PHOTO: JOHN SZARISBRICK

Unusual things were taking place at London's Southbank Centre this summer, as the artist Carsten Höller was given free rein at the Hayward Gallery. An array of installations – both eclectic and eccentric – were brought together for the exhibition, named *Decisions*.

Höller caused a buzz with his specially-commissioned 15-metre-long (49 foot) slides on the gallery's exterior – which allowed visitors to travel from the glass pyramid ceiling to the entrance level – and inside the venue things were equally playful.

One highlight was two moving robotic beds that roamed the galleries, entitled

PHOTO: ©DAVID LEVINE



Carsten Höller's twisting *Isomeric Slides* outside the Hayward Gallery

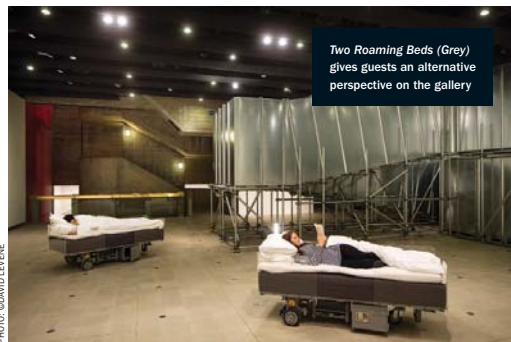


PHOTO: ©DAVID LEVINE

*Two Roaming Beds (Grey)* gives guests an alternative perspective on the gallery

*Two Roaming Beds (Grey)*. For £300 (\$461, €421), you and your guest could spend the night in the gallery, tucked up beneath your duvet as you trundled slowly amongst the artworks on a bed-machine on wheels.

Visitors were treated to *Flying Machines*, which gave the sensation of flying over Waterloo Bridge and *The Pinocchio Effect*, with technology that made visitors feel as though their nose was growing.

The *Isomeric Slides*, which have been already featured at the nearby Tate Modern, come at the climax of the experience, giving visitors the choice of how to leave. Built onto the gallery's exterior wall, these constituted "a graceful sculptural installation," according to Höller, leaving visitors "experiencing an emotional state that is a unique condition somewhere between delight and madness."

“This is an immersive experience like you’ve never had before”

Steffen Kottkamp, director at  
MackCreative, MackMedia



Europa Park revitalised its oldest rollercoaster in September when it added a world-first to the ride experience – virtual reality.

Up to 2,000 visitors per day can take the Alpenexpress VR-Ride, donning the wireless Samsung Gear headsets and launching into an immersive journey combining virtual reality with the real world experience of riding a rollercoaster.

Park mascot Ed Eureka guides the VR adventure, featuring a ride on a mine cart and a lift on the wings of a dragon. Using precise synchronisation, the 3D animated world – produced by MackMedia, Europa Park’s in-house design and ideas engine – perfectly complements the coaster track.

Steffen Kottkamp, director of MackCreative (like MackMedia, a division of Mack Rides), says the technology can be applied to an old ride to reinvent it for a new audience, but that it has more significant applications.

“You have to imagine it as defining an area and in this area you can manipulate



Europa Park's managing partner Roland Mack prepares to experience the ride

movement to appear how you want it to,” Kottkamp says. “We take the existing ride, unfold it and then put it back together again as a new ride, using every curve, ascent and descent of the track to add to the virtual experience. It’s a bit like driving or flying through a game, but here you feel the real movement. This is an immersive experience like you’ve never had before.”

The project was a collaboration between VR Coaster, Mack Rides, MackMedia and Samsung, and was developed with Thomas Wagner, professor in the department of Virtual Design at the University of Applied Sciences Kaiserslautern in Germany.

“It’s cheaper than building an entirely new coaster, but that’s not the aim of the technology,” says Kottkamp. “It can give an existing coaster a new lease of life, as we did with Alpenexpress. This is a first step, but there will be a lot of companies that decide to build a new coaster and integrate the technology from day one.”

Kottkamp says he thinks the solution will be somewhere in between.

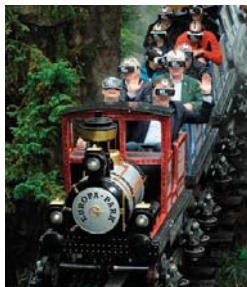
“We didn’t invent the technology in order to give old coasters a new-world sensation,” he says. “We invented the technology to create a much higher level of experience, where we can create a ride bespoke for virtual reality.”

The revolutionary technology is being distributed by Mack Rides to the wider theme park market, and Kottkamp says there’s interest from multiple parties.

“We’re making a business model out of it – one that also takes care of the operational side, such as ride capacity, hardware hygiene and ticketing solutions.”

So does Kottkamp believe the rollercoaster, as we know it, is dead?

“The future of the rollercoaster lies in a combination of real physical forces and appropriate thematic content. Using VR, we can create a much more elaborate and interactive themed world,” he says.



Passengers wear Samsung Gear VR headsets on the alpine-themed coaster

Crimson Wing  
Coming Fall 2015

# Holovis

ATTRACTIONS



World's First True 3D Interactive Dome

Catch the Exclusive Premiere of Crimson Wing™ at the IAAPA Attractions Expo 2015, Holovis Booth 4086

Transforming Sensory Experiences

London Los Angeles Shanghai

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

## Children's science museum opens in Sofia

Muzeiko – the first children's museum to be built in post-Soviet Eastern Europe – has opened its doors to the public in Sofia, Bulgaria.

Following two years of development, the Lee H. Skolnick Architecture + Design Partnership-designed (LHSA+DP) children's science discovery centre has been conceived as a "journey moving through time and space".

The 35,000sq ft (3,250sqm) facility is set over three storeys. On the bottom floor, children can explore the past, with exhibits based on archaeology, geology and palaeontology, while the ground floor represents the modern day, with hands-on exhibits about nature and contemporary cities. Finally, the first floor



■ Design for Muzeiko is based on the theme of little mountains

is dedicated to the future, with interactive exhibitions exploring new technologies and space travel.

The interactivity for kids inside the museum also extends to the site, with exterior components including a science playground, green roof and rooftop

climbing wall, rain garden, outdoor activity space and an amphitheatre.

Architectural design for Muzeiko is based on "Little Mountains", an allusion to Bulgaria's mountainous topography, according to LHSA+DP

■ Details: [http://lel.sr?a=D755\\_T](http://lel.sr?a=D755_T)



■ Magmatica can simulate multiple earthquakes

A new attraction has debuted in Cartago, Costa Rica, giving visitors the opportunity to experience a powerful earthquake.

Magmatica simulates a 6.3-magnitude earthquake – the same power level that happened in the city in 1910. The event, known as Santa Mónica's earthquake, left the city in ruins and became an important milestone in fail-safes and prevention methods that would be applied to the entire country. In addition to the Cartago quake, the simulator will also be able to reproduce the force felt during the 7.6 1991 Limón earthquake in Costa Rica and the 8.8 Chile earthquake in 2010.

"The simulator is meant to sensitise people to take preventive measures and

actions in our communities toward these situations," said Marcela Calvo, president of Magmatica. "I hope people can come and experience earthquakes with other eyes – the eyes of prevention."

An entire exhibition has been built around the simulator, with an exhibition

teaching visitors how Costa Rica acts as a biological bridge between South and North America. Using interactive technology, users can learn about geological formation of continents and how volcanic and seismic activity affected the formation of the country.

■ Details: [http://lel.sr?a=19G2v\\_T](http://lel.sr?a=19G2v_T)

## INDUSTRY OPINION

### Industrial heritage and CSR are two linked opportunities

Vlastimil Volák

The Ecsite Directors Forum is held at Techmania in mid-November. As the host of this event, we chose a theme close to our heart: industrial heritage and corporate social responsibility (CSR). The city of Pilsen, home of the renowned beer and ŠKODA factory and 2015 European Capital of Culture, is a perfect setting to tackle this topic.

Industrial heritage gives us the opportunity to build on assets created in the past. It also gives the upholders of this heritage the tools and opportunities to enable future developments. Techmania was established on the industrial heritage of ŠKODA, a company which in the past employed as many as 90,000 people, and a fertile breeding ground for an institution that will continue to communicate the significance of our industrial region and ensure that future generations embrace careers in the technical fields of companies operating locally.

CSR allows companies to participate in public life. Today many multinational companies commit to having a positive social impact on the communities in which they operate. They develop a CSR policy, setting themselves ethical, environmental, educational (etc) goals that they often implement in collaboration with external stakeholders. This CSR trend represents an opportunity for science centres and museums: the more they engage in building an atmosphere of growing both personal and corporate responsibility, the more they will benefit from corporate support and cooperation, in particular from companies interested in capitalising on the industrial heritage they are so good at keeping alive and relevant.

Vlastimil Volák, CEO, Techmania Science Center, Czech Republic





## Miyazaki's magical landscapes to become a reality in Japan

Oscar-winning filmmaker Hayao Miyazaki has revealed plans to create real-life versions of the landscapes from his imaginative anime films, with designs for a 10,000-acre (4,000-hectare) nature park on a remote island off the coast of Japan.

Miyazaki, who retired from filmmaking in 2013, will recreate the magical worlds seen in classics such as *Spirited Away*, *Howl's Moving Castle* and *My Neighbour Totoro*, at the theme park on Kume Island in Okinawa, known as The Forest Where the Wind Returns.

As with Miyazaki's films, the unique attraction will be centred around nature. Included on the forest-filled island will be a library, accommodation to sleep up to 30 people and as few man-made attractions as possible. Existing playground equipment will be replaced with "an interactive site where children can enjoy nature through five senses."

An investment of \$2.5m (£2.2m, £1.6m) will be made by Miyazaki, with development of facilities and landscaping starting in Q2 of 2016 and an opening date of 2018. The



PHOTO: STUDIO Ghibli

■ Miyazaki's Oscar-winning films have all been based around nature

Okinawa design firm Kume Creation is working on both architecture and landscape architecture for the project.

Miyazaki has said once complete, he will donate the park to Kumejima – the town of 8,000 people which is located

on part of Kume. The development will be built with a "made in Kumejima" ethos, making sure local construction materials are used and the opinions of the island's citizens are taken into account.

■ Details: [http://lei.sr?a=n7b7q\\_T](http://lei.sr?a=n7b7q_T)



■ Kynren will premiere on 2 July 2016

### UK's Eleven Arches names 2016 show

Eleven Arches – the £31m (\$47.4m, €42.9m) live-action show which is coming to the UK in July 2016 – will be known as 'Kynren – an epic tale of England'. *Attractions Management* can reveal.

"The name echoes the Anglo Saxon word 'cynren' meaning 'generation, kindred, family'," said Claire Byers, marketing and communications director for Eleven Arches.

■ Details: [http://lei.sr?a=P3s6U\\_T](http://lei.sr?a=P3s6U_T)

## The Shining hotel to become Denver museum

The hotel which inspired Stephen King's *The Shining* has announced plans to open a horror-themed museum at the Colorado establishment, with some of the biggest names in horror backing the ambitious \$24m (£21.7m, £15.7m) project.

Led by Denver-based design firm MOA Architecture, the Stanley Hotel in Estes Park will be home to the 43,000sq ft (4,000sqm) interactive museum, which will also feature a horror film archive and a film production studio with classrooms, workshop spaces and a 3,000sq ft (278sqm) soundstage. In addition, the site will be home to indoor and outdoor entertainment venues, a 500-seat auditorium and a discovery



PHOTO: WARNER BROS

■ The hotel was the inspiration for Stephen King's *The Shining*

centre with temporary exhibits based on popular horror movies and shows. To help with the funding for the development, the hotel says it has applied for \$11.5m (£10.4m, £7.5m) in film centre-generated state sales tax through the Colorado Regional Tourism Act.

Hollywood hotshots Elijah Wood and Simon Pegg, who have both appeared in horror-based flicks such as *Maniac* and *Shaun of the Dead* are on the centre's founding board, as well as producer Daniel Noah and legendary horror film director George A Romero.

■ Details: <http://lei.sr?a=r9z9v>

## Shrek to star at DreamWorks waterpark

Canadian water ride specialist ProSlide is working with the Triple Five real estate company on the multi-million-dollar waterpark section of the upcoming American Dream project in New Jersey.

American Dream New Jersey will consist of a theme park and a 20,000sqm (215,000sq ft) indoor waterpark based on famous DreamWorks IPs.

"The entire waterpark will be themed around characters from the DreamWorks movies," said Jeff Janovich, ProSlide's vice president, business development and strategic accounts.

"It's a total immersion experience. Visitors will be immersed in a world full of DreamWorks characters.



■ Shrek is making a splash at the DreamWorks waterpark

The focus is on theming the whole environment, not just the rides."

Characters from the *Madagascar*, *Shrek* and *Kung Fu Panda* franchises are set to feature heavily.

Hettema Group is working on the design for the attraction, which is

due to open in 2017. It's expected that there will be different areas within the waterpark itself, including a *Kung Fu Panda* play structure and a 42m (138ft) jungle-themed tower slide – which would be among the tallest in the world.

■ Details: [http://lei.sr?a=s5h6h\\_T](http://lei.sr?a=s5h6h_T)

### INDUSTRY OPINION

## Let's treat challenges the industry faces as opportunities for all

Aleatha Ezra

The World Waterpark Association often fields questions about the challenges the water leisure industry will face in the coming year. We prefer to focus on the positives of our global industry. However, we are also realistic in acknowledging that, as our industry continues to grow, we will face challenges as an industry. Some of those global challenges for 2016 and beyond include:

● **Water conservation.** Water conservation is something that affects waterpark operators across all continents. As an industry, we must be proactive in our efforts to be good stewards of water, while at the same time educating people on the difference between water use vs. water consumption. This is an issue that can come down to perception and we must be ready and able to overcome the perception that waterparks are water-wasters.

● **Drowning.** Lack of swimming skills continues to be a global problem. According to the WHO's 2014 Global Report on Drowning: "Drowning claims the lives of 372,000 people a year worldwide. This death toll is almost two thirds that of malnutrition and well over half that of malaria – but unlike these public health challenges, there are no broad prevention efforts that target drowning." We, as an industry, must continue to focus on drowning prevention programs and teaching children and adults how to swim.

All industries must deal with challenges. However, our industry can view our challenges as opportunities – in providing solutions we are making a positive difference in the lives of our guests and our global community.

Aleatha Ezra, director of park member development, WWA



## World's largest waterpark for Northern Marianas

The world's largest waterpark has been proposed as part of a \$7.1bn (£6.4bn, £4.6bn) resort development on the US territory of Northern Marianas near Guam.

Hong Kong-based Best Sunshine International (BSI) is behind the plans, which will also feature 20 hotels, an integrated casino resort and a kilometre-long shopping strip. According to BSI, the company is eyeing public land currently leased to the Marina Resort and Spa that will expire in 2018.

At present, the BSI resort is in phase one of development, which includes the \$190m (£172.1m, £124.1m) Grand Mariana Resort in Saipan, with the waterpark



■ The waterpark development would come during phase two

project coming in at phase two. The 1.52sq km (375 acres) development will be completed over a period of 12 years, with the plans rolled out in three phases.

Northern Marianas' Department of Public Lands (DPL) issued a request for proposals to create a masterplan for the project

earlier in the year, with a deadline of 28 July. The DPL, which is responsible for the administration, management, use, leasing, development and disposition of all public lands in Northern Marianas is yet to announce its chosen contractors and architects for the plans.

■ Details: [http://lei.sr?a=E7D3b\\_T](http://lei.sr?a=E7D3b_T)



# VEKOMA'S SUSPENDED FAMILY COASTER

Feet dangling in the air, high speed, exciting curves, guaranteed for **freedom, fun, thrill** and **excitement**. An exhilarating experience for everyone!

FAMILY COASTERS   THRILL & MEGA COASTERS   INDOOR & CUSTOM DESIGNED   ATTRACTIONS & SPECIALITIES



VEKOMA™

RIDES MANUFACTURING BV

SCHAAPWEG 18 6063 BA VLODROP THE NETHERLANDS  
TEL +31 (0)475 409222 FAX +31 (0)475 402115 [WWW.VEKOMA.COM](http://WWW.VEKOMA.COM)

## Chinese investor backs Merlin to build Legoland Shanghai

The effects of the Chinese president's state visit to the UK were felt within the domestic attractions industry when Merlin Entertainments revealed plans to build Legoland Shanghai with Chinese backing.

The \$300m (£194m, €265m) Shanghai theme park is a joint venture between Merlin and the Chinese investment firm China Media Capital.

The popular Lego-themed attraction has been making headway in the Asian market in recent years, with Legoland parks under construction in Japan and South Korea, and Legoland Malaysia open since 2012. Legoland is also expected to open at Dubai Parks and Resorts in the UAE in 2016.

Other midway opportunities in China will be explored by the joint venture, such as the Dungeons, Legoland Discovery Centres and attractions with DreamWorks IPs.

"China is a key growth market for the Group and we see this partnership as providing a significant opportunity to accelerate our plans," said Nick Varney, CEO of Merlin Entertainments.

"Through investing and operating across the whole spectrum of the media



■ Merlin Entertainments CEO Nick Varney has big plans for the Chinese and Asia market

and entertainment sector, CMC has accumulated unique experience in aligning international know-how with local market needs," said Ruigang Li, chairman of China Media Capital. "Through this partnership with Merlin, a global operator, we will be

committed to creating a premium experience as well as establishing a working system in China for the development and operation of location based entertainment attractions that meet international standards,"

■ Details: [http://lei.sr?n=5j4H2\\_T](http://lei.sr?n=5j4H2_T)



■ The rollercoaster first opened in 1920

### Oldest rollercoaster in UK fully restored

The Scenic Railway – the premier attraction of heritage theme park Dreamland – has finally reopened to the public 12 years after the UK's oldest rollercoaster shut down.

Originally designed by Sir John Henry Iles who bought the site in 1919, the restored ride is nearly identical to when it first opened, bar modifications made for both operational and safety reasons.

■ Details: [http://lei.sr?n=9f3b3\\_T](http://lei.sr?n=9f3b3_T)

## Comcast to buy Universal Japan majority stake

Comcast is set to make its largest purchase outside of the US when the entertainment conglomerate buys a majority stake in Universal Studios Japan for \$1.5bn (£1.3bn, £988m).

Universal's number of foreign visitors to its park in Japan have more than doubled since the park opened its Harry Potter attraction in 2014. According to company statistics, more than 12 million people visited the park in the last financial year – an increase from 10.5 million on previous figures a year earlier.

In a statement, Comcast said it will buy 51 per cent of USJ Co – the holding company which owns the Universal theme park in Osaka – in a deal which



■ Harry Potter's arrival has doubled the number of foreign visits

will give Universal Studios Japan an enterprise value of \$6.2bn (£5.5bn, £4.1bn).

On the back of huge growth driven by the success of Universal's Harry Potter attractions, Comcast – the parent company of Universal – has started an aggressive expansion of its theme park business globally.

"We will make more investments – not only Osaka but also other areas," said chief executive Brian Roberts, who added that while the sale had only been finalised this month, the purchase plan had been in the works since it acquired NBCUniversal in 2011.

■ Details: [http://lei.sr?n=a885f\\_T](http://lei.sr?n=a885f_T)



## THUNDERBOLT



THIS SIZE CAN FIT ANY PARK



Total track length  
**681 m (2234')**



Maximum track height  
**35 m (115')**



Maximum Speed  
**25 m/s - 90 km/h - 56 mph**



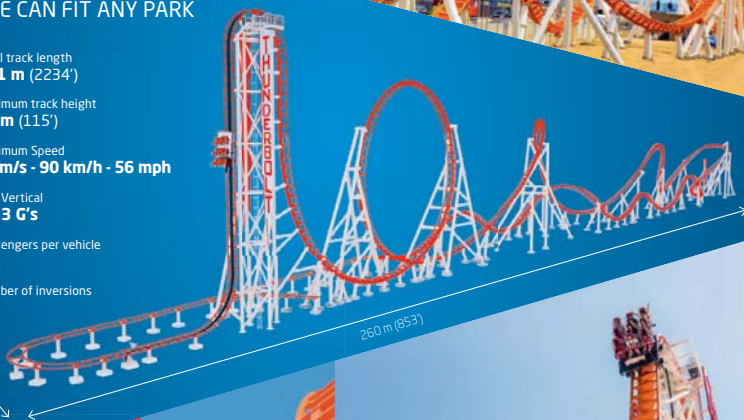
Max Vertical  
**+4.3 G's**



Passengers per vehicle  
**9**



Number of inversions  
**5**



15 m (49')

First 9 seats vehicle and new  
patent pending lap bar restraint.



## Budget tripled for Budapest's finalised cultural quarter

Hungary's government has finalised and approved plans to create a new museum quarter, significantly inflating the previous budget by around three times to \$710m, (€643m, £464m).

The cultural quarter known as Park Budapest has been designed by multiple architects narrowed down from more than 500 applications.

The Museum of Ethnography will be built in line with plans by French architecture practice Vallet de Martinis DIDD Architectes, while Japanese firm Sou Fujimoto Architects has designed the House of Hungarian Music. Hungarian firm KÖZTI Architects & Engineers will design both the PhotoMuseum and Museum of Hungarian Architecture and Norwegian architecture firm Snøhetta and Japanese design studio SANAA are designing the New National Gallery and Ludwig Museum.

Speaking at a parliamentary hearing, László Baán, the government commissioner in charge of developing "MuseumPark", said the project would draw an extra 300,000 tourists to Budapest every year as the city tries to compete with other



PHOTO: PINK BLUEPRINT

■ Park Budapest has been designed by multiple architects narrowed down from 500 firms

popular culture destinations across Europe, such as Prague and Barcelona.

Built within Budapest's largest park, Városliget, the development will see old buildings onsite demolished and replaced with new structures. The new cultural

quarter will mainly replace a wide concrete promenade used during the Communist era and a large car park that formerly acted as a parade ground. Work on the development is expected to be complete by March 2018.

■ Details: [http://lei.sr?n=B49y\\_T](http://lei.sr?n=B49y_T)



PHOTO: TOM ANSTEV

■ The exhibit displays real-life evidence

## Permanent home for London crime exhibit

Following its debut as a temporary exhibition at the Museum of London, plans are in the works to set up a new public institution to display Scotland Yard's infamous "Black Museum", a collection of criminal evidence from the Metropolitan Police Service.

London mayor Boris Johnson will confirm the museum's location by the end of the year, with funding sought from public and private sponsors.

■ Details: [http://lei.sr?n=R9x3R\\_T](http://lei.sr?n=R9x3R_T)

## Egypt plans world-first underwater museum

Egypt's Ministry of Antiquities has said it is reviving ambitious \$150m (€136m, £97.8m) plans to develop the world's first underwater museum, which will showcase the submerged ancient ruins of Alexandria.

Announced by minister of antiquities Mamdouh al-Damati, the plans have been in the works for more than seven years. The site, which dates back to 365 AD has more than 2,500 pieces of stonework from the sunken section of Alexandria, covering an area of around 25,000sqm (269,000sq ft) in the Alexandria Bay.

French architect Jacques Rougerie drew up plans in 2008 for fibreglass tunnels which would connect new above-ground waterfront



PHOTO: JACQUES ROUGERIE ARCHITECT

■ The original design features a central underwater hub

galleries to an underwater facility. However, those plans were shelved in 2011, in the wake of the Egyptian Revolution. Several years later though, the plans look set to become a reality with the support of the country's government and UNESCO. The plans will be similar to the original plan,

utilising an above-water exhibition space for recovered Alexandria relics and then an underwater tunnel taking visitors down to the 7 metre-deep (23 foot) sea floor in the bay. There will also be submarine tours with glass observation windows to further explore the museum.

■ Details: <http://lei.sr?n=UOE1F>



Wanda Xishuangbanna International Theme Park, China

# ENTERTAINING PLACES BEGIN WITH FORREC

See you at IAAPA 2015  
Booth 2049

**FORREC**

[FORREC.COM](http://FORREC.COM)

Theme Parks

Water Parks

Retail and Mixed-Use

Resorts

Visitor Attractions

## Expert calls for government action to prevent ISIS devastation

Heritage expert and former director of UNESCO's World Heritage Centre Francesco Bandarin has called on the heritage sector and the governments that support it to increase efforts to end willful annihilation of historic sites by the likes of ISIS.

Speaking at CyArk's annual summit, Bandarin – who currently serves as professor of urban planning and urban conservation at the University Institute of Architecture in Venice – called for an end to the wanton destruction taking place in countries such as Iraq and Syria.

"We are saying 'enough' to heritage destruction of these important sites," said Bandarin. "The main challenges we currently face are the limits imposed on us. What we see in the field today is total destruction. While technology has developed significantly in the past 50 years, there is still a big gap between the tools we have to prevent or preserve, and the destruction these in-danger heritage sites face from the likes of ISIS."

Bandarin, who's held key roles in UNESCO between 2000 and 2014, said that beyond organisations such as CyArk using developing technologies to map and



PHOTO: UNESCO

■ Ancient heritage sites such as Palmyra in Syria have been attacked by ISIS

preserve heritage sites, the governments of the world need to work with heritage organisations to help these efforts, so that sites can be saved even in the worst crises.

"This gap between tools and destruction prevention is very serious," continued

Bandarin. "It's not acceptable, and we need a governmental-level push to try to bridge that gap. If we can work closer with governmental organisations, then maybe we can limit the disaster on the levels we're seeing today."

■ Details: [http://lei.sr?n=Q8G2U\\_T](http://lei.sr?n=Q8G2U_T)

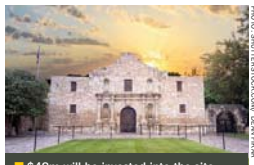


PHOTO: SHUTTERSTOCK.COM/DEANIRAK

■ \$48m will be invested into the site

### Large investment to transform the Alamo

The Alamo – one of the US's most historic landmarks – is to undergo a \$48m (£42.1m, £31.3m) renovation to turn the attraction into a prime heritage destination.

State lawmakers have approved \$31m (£27.2m, £20.2m) of funding to cover redevelopment of the Texas site, while San Antonio officials have earmarked \$17m (£15m, £11m) for the plans.

■ Details: [http://lei.sr?n=X8M2M\\_T](http://lei.sr?n=X8M2M_T)

## Greece hikes heritage prices by 430 per cent

Greece's heritage attractions are about to bump up prices by as much as 430 per cent as the country's government tries to find new sources of revenue to fund the cash-strapped nation.

Entrance fees at landmark archaeological sites, including the Acropolis, Ancient Olympia and the ruins of Knossos, will be raised up to four times their current price, potentially raising an additional €10bn (£11.4bn, £7.4bn) for the Greek government.

The decision, made by the archaeological council also applies to Greece's 200 state museums, with entrance fees raised as well as tours of archaeological digs, which were once free. Off-peak tourists visiting between November and



PHOTO: SHUTTERSTOCK.COM/ANASTASO71

■ The Acropolis will raise prices from €12 to €52

April will pay a 50 per cent discount on the new prices.

"The price adjustments put the rates on a par with those in the rest of Europe," said the ministry of culture's Ioanna Baltso. "They will take effect from the start of 2016."

Greece has around 20,000 archeological sites

across the country, with heritage a key lure for the 26 million tourists that visit each year. The move comes after Alexis Tsipras was re-elected as Prime Minister, with the head of state vowing to make cuts in exchange for €86bn (£98.4bn, £63.4bn) worth of bailout loans.

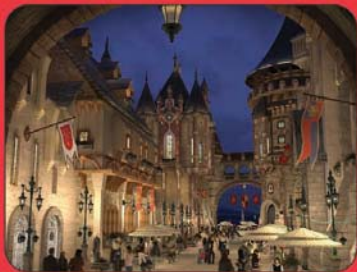
■ Details: [http://lei.sr?n=N55g\\_T](http://lei.sr?n=N55g_T)



A Global Leader in the Tourism and Leisure Design Industry

# IDEATTACK®

©2015 IDEATTACK Inc. All Rights Reserved



**MasterPlanning**  
Concept Design  
Attraction Design

**Architecture**  
Schematic Design  
Design Development

**Feasibility Study**  
Brand Design



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



Destination  
**Resorts**

Custom  
**Theme  
Parks**

FEC

Cultural  
Attractions

Large Scale  
International  
Tourism  
& Leisure Zones

Lifestyle  
Centers  
& Themed Retail



IDEATTACK Inc.  
70 South Lake Avenue  
Pasadena, California  
91101 U.S.A.  
Phone +1 626 463 7353  
[info@ideattack.com](mailto:info@ideattack.com)

# IDEATTACK®



## SeaWorld mulls breeding ban lawsuit

SeaWorld Entertainment has announced its intention to challenge the decision of the California Coastal Commission (CCC) to allow the company's San Diego park to expand its orca habitats only on the basis that it no longer breeds the captive cetaceans.

SeaWorld said it intended to pursue legal action against the CCC for its "overreaching condition that would ban killer whale breeding at SeaWorld San Diego".

Explaining its reason for the suit, SeaWorld argued that animal welfare is governed by federal and state laws that do not fall within the jurisdiction of the CCC and that the decision to make the ruling in relation to ultimate approval of its Blue World Project at SeaWorld San Diego was unjustified.



■ SeaWorld argues animal welfare is not governed by the CCC

"As a regulatory board charged with managing coastal development and related land-use decisions, the CCC went way beyond its jurisdiction and authority when it banned breeding by killer whales at SeaWorld. By imposing broad new jurisdiction

over all future SeaWorld marine animal projects, as well as aquarium projects elsewhere in the state, the Commission has overstepped both federal and California law," said Joel Manby, president and CEO of SeaWorld.

■ Details: [http://lel.sr?a=d5q7B\\_T](http://lel.sr?a=d5q7B_T)

### INDUSTRY OPINION

## Zoos act with global groups to protect cheetahs, wild dogs

Jennifer Fields

SAFE: Saving Animals From Extinction is an initiative that is deepening the substantial science and conservation work that is being done by AZA-accredited facilities and combining the power of zoo and aquarium visitors with the resources and collective expertise of zoos and aquariums and partners to save animals from extinction. Professionals representing the AZA community helped coordinate the first Cheetah and African Wild Dog Conservation Workshop since 2007.

Held in Johannesburg, South Africa in August 2015, the meeting brought together representatives from conservation organisations and government agencies.

Meeting attendees identified that there is a great need for reducing human/animal conflicts by increasing the value of the species for local communities, providing training in field methodology, and reducing snaring and illegal trade. The group also worked to update the range usage maps for both species to determine which areas have resident populations, which are corridors supporting animal movement through these areas, and what areas are prime locations for supporting these species. Additionally, the group identified opportunities for AZA SAFE and AZA members to further assist in these conservation efforts. The public can also learn more about cheetahs and African wild dogs at AZA-accredited facilities and are invited to learn more about AZA SAFE by visiting [AZAsavingspecies.org](http://AZAsavingspecies.org).

Despite the challenges ahead, the meeting was a success as it helped build the collaboration of all involved in cheetah and wild dog conservation.

Jennifer Fields,  
communications coordinator, AZA



## Hippo exhibit set to complete Cincinnati Zoo

After a near two-decade delay, Cincinnati Zoo's \$34m (£30m, £22m) Africa exhibit will enter its final phase of development after meeting a \$7.3m (£6.4m, £4.7m) target to build a new state-of-the-art hippo enclosure.

Set to house two Nile hippos, the paddock – designed by architects Cornette-Violetta – will include an underwater viewing area for visitors, employing a multi-million dollar bespoke filtration system designed to manage the large amount of waste produced by the hippos on a daily basis. Cincinnati-based HGC Construction – which also developed several of the zoo's other exhibits – is general contractor for the



■ The hippo exhibit is developed to LEED standards

development. Satchell Engineering & Associates designed the filtration system and Thelen Associates are acting as geotechnical engineers.

The new exhibit is being developed to LEED standards, something the zoo holds in high regard as it has been dubbed the

"greenest zoo in America." Assuming all goes to plan, the hippo exhibit will open in Q3 2016. The final development is not only the culmination of two decades of development but it will also be the largest animal exhibit in the zoo's history.

■ Details: [http://lel.sr?a=j8c3g\\_T](http://lel.sr?a=j8c3g_T)

# Now Get Even More

Introducing the new RMF Controller

**Defender**  
by Neptune Benson®

For over 50 years, Neptune Benson has been synonymous with water filtration and disinfection, serving recreational, industrial, and municipal water markets worldwide. Our relentless focus is on delivering innovative and sustainable technology designed to improve control and efficiency for owners and operators.

The new RMF System Controller is an advanced graphical interface for operating and automating the Defender® Regenerative Media Filter. With over 1500 installations worldwide, the Defender is rapidly replacing sand filters as the premier choice for recreational water filtration.

## Now Includes:

- Animated graphic display
- Advanced communication & data logging
- Automated capabilities
- Remote monitoring capabilities
  - Through a web browser or smart phone
- greendrive™ VFD connectivity
- ETS-UV connectivity

[www.neptunebenson.com/evenmore](http://www.neptunebenson.com/evenmore)

**Neptune Benson®**  
Since 1956

## HoloLens has 'major' heritage and architecture implications

An expert in the field of architecture and heritage has said that Microsoft's HoloLens will play a huge part in the sector in the not-too-distant future.

Speaking at CyArk's annual summit, Adrian Ferrier – who heads up product development in visual intelligence solutions for California-based mapping company Trimble Navigation – envisioned an exciting future.

He said when applied to the world of architecture, engineering and construction, the HoloLens device can extend interaction with 3D models beyond the confines of a 2D computer screen, creating new ways for both those trying to save heritage and those looking at its history to consume, interact and communicate with spatial data.

"It's a transformational device that can communicate space, which is very important when you consider heritage and preservation," said Ferrier. "You're wearing this device and it has an understanding of the world around you, putting your information into the real world."

"It is also important for context. So there might be a missing column for example,



■ The device can extend interaction with 3D models beyond the confines of a 2D screen

which the HoloLens will then fill in, giving the user an understanding of what something used to look like, even if it has been partially or even completely destroyed."

The benefits of the device don't stop there. According to Trimble, the HoloLens

technology is so advanced that eventually people will be able to virtually tour areas they could otherwise not, offering an exciting development of visitors and heritage professionals alike.

■ Details: [http://lei.sr7a-C6m8u\\_T](http://lei.sr7a-C6m8u_T)



■ The ride will debut at Legoland California

### Interactive Lego ride uses hand gestures

Legoland California and Legoland Billund will introduce a revolutionary new dark ride in 2016 with the debut of *Ninjabo - The Ride*, which for the first time will offer interactivity through nothing but hand gestures.

The Triotech innovation will be showcased for the first time at this year's IAAPA conference and trade show, which takes place in Orlando, Florida, between 16-20 November.

■ Details: [http://lei.sr7a-F7y9E\\_T](http://lei.sr7a-F7y9E_T)

## Disney colouring app brings the page to life

Disney has developed a way to live-map colour from a 2D colouring book onto an animated 3D model using augmented reality.

A video released by Disney shows tests where if you view specially-designed images through an app, the character you draw comes to life in an augmented 3D virtual space. The technology can recognise boundaries in a similar way to a QR code reader but can also recognise the drawing itself and the colours applied to it, even if the image moves. An app-enabled device will be able to move 360 degrees around the character, which is created by mapping each pixel on the 2D drawing to each surface pixel on the 3D animation.



■ Users can draw a 2D image which will be shown in 3D

ETH Zurich and the Swiss university EPFL, worked with Disney on the development, which could be implemented into future visitor attractions as part of an immersive experience.

"It's more than just a toy," said Disney Research Zurich's Bob Sumner, speaking to the BBC. "It

focuses on an area we call 'augmented creativity' where we use augmented reality to enhance creative play.

The research team is now taking the revolutionary new technology beyond drawings and looking at how it can apply it to musical and educational experiences.

■ Details: [http://lei.sr7a-E2z8V\\_T](http://lei.sr7a-E2z8V_T)



Niceberg Studios Distribution presents



# LITTLE DOLPHIN

IAAPA

Attractions  
Expo

BOOTH NO. 2071

**NEW  
3D/4D attraction film**

"THE FUTURE IS BRIGHT AND BLUE"

A Niceberg Studios Production  
info@niceberg.be



/ nicebergstudios



/ nicebergstudios



# Jean de Rivières

Game on: the man heading up Ubisoft's new theme park division reveals why the videogame developer is moving into the attractions sector and his hopes for designing the park of the future

Tom Anstey, Journalist, Attractions Management

Ubisoft, the world's third-largest independent videogame publisher – known for popular titles such as *Assassin's Creed*, *Far Cry* and *Splinter Cell* – is planning to make its mark on the attractions industry with its own "next-gen" indoor theme park.

Ubisoft is partnering with developer, designer and operator R-Segari Group (RSG) on the 15,000sqm (161,500sq ft) theme park, which will be in Kuala Lumpur, Malaysia, and feature cutting-edge Ubisoft-themed rides, attractions and shows.

"It's still early days for the theme park plan," says Jean de Rivières, who is senior vice president at Ubisoft Motion Pictures, which manages the company's non-videogame ventures. As part of that, De Rivières is now heading up the company's new theme park division.

"I have always been close to theme parks, but never in an executive or operator role," says De Rivières, who spent 15 years in charge of Disney's theatrical division. He's been involved in the RSG-Ubisoft theme park project for the past three years.

## VIDEO-GAMIFICATION

According to De Rivières the indoor attraction will be like nothing that's ever been seen before, fully incorporating gamification into a theme park experience.

"We want to create a specific journey, a personalised journey. The idea is to make guests the heroes of their own life-sized game," he says. "The intention is to immerse people in worlds where they can interact with each other."

"We are trying to apply what we've learned over the past 30 years at Ubisoft, which is to engage people, immerse them

in our universe and bring them back. That's the definition of a video game. If our gamers want to return to play *Assassin's Creed*, for example, we win. The more time they spend with us, the more it means they love the brand and the happier we are because it means they will keep coming back to us.

"There are rules for creating a good video game – scientific and behavioural rules that we are looking at in detail in order to apply them to the theme park."

## BRAND STRENGTH

De Rivières says the idea for a Ubisoft immersive attraction "has always been there". Finding the right time to do it was really a question of having enough brands and enough equity within those brands, as well as the will and determination to realise such a project.

"You need the strength of your brands," he says. "You need the will to succeed – which we absolutely have. And, most importantly, you need to make sure you find the right partners to work with on these developments. The first two factors are up to us and we're ready now. We've been looking for the right partners since the Asian Attractions Expo in China, two years ago. Discussions there helped

■ Good translation: Ubisoft's Raving Rabbits IP has already been adapted for the theme park market

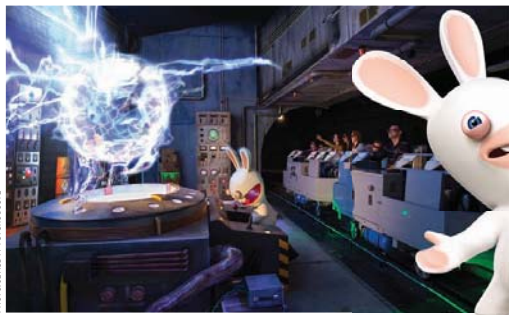


PHOTO: ILAIDY / FOTOBOSCOPE



■ **Assassin's Creed:**  
Unity is a popular  
release from Ubisoft

us understand whether or not we were going in the right direction. It was about a year ago was when it became clear to us that Ubisoft as a brand has the strength to do a park based on its own IPs as opposed to rides at other visitor attractions, as we have done with projects such as the Raving Rabbits Time Machine 5D ride at Futuroscope in France."

## RIGHT PARTNERS

Next for Ubisoft is finding the right partners to develop more visitor attractions and to get the message Ubisoft is trying to portray across to the public, keeping the high standard it has set for its games and conveying that in a theme park.

"We count on our partners," says De Rivières. "We need people who are very excited about our park, the park of the future, and the challenge is to do it well. It's the same challenge we're facing right now as we produce *Assassin's Creed*, the motion picture – to bring the core value of our brand to a new medium while respecting the way these mediums work."

For a film, you need a story, a hero and an immersive setting and it needs to be done in a way that respects and is consistent with the brand, which De Rivières says is the same process for the park, taking the essence of a Ubisoft IP and translating it into an attraction.

"A lot of times you put a name on a ride, but the ride doesn't keep the essence of the IP it has been labelled with. We really don't want to do that. This is the heart of our business, to keep the brands completely exciting and completely consistent," De Rivières says. ▶

"THERE ARE RULES FOR CREATING A GOOD VIDEO GAME – SCIENTIFIC AND BEHAVIOURAL RULES THAT WE ARE LOOKING AT IN DETAIL IN ORDER TO APPLY THEM TO THE THEME PARK"

■ **Michael Fassbender** is playing Aguilar in the film *Assassin's Creed*, which comes out in 2016 SUMUS.

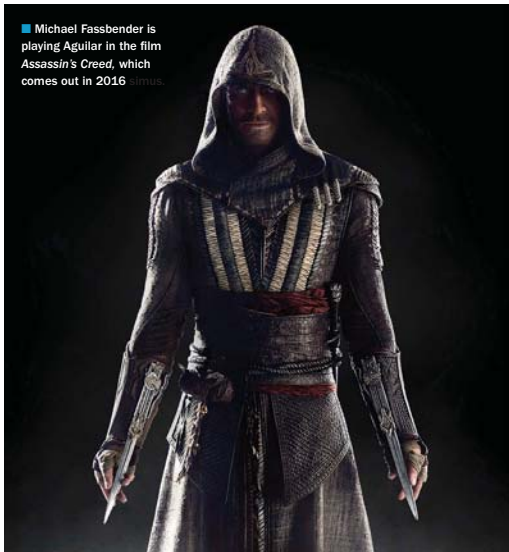


PHOTO: 20TH CENTURY FOX



■ Futuroscope (top) boosted attendance by adding a Raving Rabbits 5D attraction in 2014. R-Segari Group chairman Ramelle Ramli and Ubisoft's Jean de Rivières (right)

► To launch a multi-million-dollar venture such as this, the team at Ubisoft Motion Pictures had to weigh the risks against the potential rewards.

"The risks are big," De Rivières says. "But we have our internal division developing the concept and in order to make sure we're completely close to what's being developed in the games, we talk daily with the game developers to make sure that the consistency is perfect. The idea is to continue the story in a new medium. It's to keep the story going and you will find things in the game that echo in the theme park and vice versa."

## FIRST STEP

Ubisoft's first park is coming to Kuala Lumpur in 2020 and De Rivières says the rapid expansion of the attractions industry in Asia was behind the company's decision to make its theme park debut in Malaysia.

"The Asian market is growing and interest for the approach we're taking was strongest in Asia," he says. "In the Kuala Lumpur market we found a few great things



PHOTO: JEFFREY ONG/AMH001

**"THE BIG PICTURE IS FOR WORLDWIDE EXPANSION, BUT IN A NATURAL WAY: IF WE DON'T FIND THE RIGHT PARTNERS WE WON'T DO IT"**

which we think will be key to the park's success. The first was spirit. The people we are working with are completely in tune with what we have in mind. They fell in love with the concept and our brand and they believe it's a completely next-gen approach that fits with the character of Kuala Lumpur."

Second was the location in the centre of Kuala Lumpur. The details are still under wraps, but De Rivières describes it as "the perfect urban destination." And third was the fact that Malaysia has a stable business environment and is one of the top travel destinations in Southeast Asia.

"It's also the right size," he says. "It's not like the big outdoor parks where you need massive investment in terms of land. We've got everything we'd want in a location and we're very happy with that."

## GLOBAL VENTURE

Ubisoft's ambitions for the attractions industry don't stop in Kuala Lumpur

though, with plans to eventually take the concept worldwide. With the initial theme park plan now in place, De Rivières and his team are looking at ways to expand this new venture for Ubisoft.

"The big picture is for worldwide expansion, but in a natural way," says De Rivières. "If we don't find the right partners then we won't do it."

So as it develops the Kuala Lumpur theme park concept, Ubisoft says it's also keen to find new partners and opportunities in other regions of the world.

"We really want to become a strong player in this industry and we think we have everything to achieve that," De Rivières says. "We have the brands, we have the concept of the Ubisoft theme park and the strategy, confidence and trust of the company to go in the direction we want. We also have a strong alternative vision to what's been done previously. It's fresh and different and the audience will love it." ●

## WINNING RELATIONSHIPS

Ubisoft isn't the only videogame company delving into the theme park market. Nintendo kicked things off in a big way in May, announcing a partnership with Universal that will bring the brand's popular IPs, such as Mario and Zelda, to Universal parks. Electronic Arts is also looking to get in on the action, unveiling a pair of theme park collaborations based around *Mass Effect* and *Plants vs Zombies*. Six Flags has recently seen the appeal of video games too, temporarily incorporating *Street Fighter V* and *Monster Hunter* into its parks.



# TURN ON MEDIA-BASED ATTRACTIONS

AUDIO | VIDEO | SCREENS | LIGHTING | SHOW CONTROL | SFX

## AV SYSTEM INTEGRATION FOR:

- > 4D THEATERS / WATERPLEXX 5D
- > DARK RIDES
- > SUSPENDED THEATERS™
- > INVERTED POWERED COASTERS
- > FLYING THEATERS
- > 3D AND 2D DOMES
- > CIRCUMOTION THEATERS™
- > HYBRID DOME THEATERS
- > TUNNELS / VIRTUAL AQUARIUMS
- > IMMERSIVE TRAM RIDES
- > AND MANY MORE ...



Silver  
Sponsor



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



As Europa Park turns 40 this year, many of its original visitors will now be grandparents

# What can we do to better accommodate older visitors?

The 65-plus market is growing and this age group tends to be internet savvy with plenty of spending power. Is your attraction welcoming them? Kath Hudson reports

**T**here's no escaping the fact that, as a population, we're getting older. In developed countries especially, people are living longer and birth rates keep decreasing. The market is shifting dramatically, and that means every industry needs to start actively responding to the ageing population.

In the EU alone, the number of elderly will almost double from 85 million in 2008 to 151 million in 2060. The numbers are vast, but we must remember that each person will vary wildly from the next in personality, physical ability and financial situation.

However, according to figures from the International Longevity Centre, over 65s in the UK currently spend £2.2bn (\$3.4bn, €3bn) a week – that's £114bn (\$174bn, €156bn) per annum – on goods and services. Assuming their weekly spending rises in line with annual inflation of 2 per cent, they're likely to be spending more than £6bn (\$9bn, €8bn) per week – £312bn (\$470bn, €427bn) per annum – by 2037.

From now until 2037, the 15 to 64 age group in the UK will, on average, grow by just 29,000, compared to a growth of 278,000 in the over 65s group.

In more economically developed nations, the proportion of over-65s will rise from 16 per cent to 26 per cent. The over 80s will rise from 4.3 per cent to 10 per cent.

---

**Over-65s are a less budget-conscious market. They fund trips, make decisions and are available during off-peak hours**

---

There are many compelling arguments for the attractions industry to do more to appeal to the older customer. This can be a less budget-conscious market and multi-generation days out and holidays are growing in popularity. Grandparents often fund these trips and make the important

decisions, and another advantage of this market is that they're often available during off-peak hours.

Furthermore, as the demographic is changing, culture and heritage has been identified by the EU as a way of stimulating mental health, which could potentially become another revenue stream for museums and galleries going forward.

And it's not just about having over-65s as customers – what about as employees? They bring experience, maturity, knowledge, memories and enthusiasm which can be a tremendous asset in this industry, as we have seen in the heritage sector.

So what should our attraction be doing to ensure it's welcoming to older age groups? Is investment in attractions aimed specifically at them necessary, or will aiming for the family market suffice? Should older people be reflected in the marketing and should there be discounts and memberships tailored around this age group? How about the design of parks and attractions? We ask the experts.

## Francesca Rosenberg

MoMA, director of community, access and schools programmes

At the Museum of Modern Art (MoMA) in New York, we have always offered programmes to older adults, but we wanted to do more to specifically appeal to them so we started an advisory board made up of people aged from 61 to 94.

We asked them to try out a selection of our programmes, courses and workshops, both at the museum and online, to establish what was missing and what more we could do to meet their needs.

Firstly, we found out that they liked the idea of being with people their own age,

and slightly younger. They also liked having their peers and cohorts in charge.

They also wanted an invitation: it wasn't enough to offer a discount, they wanted a warm welcome to feel like they were really included and they wanted opportunities to learn and develop skills regarding art and print.

We started a film programme as a consequence of the feedback, as lots of them wanted to delve more deeply into our film collection.

MoMA did a lot of training in communication techniques, with both front-of-house and back-of-house staff, to make sure that they all really understood this age group and would be able to provide a positive experience.



Opportunities were created for grandparents to come with their grandchildren, to look at art and create art, but also to come on their own, or with their own peers. It's interesting that our 94-year-old board

member says that she spent her grown-up life coming with her children and then her grandson, but now she feels like the museum is hers and that's important to her.

We ran a free day for the over-65s in May, offering extra programmes and workshops and a discount in the restaurant. When promoting this we had to think carefully about the media channels that age group uses, and also to reflect that age group in the marketing itself.

It's been a wonderful experience for me and my team to work with older adults. We've learned so much from their rich and interesting lives, such as fascinating stories of migration.

@francescatime

**We started an advisory board made up of people aged from 61 to 94.**  
**We asked them to try out a selection of our programmes and workshops to establish what more we could do to meet their needs**

## Jakob Wahl

Europa Park, director of communications

We've found the over-65s to be a golden generation: they're a nice audience with good spending power.

Our overall philosophy and strategy at Europa Park is to try to suit all ages. Three generations of the Mack family live at the park and they want to experience things together. That's reflected in the park because we create rides and experiences which grandparents and grandchildren can do together. This includes gentle scenic rides and the monorail, but also our new addition by Mack Rides last year, Arthur and the Minimoys Kingdom, a dark ride/coaster combination.



At Europa Park, we're not looking to build the fastest or highest rollercoasters, but to create a great family experience. For example, the latest 4D movie, *The Time Carousel*, has been pitched not to be too fast.

We have also strengthened the areas of the park which are of particular interest to older people. In the Castle Park area we have paid great attention to the gardening and landscaping to create a calm and relaxing atmosphere for older guests to get away from the noise and action.

Europa Park turns 40 this year, so our original guests are now coming with their own grandchildren. We aim to appeal to them with quiet spots, a variety of restaurants, family rides, entertaining shows and high-quality hotels, with golf and wellness offers.

We're also the only theme park in the world with a two-Michelin-starred restaurant. The main reason for creating this was to reach out to new audiences who don't just

want burgers and pizza, and who might be attracted by the restaurant and then visit the theme park as well.

In order to attract this audience, we work hard to put together appealing special offers and then take these to trade shows and work with magazines read by this particular demographic.

We have found that this audience interacts with the park differently: they have more patience, so are happy to sit down at a high-quality service restaurant. They also like to stroll and appreciate the landscaping. Going forwards we will continue to come up with attractions which appeal to the broadest audience possible.

@europa\_park

### Henrik Zipsane

Jamtli Foundation, CEO

To be sustainable in the future, the attractions industry needs to produce something for this market. At the Jamtli Foundation, a museum and heritage organisation in Östersund, Sweden, we started looking at this area about 10 years ago and we implemented three new strategies which have all been very successful.

Firstly, we recruited a number of older volunteer staff. They take evident pride in their work and produce a fantastic atmosphere. It makes visitors feel more comfortable when they see staff from their age group. Another advantage of using older volunteers is that



we've been able to use their memories as a resource: for example, they can look through old photos of the town and identify people and locations.

We've also made an effort to ensure the content of the

museum tells the stories which our older visitors recognise.

They want to be part of the story. For example, between the 1950s and 1970s there was a Swedish policy of moving older people out of the countryside and into purpose-built towns in order to be near their offspring. We've recreated these environments and we recruit over-65 actors to bring the stories to life. We plan to create more environments which show how older adults live.

Another successful initiative has been inviting groups of dementia sufferers into the museum. We have a problem in Sweden with under-70s suffering from dementia.

The state gives their carers eight hours a week of free time and part of this time

when carers are taking a break is being used to take the sufferers on a trip to our museum. We created the environment of a 1970s house, which can be used to jog their memories of happy, younger years. This has had very good results and been engaging for them. They are very calm and happy in this environment and it is a cost-effective intervention for the municipality. We're giving back to society, which is good for our branding, and as we are paid by the municipality it has become another income stream, which is useful in low season.

Furthermore, we're always working on making our museum accessible to everyone.

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

Older people need something to engage them. They don't necessarily need rides made for them, but family rides should be accessible ... and mobility scooters or Segways help people get around

### David Sinclair

International Longevity Centre, director

While they won't admit it, many attractions, and other industries, don't want to be associated with this demographic because they think other target groups will be turned off by the association.

One supermarket chain started building supermarkets around the needs of older people, but they were reluctant to talk about it. They then incorporated the design features – wider aisles, larger font on signage – into their general stores, which benefited everyone.

It's time for the attractions industry to make a few changes and get over the fear of being

portrayed as an "old person's park". This age group cannot be ignored. Older consumers are spending more and will continue to do so. They make decisions on behalf of their children and grandchildren and they pay for the day out.

Implementing changes to make attractions more welcoming for older people will benefit all users. Older people are a diverse group and as such there isn't going to be a model which works for all, but many older people will want the same as younger people: plenty of clean toilets, good access, good signage, shade, benches (ideally with backs on) and water stations.

We're already starting to see some attractions operating more upscale restaurants and these can be



especially appealing to older people and multi-generation groups. You can offer food at different price points. Some older customers will be happy to pay £40 (\$61, €56) for a good lunch. Nice cafés, where grandparents can have a

coffee while watching the kids, should also be on the list.

If theme parks want repeat visits from older people they also need something to engage them. They don't necessarily need rides made for them, but family rides should be fully accessible. Larger attractions should consider providing mobility scooters to help older people to get around.

We can look to places like Las Vegas and Benidorm, which are – unofficially – becoming age-friendly resorts, where older people are met at the airport, offered a range of mobility options and where all restaurants are wheelchair accessible. Older people are comfortable there, so they stay longer and spend more. ●

@ILCUC



**SAVE THE DATE**  
**EURO ATTRACTIONS SHOW 2016**



► **WHERE THE**  
**BUSINESS**  
**OF FUN** **BEGINS**

**20–22 September**

**Fira Gran Via, Barcelona, Spain**

[www.IAAPA.org/EAS](http://www.IAAPA.org/EAS)

**EAS**

**Euro  
Attractions  
Show**



**IAAPA**


# GONE, NOT FORGOTTEN

## DISMALAND: WHERE DREAMS (DON'T) COME TRUE

In late summer, the world's media focused its lens on a depressed beachside town in the UK. The reason was the anonymous urban artist, Banksy, and a satirical pop-up art attraction

Alice Davis, managing editor, Attractions Management





"We just built a  
family attraction that  
acknowledges inequality  
and impending catastrophe.  
I would argue it's theme  
parks which ignore these  
things that are the  
twisted ones"

Banksy

Cinderella's Castle is the  
crowning glory at Dismaland.  
Nearby, an armoured riot van  
from Northern Ireland boasts  
the addition of a kids' slide



Artworks at Dismaland include *Big Rig Jig* by Mike Ross (top left) and a migrant boat installation by Banksy (top right). A mural on the wall is one of several Banksy works around the park (right); and a seemingly innocent carousel makes a satirical dig at the horse meat scandal (left)



**F**ollowing a life span of just five weeks, Banksy's Dismaland has been dismantled.

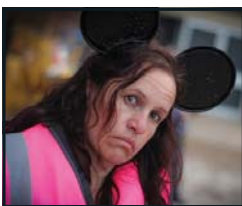
The building materials are now shelters for refugees stranded at the French port of Calais, where 6,000 migrants live in limbo in the "Jungle".

The site where the "bemusement park" briefly stood has returned to normal: an abandoned lido, called Tropicana, once the heart of British seaside town Weston-super-Mare, and a place where Banksy spent his (or her) summers until the age of 17.

The Dismaland website – which dropped information to a clamouring public – is now defunct, and just a photo of a cardboard-cutout Dismaland remains.

But Dismaland left much in its wake. The pop-up art installation – based around the idea of a twisted Disneyland – generated more than £20m (\$30.5m, €27.3m) for the local economy, with tourism businesses such as hotels, B&Bs, restaurants and attractions reporting significant boosts in revenue, according to tourism body Visit Somerset.

The Hoteliers Association said an additional 50,000 bed-nights were sold



**Taking the Mickey? The Dismaland uniform**

in Weston's hotels and train passengers between the town and London doubled during the 21 August to 27 September period when Dismaland was open.

The park featured 10 new sculptures and artworks by Banksy, as well as works by 56 of Banksy's favourite contemporary artists. Attractions included Mini Gulf, Guerilla Island and Cinderella's Castle. Live comedy and music events also took place, with Fatboy Slim, Damon Albarn and Russian feminist punk act Pussy Riot performing.

Dismaland was a satirical jab at theme parks, there's no doubt. The sully

workforce, the long queues, the litter on the ground, the unwinable games and the general ambience of despair – and despair – underlined what can be wrong with parks.

In a way, Dismaland also highlighted what's right. Dismaland brought people out, together. It got people talking, it got them excited and – whether they were supposed to or not – they had fun.

We see plenty of crossover between sectors in the modern industry, with museums seeking to entertain and visitor attractions seeking to educate. Banksy took this to the extreme with an art gallery in an amusement park – although he says he was not too pleased with the result.

"I have to admit there was no one more disappointed than me. I think the whole idea might have been a big mistake. By repackaging an art show as an amusement park, everybody's expectations were raised substantially – the branding writes a cheque that the event doesn't cash," Banksy told *The Sunday Times*.

"I suddenly realised the whole premise was wrong. I'd pushed it too far and it had gone from being a pretty good art show to a very sub-standard amusement park."

PHOTOS: NORTH SOMERSET COUNCIL



## A DAY OUT AT DISMALAND

### KEVIN MURPHY

VP of sales

Attraktion!

Whilst I'm not a great art fan, the opportunity to visit Dismaland was not to be missed. In the long queue to get in, the buzz of expectation came from an enthused arty crowd and a younger, more rebellious visitor. There were very few children, and none of the usual theme park visitors here.

It wasn't dismal. Frayed and run down, but well put together with no signage needed.



I spent two hours, but I could have spent four. Dismaland was an art installation like nothing you'll see again. The setting in a slightly worn English seaside resort and an abandoned building was perfect.

The art complemented the setting, and it was challenging in terms of the subject matter. The staff were something else, and they really did look bored.

You went in with interest but expecting little and you came out, well, enlightened! Funny, entertaining and frankly unique: impossible to duplicate and a one-off experience in the right place at the right time.

### ALICE DAVIS

Managing editor

Attractions Management

Banksy's dystopian park is about inequality. It's the anti-Disneyland. The art is highly politicised. Dismaland is asking us (or asking young people) not to become immune and desensitised to the suffering that happens – we don't live in a happy-ever-after Disney-type world.

The world of Disney had to be parodied. Mickey Mouse was eaten by a snake. The



Little Mermaid was distorted and disfigured. Cinderella was killed when her carriage overturned – to the paparazzi's delight.

In a traditional gallery, it might be too dark. But the "busement park" setting brought levity, and the humour – albeit the blackest humour I've encountered – stopped it being overwhelming.

Using click-bait installations, attention-grabbing Disney references and a "theme park" as a vehicle, the art – 56 artists' works were on show – reached a global audience on an unprecedented scale. And what art museum wouldn't love to do that?

### MAGALI ROBATHAN

Managing editor

CLADmag

While the anti-corporate, anti establishment message of the park isn't exactly breaking new ground, there were installations that I found genuinely thought-provoking.

The Museum of Cruel Objects, curated by Gavin Grindon, is a series of exhibits inside a caravan. It tells the story of the role of design in keeping people in line



on behalf of the state, from stun tongs to anti homeless spikes. I found the timeline explaining the history of CCTV enlightening – it made me think about how we blindly accept an increasing lack of privacy without questioning where it might be leading us.

Not all of the exhibits worked for me – some felt one-dimensional; as though they were trying to be clever without any genuine meaning behind them. The oil calphate-themed crazy golf course Mini Golf fell into this category. All in all, it was dark and unsettling, at times thought-provoking, and a lot more fun than I'd expected.

### MARTIN BARRATT

Visitor attractions

consultant

I'm not sure why I wanted to visit Dismaland. Was it because I had an interest in Banksy's dystopian world vision? Or because it was a parody of a theme park?

Either way, it was the most thought-provoking thing I've done this year. From a theme park perspective it shared the



queues. Queues to get in, queues for the rides – but no queues for the toilets.

In his foreword in Dismaland's brochure, Banksy suggests that in the face of "global injustice", "climate catastrophe" and a lack of jobs, today's children should be taught that "maybe escapism will have to wait".

That's where Dismaland makes its comment on our industry. Is riding out your day on theme park rides the equivalent of riding to hell in a handcart? Fiddling while Western civilisation burns?



A woman is attacked by seagulls and a killer whale performs in two sculptures by Banksy. In an indoor gallery, contemporary art is on display

## THE DISMALS

### JEMMA GRAY

#### Dismal Steward

##### What was your job title?

We never had an official title, but came to be known as Dismal Stewards or, more affectionately, the Dismals.

##### How did you apply?

I saw it advertised on reed.co.uk as a runner for a movie being filmed in Weston. It was also in the local paper, a tiny ad that barely anyone noticed.

##### What did you know about the job?

"Training" began a local hotel on 17 August, but when we started having improvisation training and developing characters, it all seemed a bit odd.

At the end of the third day we got more details about the job – only because a tabloid had leaked something.

There were a few people who hadn't heard of Banksy, but others were avid fans and couldn't believe we were going to be part of something like this.

##### What was the brief for your job?

Be Dismal! It sounds simple but there was a fine line between what we could and couldn't do. We couldn't laugh, smile or give any customer service to the public, which is hard when you've got a seventy-year-old begging you to direct them to the loos. It was a team effort building up the Dismal environment and hard work to maintain a Dismal persona all day, but I'm glad I did – the feedback has been amazing.

##### How hard was it to look so dejected?

I found it quite easy being Dismal – but then I do want to be an actor. The hardest part was not smiling or laughing. There's a position at Bill Barminksi's security installation where stewards hand out maps as the public enters Dismaland. I'd drop the maps before the punters had a grasp of them, provoking laughter from the visitors. But if I'd broken character and laughed it would have diluted the entire encounter. The improvisation training did help us each find our own unique Dismal approach.

##### How did visitors react to Dismaland?

It was mixed. Most people loved our Dismalness and the more miserable we were the better. There were others who thought we were rude and bad at our jobs and got quite upset with the concept.

##### What did you think of Dismaland?

It's one of the best art exhibitions I've seen. I think it was brave and ambitious and visitors were very lucky to pay £3 for world-class art and the experience. I also got to go in the Tropicana again, a favourite childhood memory, so I'm grateful to Banksy for dreaming this up.

##### Was there a moment that stood out?

At the masked ball – the final gig night – we all wore bandanas so Banksy could roam around and not be spotted.

That, and the very last night when the staff had the park to themselves, a free bar and the giant supermoon eclipsed – that was a pretty special night.

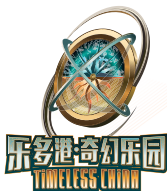




A night view of Dismaland (top) and a view of the exterior, the entrance to the abandoned lido (right). Staff were directed to look miserable and "dismal" at all times (left). A mushroom cloud artwork by Dietrich Wegner (bottom left) and the Little Mermaid sculpture by Banksy (below)



# TIMELESS CHINA



The traditions, beauty and mysteries of China's rich culture are at the heart of IDEATTACK's new mixed-used tourism destination - with a healthy dose of high technology, futuristic fantasy and time travel

## What is the project?

The project, entitled Timeless China, is a cultural experience park which is inspired by the timeless values of the Chinese cultural heritage.

## Where is it?

Timeless China is located 35km (22 miles) from the centre of Beijing, on the way to the most-visited section of the Great Wall at Badaling. The theme park is part of Beijing Outlets World, a large complex that also includes a shopping mall, a resort and a conference centre.

## What's your role on the project?

IDEATTACK has designed all stages of the project, from the overall concept to the smallest details.

## When does it open and how much is it costing?

It opens in the first half of 2016 and the budget is \$150m to \$200m (£97m to £129m, €133m to €177m).

## What is the aim of the attraction?

Most of Timeless China's attractions are inspired by important historical events and highlights of Chinese history, interwoven with local legends and myths. Some of the attractions are inspired by the future. The park is envisioned as a "time machine" that enables visitors to experience the fourth dimension with the help of high

## ABOUT IDEATTACK

IDEATTACK brings architecture and entertainment design together to create large-scale, mixed-use leisure tourism projects. Founded in 2004 by Natasha Varnica and Dan Thomas, the Los Angeles-based company creates high quality, original and profitable attractions on a realistic budget. The service includes all stages of project development, from masterplanning and concept design to brand design and construction supervision.

technology. The idea was to connect the attractions with the limitless possibility of travel within China, without temporal or spatial limitations. Some of the attractions are dedicated to Beijing as the capital city. Each attraction is a "technological fantasy", a simulation of future technology.

## Who is the target audience?

Both local people and domestic and international tourists.

## How big is the attraction?

It's a 76,000sqm (818,000sq ft) site, and approximately half of the site will be built on (32,500sqm, 350,000sq ft). Between

1.5 million and 1.8 million people are forecast to visit every year.

## Can you describe your design?

The architectural style of the park follows the idea of the "limitless" nature of the attractions and symbolises a passage between past, present and future. The architectural forms, colours, textures and shapes of the buildings are a combination of stylised old and new forms, forming a new and distinct, eternal architectural form.

Timeless China has two entrances: one in the north and one in the south, following the symbolism of feng shui principles. The theme park will be divided into two zones, one with indoor attractions with partially covered walkways and another completely outdoor area with outdoor attractions.

The layout of the theme park is designed to transform the relatively small area of 76,000sqm into a very diverse and, from the point of view of the visitors, much larger area. The configuration of pathways makes it look much bigger than it actually is, and there is additionally a second-level walking area in the central part of the park, connected by three bridges. Every part of the project will have a green, individually designed landscape to fit the overall space-time vortex theme.

As part of the wider concept, the environment is very important and in itself plays the role of an attraction. Timeless China has a wide range of unique retail and

Voyages of Discovery attraction at Timeless China, near Beijing





The Voyages of Discovery is a boat ride and special effects theatre attraction based on seven expeditions of the admiral Zheng He



## OUR GOAL IS TO DEVELOP A WORLD-CLASS THEME PARK IN CHINA AND TO CREATE A UNIQUE IP FOR THE PARK WITHOUT USING EXISTING ESTABLISHED BRANDS

food offerings. One of the areas of the park is specially dedicated to the concept of organic food and a healthy lifestyle and this concept is present throughout the park.

### What was your inspiration?

The inspiration was Chinese cultural heritage. The inspiration for the concept design is a vortex of time, a trans-dimensional spiral that connects different points in space and time.

### What do you want to achieve?

Our goal is to develop a world-class theme park in China and to create

a unique IP for the park without using existing established brands.

### What themes and motifs are you using?

Important historical events from Chinese history, Chinese myths and legends, modern technology and the simulation of future technology.

### What materials are being used? Who are the suppliers?

Most materials are sourced and supplied in China, with a couple of foreign suppliers. Wherever possible we use natural materials such as wood, brick and stone, but also technological materials such as bioplastic façade, composite panels with natural wood, polyurethane and polystyrene foam facade elements, polyolefin plastics, non-transparent Plexiglas and artificial and natural grass for covering the roofs.

### Is this typical of IDEATTACK's approach to design and design philosophy?

For us, every project is different. We don't have a typical approach.

### IDEATTACK specialises in "one-of-a-kind" attractions. How is this one-of-a-kind?

Here, for the first time, we have a fusion of two of the latest concepts: a commercial development and lifestyle centre, and a story-based attraction inspired by local heritage.

The theme park is designed to introduce a human-scale environment into a huge city, and to create something unique by building an original IP for the park.

The interpretation of historical events and legends is also original. We didn't create literal replicas of historical events, myths and themeing, but modern interpretations to appeal to a modern audience.

### Is this a modern/cutting-edge attraction?

Timeless China is modern in terms of technology and ride systems used in the attraction and in its abstract interpretation of historical heritage. ●

IDEATTACK designed all details, such as mascots and logos



## CONTROVERSIAL TOPICS:

# PUSHING THE LIMITS

## IN THEMED & IMMERSIVE SPACES



Are some themes out of bounds, or should we push the limits of design, context and content?  
Should we assume that guests want clear-cut and simple attractions, or ask if they want to be challenged? Scott A Lukas investigates

**D**esigners and operators are known for paying attention to the most minute details in themed and immersive spaces – whether theme parks, casinos, cruise ships, museums or other spaces. They use the most evocative sensory approaches and the most powerful ways of storytelling. The themes, topics and contexts used in immersive storytelling in contemporary spaces vary, but they tend to follow memorable patterns and reflect common elements.

These common elements of themed and immersive spaces include branding, good versus evil, freedom, conflict, sexual appeal, positive history and nostalgia, optimism, myth, progress, the future, happiness and (clean) death.

In contrast, other patterns and elements tend to be considered either not at all in popular spaces or only in certain ones – notably, the museum and interpretive centre which, as we shall see, often ask the guest to deal with dark and depressing issues.

Uncommon elements of themed and immersive space include harrowing cultural topics (slavery), dark historical issues, explicit and gruesome death, explicit politics, explicit sexuality, social “isms” (racism, sexism, classism), religion, pessimism, anti-authoritarian themes, depression and struggle and existential issues.

One reason we see certain topics predominant in themed and immersive spaces is their archetypal quality. Mythologist and scholar

Joseph Campbell offered the idea that certain stories resonate with us because they are retellings of classic folktales and myths – the hero’s quest, the struggle of good and evil – which have become powerful traditions or canons within the industry and within the popular culture world of fiction, video games, TV and film.

Another reason for the predominance of certain themes is to do with the nature

of the space itself. Certain spaces rely on specific themes or contexts for their stories because of the main purpose of their venues. Theme parks, as an example, commonly offer guests the idea that the theme park is an escape from their everyday reality and thus topics that might remind guests of their non-theme park lives should be avoided.

Mood refers to the emotional and subjective feelings of guests as they interact with a space. Dark topics, like those of tragic periods in history, will likely create negative or depressing moods in guests’ minds. Cultural critics have noted that Disney’s Hall of Presidents makes

fleeting and subdued references to disturbing periods in US history, such as the Vietnam War, but the designer of such an attraction would argue that including more explicit points of reference would impact the mood planned for that themed space.

Yet, the question remains, should such topics, themes and contexts play a larger role in more spaces of popular amusement?

**Disaster spectacles – like Fighting the Flames at Dreamland, Coney Island – realistically recreated terrifying events**



### A Tradition of Dark Topics

There was a time when controversial, dark and depressing topics were represented in popular amusements. The amusement parks of Coney Island – including Sea Lion Park, Steeplechase Park, Luna Park, and Dreamland – included forms of entertainment, rides and attractions that covered topics ranging from the Boer War and the Galveston Flood to



Disney's Hall of Presidents (top) refers to disturbing events in history in a theme park environment. *Breaking Bad*'s anti-hero Walter White (right)

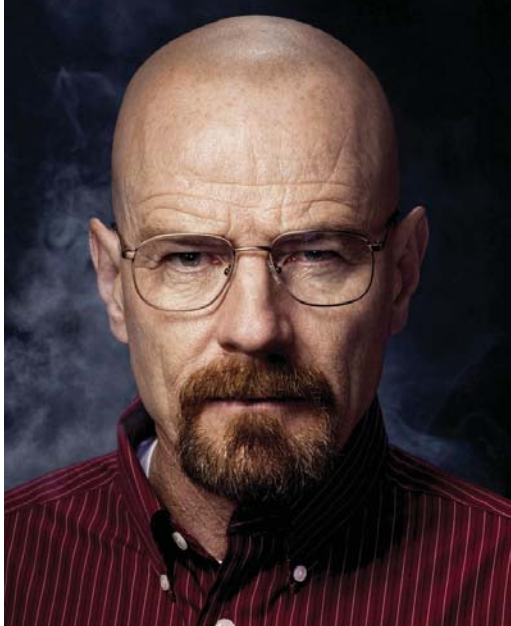


PHOTO: BRITANNICA

## The anti-hero has the potential to disrupt rides and attractions with a more potent and disturbing storyline and morally complex characters and dilemmas

the Fall of Pompeii and the gates of hell, and offered oddities like "midget" worlds (Lilliputia), fire-fighting demonstrations and premature baby incubators.

Many of these attractions also opened in world's fair midways, generating much of the popularity of late 19th and early 20th-century outdoor amusement spaces. Simultaneously, carnivals and circuses supplemented these themes with "freak" shows and other public displays of the grotesque and the tawdry.

During the period that followed and culminated with Disneyland and Six Flags Over Texas, popular amusements changed. Many designers were influenced by Walt Disney and Angus Wynne Jr, who believed that popular amusements needed to be cleaned up, and thus a trend developed in which the previous displays of dark, unsavoury, controversial and grotesque topics would become much less common. Some designers and operators felt that while one could present a topic like the Boer War, the dark nature of it could be off-putting to guests.

The wholesome outdoor entertainment of Disney, Six Flags and other themed spaces may be the norm, but it's very possible to imagine new spaces that will revive the dark and creative traditions of Coney Island past. New trends on the horizon will, perhaps, impact the ways in which leisure designers approach the themes, topics and contexts of their spaces.

### Influences from Popular Culture

Themed and immersive spaces do not exist in a vacuum. The changes in the design, content and thematic aspects of these contemporary spaces can be linked to significant developments in the worlds of consumer and popular culture.

#### 1. Anti-Heroes and Bad Characters:

Popular TV dramas like *The Wire*, *Breaking Bad*, *Luther* and *Dexter* point to a trend in which audiences root for the bad guy or come to terms with the fact that the protagonist of the drama is flawed, often deeply. In *Breaking Bad*, the show's anti-hero, Walter White, is constantly making

questionable decisions that end up affecting, often killing, numerous people. In themed and immersive spaces, the anti-hero has the potential to disrupt the tendency in which rides and attractions feature stereotypical good guys who defeat the stereotypical bad guys. In place of such storytelling is a potentially more potent and disturbing storyline in which audiences are presented with morally complex characters and dilemmas – all of which suggest a moral relativity that could impact the world of popular amusements.

#### 2. The Blurring of Media:

In recent years, popular storytelling has become more complex. Forms of media convergence and transmedia – in which fans of popular culture play a greater role in the stories and in which the stories themselves stretch across multiple media forms and platforms – have impacted the ways stories are told in themed and immersive spaces. Mobile technology and approaches that extend the narratives of rides and attractions beyond the immediate ▶

Dennis Severs' House in London uses evocative sensory design to create a "still-life drama" telling the story of a family of Huguenot silk weavers

- ▶ spaces in which they are presented to the guest offer many possibilities for telling different and more complex stories. At the same time, there is a blurring of themed and immersive spaces in which it is becoming increasingly more difficult to state the differences between a museum and a theme park, a cruise ship and a themed casino. In such a world, the opportunities for exploring deeper, darker and more complex stories and characters abound.

### 3. Extreme and Experimental Tourism:

More and more, guests are desirous of different attractions, rides, experiences and forms of tourism that take them into new, unexplored and even dangerous worlds. Extreme tourism, where a guest might approach a traditional tourist experience in a new, surreal or unexpected way, offer numerous opportunities for designers and operators of leisure spaces. The key is the desire to experience things in a new way and thus designers may consider new approaches, topics, themes and contexts where a desire for the unexpected may be better met.

### 4. Historical Reenactment and LARPs:

Across the world, people participate in immersive and engaging dramas that span the historical, cultural and imaginative realms of society. Historical reenactment (in which participants recreate a time period like the Civil War) and LARPs (or live action role play) are examples of evocative settings that allow those involved to more fully experience the sights, smells, sounds and experiences of another world, regardless of its specific origins. Such forms of creativity have also drawn attention to the depth of consideration that may be applied to the creation of and participation in an immersive or themed world. In the case of historical reenactment, deep and disturbing aspects of history may be relived in order to gain a new appreciation of troubling and tragic aspects of human history. Such deep realism may be applied to the many contemporary



leisure spaces that could benefit from a more nuanced and sometimes disturbing look at history, culture and imagination.

### 5. Conceptual Spaces:

Conceptual spaces challenge the traditional understandings, uses and constructions of themed and immersive spaces. Such spaces are "type breakers" as they suggest new ways of understanding traditional spaces and, indeed, point us in new directions. As conceptual spaces they get us to think about themed and immersive spaces in the deepest senses possible. The Museum of Jurassic Technology in Culver City, California, is an example. One could call it a museum, but this misses the point of the space, which is to challenge our perceptions of what a museum is. An exhibit of a bat suspended mid-flight in a piece of solid lead – it is said to have got stuck while using its unique technique of

travelling through solid objects – asks the guest to reflect on the idea of museums themselves, what is true and untrue.

A second example is Dennis Severs' House in London. Like the Museum of Jurassic Technology, Dennis Severs' House challenges the visitor's perceptions of a museum or interpretive centre. The exhibitions are offered in fanciful ways that seem to "wink" at the guest, as if playing a joke on him or her. An evocative use of sensory design suggests a much different approach to the staid museum. Applying principles of conceptual spaces to other themed and immersive spaces – including theme parks – would likely result in an expansion of the immersive potential of the space as well as an ability to include topics and themes that may be more impactful when considered through the modalities of spaces like the Museum of Jurassic Technology and Dennis Severs' House.

It's the sense that harrowing topics like war should only be considered in serious spaces and understood in an educational, not entertainment, context





PHOTO: RIGOLF BAKKER



PHOTO: MARGARET JENI DEANLINE.COM

A hospital-themed restaurant plays with ideas of overeating, obesity and premature death

The effects of these trends will likely be felt in future embodiments of themed and immersive spaces. We may reflect on some examples of spaces that have, in various ways, pushed the limits of traditional theming and immersive world design.

### Controversial Spaces

The many controversial themed and immersive spaces of the last few years vary greatly in the contexts, approaches and stories that are used to give meaning to their environs. Themed restaurants may use a unique theme – like toilets or hospitals – as a way of distinguishing themselves from other competitors.

### Examples of Controversial Spaces

- **Heart Attack Grill (Las Vegas, Nevada)** – a hospital-themed restaurant that is known for its 9,982 calorie Quadruple Bypass Burger, scantily clad waitresses dressed as nurses and a policy that allows any customer over 350 pounds to eat free
- **Magic Restroom Café (City of Industry, California)** – a toilet-themed restaurant that features dining seats fashioned as toilets

and curries and soft-serve ice cream that are served in toilet serving plates and made to resemble excrement (closed in 2014)

- **BonBon Land (Holme Olstrup, Denmark)** – a theme park known for its bawdy attractions, themed like vomiting or defecating animals, including the “dog fart rollercoaster”

These spaces suggest it's possible to push the limits of design and operation of leisure complexes, but such effort does not preclude controversy.

A classic example of a space that attempted to push the limits but which met with considerable controversy and ultimately was never built was Disney's America theme park. The park would have included historical reconstructions of a Native American-themed area, a Civil War-era theme land (complete with a Coney Island like Monitor and Merrimack battle reconstruction) and other themed lands.

The controversy stems from references to the Civil War. For some historians, Disney's efforts to represent the Civil War in a theme park space was blasphemous. For such critics the form of the themed space

– what could be loosely called its “genre” – dictates the types of topics that may be considered as well as the manner of their presentation to the guest. For many, the topic of the Civil War belongs in a museum or a historical reenactment, not in a theme park. It's the sense that a harrowing topic like the Civil War should only be considered in such serious spaces because the topic must be understood in an educational, not entertainment, context.

Unfortunately, such views are limited by their traditionalism. As more and more blurring occurs in the outdoor entertainment industries, we will likely see museums adopting principles of theme parks and theme parks appropriating the approaches of museums. Industry conferences, like those of the Themed Entertainment Association (TEA), reflect more and more dialogue between designers and operators of themed and immersive spaces that have in the past seemed worlds apart in terms of their contexts, themes, designs and approaches. As well, education and entertainment need not be seen as being in competition with one



PHOTO © STEVE STANNI / DREAMSTIME.COM

A ride at Bonbon Land, a Danish theme park that's based on wacky ideas and toilet humour (left). Historical reenactment (top) is an increasingly popular immersive activity

**As societies change, themed and immersive spaces have an opportunity – some would say a responsibility – to reflect such change in their spaces**

► another. More and more, designers realise the immersive potentials of entertainment and the pedagogical potentials of education may go hand in hand in a themed space.

### Why the Limits May Be Pushed

As design approaches and guest interests continue to evolve, themed and immersive spaces have unique opportunities to push the limits of the stories that are told in their spaces. New spaces offer the ability to retell a story in new ways.

Disney's America would have allowed a new interpretation of the Civil War and many other spaces may be inspired by the retelling to create amusement venues that push beyond the limits of traditional theming and immersive design. We discover that many themed and immersive spaces follow the same design and narrative lines, resulting in ritualistic, stereotypical and traditional spaces that look very similar to all the other spaces.

Thus, designers may look to new topics and approach theming by emphasising new perspectives. Underground Adventure at the Field Museum in Chicago uses the perspective of insects to give visitors the illusion that they are 1/100th of their size. The unique telling of the story of the soil and its organisms illustrates how attraction design may push the limits through not only the topic being told but how it is told.

There are many important reasons why theme parks, interpretive centres,

cruise ships and numerous other themed and immersive spaces should push the limits of their design elements, the contexts and content of their displays and attractions, and the expectations of the guests within their spaces. One reason is to be more inclusive and to speak to the diverse needs of guests in terms of their backgrounds and life interests.

### Addressing Existential Needs

A family theme park excludes LGBTQ guests if the attraction only addresses the heterosexual family. Likewise, spaces may reflect the tendencies of social change that are found outside of their confines. As societies change, themed and immersive spaces have an opportunity – some would say a responsibility – to reflect such change. The values of multiculturalism, for example, have begun to play a greater role in many contemporary leisure spaces.

Awareness of the guest does not end at his or her consumer needs. Guests have existential needs and it's important that designers consider these in the development of their attractions. Museums like the Museum of Jurassic Technology and Dennis Severs' House challenge the assumption that guests want simple, cut-and-dry attractions requiring the least cognitive ability. These and other spaces grant the guest their intelligence, as attractions designed for complexity and depth, to intellectually and conceptually

challenge. Spaces may also place greater emphasis on the guest by stressing values of reflexivity and complicity. Team Earth on Celebrity cruise ships asks guests to examine their complicity in environmental issues. The Museum of Tolerance and other Holocaust and genocide museums ask guests to confront their own prejudices.

The industry should lead the way in incorporating these new approaches that challenge the limits of their spaces. New topics that focus on dark cultural issues, controversial subjects and disturbing aspects of history should also be explored as they allow us to not only to entertain guests, but to teach them important social, cultural and historical lessons.

The risks of including such topics in future themed and immersive spaces are numerous. The guest could be alienated, turned off or outright offended, and the ultimate outcome could be lost revenues – making mute any conceptual gains that might be made with greater inclusion of dark and controversial contexts. No doubt the future of themed and immersive spaces will reflect this tricky compromise. ●



Scott A. Lukas is an author and researcher who specialises in immersive worlds and cultural remarking. He studies theme parks and themed spaces, film, video games, gender and crime.

## ATTRACTION PLANNING & DESIGN THEMING CREATION & DELIVERY

Theme Parks & Attractions | Visitor Attractions | Zoos & Aquariums | Retail & Hospitality Spaces

We believe that imagination & quality craftsmanship are key. With one of the best-equipped facilities in Europe and a large, multi-disciplined team that offers a wealth of experience in the international market, we strive to deliver a solid return on investment to our stakeholders & truly memorable experiences to their guests.

### Services

- Dedicated design management
- Cost analysis & scheduling
- Research & brainstorming
- Guest / user experience analysis
- Storyboarding & storytelling
- Masterplanning
- Technical design
- Concept development & design
- 3D modelling
- Character & creature development
- Graphic & mural design



### DESIGN

### CREATE



### Facilities & Skills

- 7-axis CNC robotic sculpting
- 3-axis flatbed CNC cutting
- Dual-component spray systems
- GRP / FRP spraying
- Rota-casting
- Spray bake & spray booths
- Joinery & metal fabrication
- Sculpting
- Mould making
- Coating, resins & GRP
- Scenic painting

### DELIVER



Let us prove ourselves...

We're so confident that you'll want to continue using our attraction design service, that we're offering all new customers...

**25% DISCOUNT**  
on design services

Terms & Conditions

Valid only for new customers on their first project. Discount based on standard studio rates, for a maximum of 20 days studio time. Valid until 31/12/18.

UK: 0800 211 8604 International: +44 (0) 121 730 2400 info@scruffydogltd.com www.scruffydogltd.com

Head Office: Unit E3, OYO Business Park, Park Lane, Birmingham, B35 6AN, United Kingdom

Royal Botanic Gardens at Kew uses an audience segmentation system to understand engagement

# People Power

Old market research techniques are making way for Culture Segments – a mass personalisation approach that asks what motivates different types of cultural consumers. Gerri Morris explains

**A** number of the UK's museums, galleries and heritage attractions have adopted a new way of looking at their audiences, and it's paying dividends.

They're using an audience segmentation system that's based on understanding the deep-seated values that drive people's engagement with culture. Then they're using these insights to craft offers and messages that really resonate.

Using this system, the Museum of London saw a massive increase in visits last year; Royal Botanic Gardens at Kew is increasing its exhibitions engagement; the Tate Modern is maximising its audiences; and Historic Royal Palaces (HRP) is using the insights across every area of its work, from marketing to interpretation to retail.

The system is called Culture Segments and it takes a psychographic approach to classifying customers. Developed by

cultural research consultancy Morris Hargreaves McIntyre (MHM), it's designed as a system that can be used by any organisation targeting audiences for cultural, leisure and heritage attractions.

## Why segment?

Audiences are not homogenous. They're made up of diverse people with different needs and wants. To be audience-focused, we need to understand and meet those needs and wants. In an ideal world we'd develop personalised offers for everybody, but this is expensive and impractical. Segmentation is a good half-way house: clustering people into groups who share the same needs and wants and developing differentiated strategies for those segments whose needs we can best meet.

## Why use psychographics?

Many segmentation systems are based on demographics such as age groups, life

stages, income levels or social class. Or they're based on behaviour – people who already engage in different types of activity and people who might. There are other proprietary systems that are based on making assumptions about the attitudes and values people might have depending upon their postcode.

Most of these systems are concerned with finding audiences for mass-market products and so they take a broad-brush approach. What we've found when people engage with culture is that such approaches simply don't apply and so these systems will always have limited success.

## What motivates us?

Cultural activity is highly discretionary. The motivations people have for engaging with culture and the benefits they seek are highly personal. In this respect, broad demographic groups are not homogenous in their attitudes towards culture. In those





Tate Modern hosted its most popular exhibit ever after targeting certain sectors in its audience

areas where there's a critical mass of cultural offerings – in cities, for example – housing is so diverse that a single postcode can't possibly serve as a proxy for what all residents might be looking for as cultural options.

Through years of research we have found that values and attitudes are the key factors that drive cultural behaviour.

Some people are open to taking risks with what they see and do, others are more conservative and want the reassurance of popular events. Some people want to have a great time with friends; others want deep and meaningful experiences, sometimes on their own. Some people want to be challenged and provoked while others want the comfort of familiar things. Some people have their imaginations fired by the creative process, while others prefer to be wowed by the finished article. Some people want to learn; others want to have fun. These and many other factors determine the type of cultural consumer an individual is.

### Eight Culture Segments

Culture Segments have been derived from robust research using large-scale quantitative methods



Morris Hargreaves McIntyre identifies eight distinct types of cultural consumer

and multivariate 3D cluster analysis. The system divides the majority of the adult population into eight distinct groups. In this system, the definition of "culture" is very wide – stretching from high art to movies, from playing an instrument to making a film, from going to a pantomime to going for a walk.

### THE EIGHT SEGMENTS ARE:

**ENRICHMENT** – mature; traditional-minded and interested in heritage, nostalgia and life-long learning  
**ESSENCE** – sophisticated, discerning, independently-minded and spontaneous; very active cultural consumers

**EXPRESSION** – community-focused, receptive, confident; value inclusivity and creatively inclined

**STIMULATION** – contemporary-minded; social, active, experimental and like discovery

**AFFIRMATION** – aspirational; seek quality time, build their self-identity and look for self-improvement

**RELEASE** – time-poor, busy, ambitious; struggle to prioritise leisure activities; wistful and need guarantees they're not wasting time or money

**PERSPECTIVE** – settled, self-sufficient, focused, content, with fulfilling interests; appreciate being reminded how much they enjoy occasional cultural outings

**ENTERTAINMENT** – enjoy mainstream fun, popular acts and events; see mainstream culture as great social and leisure opportunities

This is not to suggest that there are only eight kinds of people in the world, but that if we group people according to those who have these factors in common, we're in a better position to understand and meet their needs.

We have developed detailed "pen portraits" – easy-to-use data sketches ▶

## MUSEUM OF LONDON

Sharon Ament, Museum of London, director

The Museum of London is as much about the people of London as the "stuff" and the history of London. Therefore, it's imperative that we're connected to our audiences and understand them in a sophisticated way.

It was important for me that the museum went beyond the broad classifications of audience. I wanted to understand motivations as much as demographics.

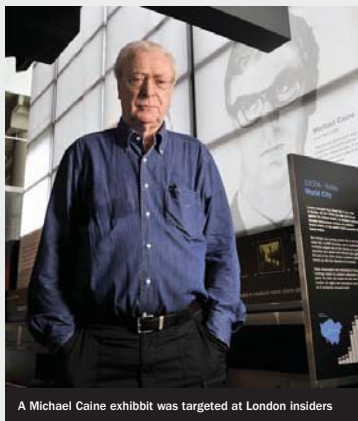
We worked with MHM on Culture Segments, because

we wanted to understand and target our audience more accurately to make the most of our resources.

Audience segmentation has a real ability to impact on an organisation if it's part of a bigger package - a bigger transformation agenda. At the Museum of London we've been thinking about ourselves strategically in a new way, and now a whole slew of new strategic activities are coming together as one.

Culture Segments allowed us to identify core audiences and effectively target exhibitions at existing and new segments. A Michael Caine exhibition and a Sherlock Holmes exhibition were aimed at attracting specific audiences. We prioritised two groups of our main audience, which we called "London insiders" and "cultural connoisseurs". The first

**The "Look Again" campaign reflected the Museum of London's decision to re-assess its target audience**



A Michael Caine exhibit was targeted at London insiders

group are locals who love to go behind the scenes and discover the hidden London, and the second group use and consume culture all the time. We chose to target them, because where they lead, other groups will follow.

The "Look Again" campaign to promote the museum was designed to attract London insiders, and has been hugely successful over the past three

years. We have found using YouTube videos to promote our exhibitions is not only effective, but quick, economical and sharable.

In 2015, the exhibition was Sherlock Holmes: The Man Who Never Lived and Will Never Die. Everything from our advertising to our late nights to our Sleeping with Sherlock sleepovers, all our products tried to be more contemporary and to connect more with audiences.

We also did a Museum of London tweed. Our curators analysed the colours referred to in the Sherlock Holmes stories, and we designed an urban tweed fabric with Liberty's of London to create Sherlock-style hats and other items, which were priced around £40 and sold out. We had advocates who wore the hat, helping us promote it and communicating the message of the museum to the contemporary London audience we want to attract.

In the end, it's about being extroverted rather than introverted and being more savvy when it comes to the audience needs.



A new tweed was developed by the Museum of London in partnership with Liberty from colours mentioned in the Sherlock Holmes books. It was used to make items for the museum shop



## Organisations are proving this approach to “mass personalisation” is far more effective than targeting people by superficial and irrelevant factors

- full of details about the eight segments, designed to help attractions recognise and understand their current audiences and prioritise those that offer most potential. Organisations are proving that this approach to “mass personalisation” is far more effective than targeting people by superficial and irrelevant factors.

### Reaching your audience

Using these insights about their markets, organisations can begin to develop cross-departmental strategies to respond to the needs, values and motivations of audiences. This gives teams across departments a common language for talking and thinking about audiences.

Culture Segments have worked effectively for the Museum of London, where they have increased their audiences from 500,000 to over 1 million in the past two years. The museum used Culture Segments to identify its core, priority and developmental audiences, creating events programmes to attract new groups and effectively target exhibitions at very different segments, thereby attracting entirely new audiences.

At London's Tate Modern, for Henri Matisse: The Cut-Outs, Culture Segments

were used to identify those audiences that are always slow in booking tickets and attending certain exhibitions, to then urge them into taking action promptly and reassuring them that the show would deliver positive benefits. The result was that the Matisse exhibition broke all of Tate's records to date, attracting some 600,000 visits over its five-month period.

### Understanding your visitors

At HRP, every department is familiar with Culture Segments and develops its strategies with its priority segments in mind. Each palace has priority segments that inform programming and events planning. Developments, retail and catering offers are all increasingly being informed by research with key segments.

MHM also works with the Royal Botanic Gardens at Kew, most recently to evaluate several of their festivals, including the summer festivals Plantasia and Full of Spice. Applying the segmentation developed for the attraction – which is based on the attitudes, needs and motivations of visitor groups – enabled Kew to understand its festival visitors through a segment lens, and to

understand what potential visitors might want from a festival depending on their segment. This has allowed the attraction to actively focus on and address visitor engagement with their festivals.

Culture Segments are universal. MHM has now conducted studies in 14 different countries, including the UK, the US, Norway, Sweden, China, India, Brazil, Australia, South Korea, Turkey and Indonesia. It works across the subsidised and commercial cultural sector from performing arts and exhibitions to plays and visitor attractions. ●



Gerri Morris is an arts management consultant. In 1997, she established strategic cultural management and research consultancy

Morris Hargreaves McIntyre with Jo Hargreaves and Andrew McIntyre. Morris has led projects for clients such as Tate, the British Museum, National Trust, Art Institute Chicago and the Philadelphia Museum of Art. It's free to access Culture Segments on the MHM website, where you can also find out which segment you are in. [www.mhminsight.com](http://www.mhminsight.com)

# VISITOR ATTRACTION EXPO

A unique show for the leisure park, piers, zoos, FECs and adventure play sectors

**A**fter a successful launch in January this year, the Visitor Attraction Expo (VAE) is set for a repeat performance from 12-14 January 2016. Presented by BALPPA and supported by BACTA, the event will again take place at the prestigious ExCeL London, alongside the EAG International Expo.

It would be difficult not to be impressed by ExCeL's truly world-class facilities and, according to expo organiser Karen Cooke, of Swan Events, they were well appreciated by the show's participants.

"ExCeL is one of the top exhibition venues in the world and it's still winning awards for its accessibility and the standard of facilities offered. By co-locating the show with EAG International, VAE exhibitors have access to a level of venue not normally associated with smaller launch events," says Cooke.

VAE 2015 certainly attracted a wide spectrum of exhibitors, each with a unique product offering for operators of leisure parks, piers, indoor attractions, zoos, adventure play and indoor play. VAE showcased the latest products from

suppliers of children's play equipment, branded merchandise, payment and ticketing solutions, iced drinks, cash handling products, inflatables, 4D motion simulation, adventure play and high ropes, climbing towers, laser games and even a fully-equipped play bus.

A number of specialised service providers also exhibited, offering leisure development consultancy, insurance, purchasing and procurement solutions, safety consultancy and staff training.

With visitors also enjoying free access to EAG International, the product offering was further extended to include: basketball and air hockey, the very latest in access control, candy vending kiosks, capsule, stickers and toy vending, cranes, licensed and generic plush, loyalty card systems, video games, go-karts, coin-op mini cars, jukeboxes and customised music services, kiddie rides, revenue management systems, redemption games and ticketing solutions – to name just a few of the exciting business-building opportunities on offer.

Networking opportunities at VAE 2015 were also excellent, with events held by individual trade associations and interest groups. For 2016, the second night's After Show Party, just a stone's throw from the expo floor, is expected to be attended by over 1,000 showgoers.

Operators will find a wide variety of suppliers and manufacturers at VAE



Holding the event alongside EAG gives VAE participants the chance to exhibit at London's ExCeL, a world-class venue with excellent facilities





VAE is an annual trade show for those who target family attractions

By co-locating the show with EAG International, VAE exhibitors have access to a level of venue not normally associated with smaller launch events

#### What makes VAE unique?

In a crowded expo and show calendar, a new event has to deliver something unique to justify any participant's investment, in both time and money. VAE is differentiated from other industry events by a number of factors:

#### VAE meets a genuine need

VAE was conceived after recommendations from within the industry, made to BALPPA, by suppliers looking for a UK event they could call their own.

#### VAE is run by the industry for the industry

In common with its sister show EAG International, VAE is not part of a large corporate portfolio, meaning it can focus exclusively on its participants. The show's small operational team is open to feedback on every aspect of the event.

#### VAE will be held in the same location and at the same time every year

Many operators of smaller attractions in particular have indicated that they are unable or unwilling to travel overseas to trade shows. VAE's convenient location and

timing, right at the start of the new year, make it perfect for discussing the previous season and laying plans for the next.

#### VAE is primarily focused on the UK

VAE has a European outreach but is very much about the UK; the show's overseas exhibitors are at the event because they have a particular interest in our market.

#### VAE has a first-class programme of seminars and educational events, organised by BALPPA.

BALPPA is recognised for the excellence of its education and training. Indeed, the organisation's events are regularly attended by employees of leading UK operators. A focus on the UK market ensures that VAE's attendees are offered sessions that are both topical and relevant.

#### VAE has a very interesting neighbour!

As the distinction between out-of-home leisure markets becomes increasingly obscured, visitors to both EAG and VAE are likely to find business-transforming products at both shows. The critical-mass achieved by joining the shows has had an

inclusive effect, making both shows more viable for smaller exhibitors and start-up businesses.

A huge bonus for attractions operators is that the majority of EAG's exhibits are designed to generate those all-important incremental revenues. Some of the products on display can have a major effect on profitability.

#### REGISTER NOW AT

[www.attractionsexpo.co.uk](http://www.attractionsexpo.co.uk)

VAE is organised by Swan Events Ltd. For further information contact Karen Cooke on +44 1582 767254 or at [karencooke@swanevents.co.uk](mailto:karencooke@swanevents.co.uk)

Presented by

In association with



# SATE 2015

The rules are changing. Be disruptive. Explode the experience. Those are the messages from this year's SATE conference, which was headlined by Star Wars legend Anthony Daniels. Christine Kerr files this report

Christine Kerr, vice president, BaAM Productions

This year's SATE (Story + Architecture + Technology = Experience) conference featured many highlights, not least that the attendees were privileged to share an up-close-and-personal conversation with Anthony Daniels, famous for his role as C-3PO in the *Star Wars* films.

The Themed Entertainment Association's (TEA) annual storytelling conference was hosted by Carnegie Mellon University in Pittsburgh, Pennsylvania. This top-ranked university is home to the Entertainment Technology Center (ETC) and Disney Research Labs among many other prestigious programmes and partnerships.

Conference attendees were welcomed to a showcase of student projects at the ETC, were active participants in demonstrations of projects in development at the Disney Research Labs, treated to drone flying demonstrations and gained insights into how the Pittsburgh Penguins NHL hockey team is integrating technology into its arena and fan experience.

## EXPLODE, EXPAND

The theme of SATE this year revolved around the idea of extending experiences beyond a defined time and place. Words like *explode*, *disrupt* and *expand* guided the thinking of co-chairs Shirley Saldamarco (president of Interactive Media Productions and an ETC faculty member) and Loren Barrows (director of business development at Alcorn McBride). Speakers explored the trend and identified examples, demonstrating that the nature of experience design is changing.

We're seeing this trend rapidly expanding in the world of experiential marketing. Marketers are creating brand activations that include destinations – built environments – as one pillar of a total campaign. The in-person experience is



Anthony Daniels, who plays C-3PO in *Star Wars*, was SATE's headline act

seamlessly supported by other promotional and media elements that serve to build anticipation in advance, promote sharing during the event and provide opportunities for follow-up after the event.

In the world of themed entertainment and built environments, what is happening that parallels or echoes this marketing evolution? How are themed entertainment experiences expanding their traditional boundaries? Are there categories of work that used to be the responsibility of the marketing department that are now falling to the experience designer? What other industries offer examples that help us meet the expectations of audiences?

## COMMUNITY SPIRIT

Matthew DuPlessie from 5 Wits opened the conference by challenging the group to create more experiences that depend on the guest being there – that are interactive because participation, thinking,

cooperation and teamwork are required. In order to do this, he challenged experience creators to consider smaller attractions. Instead of one \$50m (£33m, €45m) ride, what about 10 smaller experiences that each cost \$5m (£3.3m, €4.5m)?

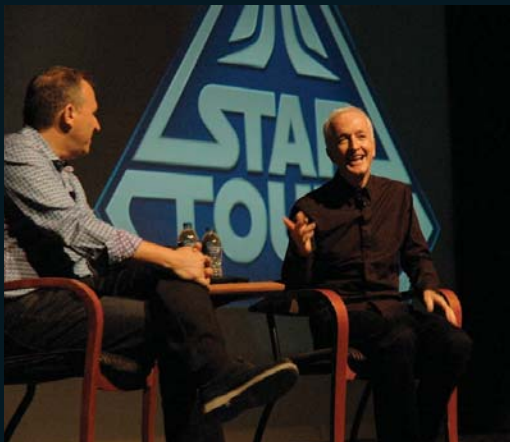
Matt Earnest of Entertainment + Culture Advisors explored the success of London's Secret Cinema and their *Star Wars* events – a great example of tying community and immersive participation by combining a film screening with a role-playing event. These events allow audiences to “live the film” by combining live actors and role playing. Attendees are assigned an identity (a character and a costume) and join a community when they purchase a ticket – before the event even starts. Secret Cinema creates further opportunities for attendees to interact at social events, where they must still wear their costumes. It becomes a season-long community event that creates value with immersion.

## BUT IS IT ART?

Adam Bezark is always a thought-provoking and popular speaker. He engaged the audience immediately by wondering if we are artists, if the experiences we create are ones that will stand the test of time, asking if people will study them in 500 years?

He shared what he believes makes great art great: technique, medium, concept, newness and emotion. He further suggested that places and experiences – such as Cirque du Soleil's shows, Sleep No More (a theatrical experience from British production company, Punchdrunk) and Universal Studios' Diagon Alley – are all art.

Even the Disneyland Castle – because it was parodied in graffiti artist Banksy's Dismaland (a temporary art installation in Weston-super-Mare in the UK this summer – see our feature on page 42), is now elevated to the level of art



PHOTOS: FOR TEA BY MARTIN PALON

Speakers at the SATE 2015 conference at Carnegie Mellon University in Pittsburgh included (clockwise from top left) Jesse Schell, Scott Trowbridge with (C-3PO) Anthony Daniels, as well as Jacob Wahl, Shirley Saldamarco and Loren Barrows, Joshua Jeffery and Adam Bezak

Of course the people who created these shows and designed and fabricated the structures are all artists, Bezark said.

Then he challenged delegates with this question: can we do a better job of what we do if we treat our work as art? Given that many of us have training in some kind of visual art, design or theatre, we certainly were reminded of our roots and inspired to think about our work differently.

Bezark shared some advice on how we can return to those roots or find our inner artist. His advice included: awaken the poet by challenging ourselves; fight for the new by challenging our clients; fight for the weird; and stick to the story so you do not disrupt or interrupt the immersion.

## FROM ME TO WE

Deanna Franci, the brand design practice area leader at Gensler, asked the question: "What are you doing to dramatically change the way people experience your brand?"

She challenged the group to become instigators, like that childhood friend who always dared you to do things. She also said the "wow" factor is no longer the priority – "cool" is more important.

Franci shared the trends she sees emerging, which include a new focus on spirituality and creating havens, contrasted by unexpected and provocative pop-ups that are immersive brand experiences. She also suggested that community is more important than ever and that this extends to experiences that are customised to incorporate local connections.

She also said the trend towards collaborative consumption has led to a shift in consumer values – a shift in priorities from ownership to access, and from me-to-we through crowdpower and mobile collaboration. Franci talked about how the world we are living in motivates us to redefine the nature of experience and of service – she suggests our work will no

longer be judged by how good or great it is – success will come from being different.

## VIRTUALLY THERE

Jesse Schell, CEO of Schell Games, has been passionate about VR since the early 1990s, so he is very excited that, in 2016, VR will explode into popular culture. He reminded the group that, like all technologies, the development curve takes time, like the evolution of the TV, which has taken 45 years to get to where we are today. New VR is different and will be successful because it brings a feeling of presence that is powerful, he said.

The challenges of the past are solved; there's no motion sickness because content is delivered at a higher frame rate, with a faster refresh rate, so there's no virtual motion. The user moves – not things in the world – so there's no nausea: the body and brain forget it's not real.

The products already available or coming ►

► to market are also affordable at up to \$500 (£320, €440) for the high-end that includes Oculus Rift, HTC Vive and Sony's Project Morpheus/PlayStation VR. Products like Google Cardboard and Samsung Gear are much more affordable but sacrifice tracking capability (according to Schell), priced at below \$200 (£129, €176).

Schell is one very excited and knowledgeable guy – he's seeing something he's been passionate about for more than 20 years finally becoming a reality. When asked about augmented reality, he said it's at least five years away.

In a feat of serendipitous timing, Jakob Wahl from Europa Park spoke about Mack Rides' newly introduced VR for a rollercoaster, which had launched that very day (see page 18). Wahl admitted there are capacity challenges, so the initial implementation will be rolled out to select groups such as season pass holders, hotel guests and those willing to pay a premium.

Wahl agreed VR is a great way to update a ride. He was pragmatic about the downsides – they are using the Samsung Gear but accept there are technology challenges with a new and quickly evolving product. He also admitted it won't work on all rides and can be isolating – although based on other speakers at the conference, this could be interpreted as personalisation. Mack Rides believes VR is a tool for advancing and enhancing the experience, but it's not the future of the rollercoaster.

### DEVICE ADVICE

Joshua Jeffery, experience design lead on Google's Experience Centres Team, has had an interesting career path, graduating from the ETC at Carnegie Mellon, interning

PHOTO: CAMILLA GREENWELL



A child dresses up as Secret Cinema presents *Star Wars: The Empire Strikes Back* in London

at Thinkwell and then leading interactive technologies for the Warhol Museum for five years before joining the tech giant.

Jeffery talked about Google's focus on creating seamlessly woven experiences. Our attention spans are shorter than ever and our tolerance for information, the speed we process it and our ability to focus have all changed, he says.

Our devices are poking the outside world in and the inside world out. They provide social, meaningful interactions – so what should we do? Block them? Collect them? No, says Jeffery, because they have value in an experience. They represent convenience (on-demand) because they separate the fun from the functional – use devices to allow you to focus on the fun by getting the practical details out of the way.

They offer personalisation – like Trunk Club and Netflix. Your device knows you and can provide concierge-level service and customise experiences for each guest.

And perhaps most importantly, devices offer opportunities for experience layering, including gamification: your phone is like a heads-up device, acting as scorekeeper, image keeper and storyteller during an experience. After the experience, it allows you to connect experiences to create your own story out of the experience you had. Ultimately, Jeffery said, we can take advantage of that digital literacy to focus on the personalisation opportunities.

### FOLLOWING PROTOCOL

SATE 2015 was pleased to present a Conversation with Anthony Daniels, the second presentation of this new format of open, direct dialogue. Daniels has enjoyed a career spanning four decades, portraying the beloved C-3PO in the *Star Wars* films and having the privilege of broadening his involvement to many extensions of the franchise as the character and hosting various symphonic events, especially *Star Wars in Concert* in its US and European tours. He is also a visiting scholar at the ETC at Carnegie Mellon University.

The upcoming release of *Star Wars: The Force Awakens* and recent announcements from Disney about an expanded *Star Wars* presence in the parks made the conversation with Daniels a timely feature of SATE 2015. And who better to lead the conversation than Scott Trowbridge, the creative executive from Walt Disney Imagineering responsible for the strategic concept development and integration of the *Star Wars* franchise across all Walt Disney Parks and Resorts?

This was the ultimate discussion about extending the experience. The conversation circled around the various ways the *Star Wars* franchise has been leveraged and expanded to invite people to step into the stories. After a dramatic entrance by



Europa-Park directors take the first ever VR rollercoaster ride in Rust, Germany, in September





Feel the Force: With the latest film and the recent confirmation of Disney's Star Wars Land, the conversation with Anthony Daniels was a timely feature of SATE 2015

## "IT'S AN UNENVIABLE TASK TO BRING STAR WARS TO LIFE IN THE THEME PARKS FOR GENERATIONS OF FANS WHOSE LEVEL OF KNOWLEDGE IS UNPARALLELED"

Daniels – in a gold sequined jacket, of course – both gentlemen were generous with their stories and witty banter.

Among the highlights of the conversation was how the C-3PO costume has changed – evolving from a metal construction made from a full-body casting that required two hours to put on and was so heavy, Daniels considered not participating beyond the first film. The current costume is 3D printed and easily worn and modified.

Daniels also told the story of how George Lucas auditioned many actors to be the voice of C-3PO after filming was complete on the original *Star Wars* movie. Eventually he decided nothing fitted the original like the original, and asked Daniels to record his own voice.

The anecdotes and insights shared were many – ranging from a disguised

Daniels visiting Secret Cinema's *Star Wars* event in London, to the challenges of translating the onscreen character into the requirements (and restrictions) of the *Star Wars* attractions.

### STAR WARS LANDS

Trowbridge was asked many questions about Disney's plans for the *Star Wars* franchise across the parks and resorts. Avoiding specifics, he nevertheless built excitement among the attendees. He and his team have an unenviable challenge of determining how to bring the films to life in the theme parks for generations of fans whose level of knowledge is unparalleled.

The conversation was full of banter and dramatic action. Daniels had a hard time sitting still and often jumped up to act out a point. Trowbridge took delight in playing

R2-D2 to Daniels' C-3PO, much to the amusement of the audience.

TEA's SATE 2015 took delegates on a journey that challenged their thinking and inspired – even provoked – them to approach their projects in new ways. Themes of creating experiences that encouraged community, teamwork and shared human experiences were repeated by almost every speaker. This was contrasted by ongoing discussions of how to use guests' personal devices in the right way, rather than just asking them to be turned off – to incite social action, deliver personalised content and extend the guest experience by creating and sharing stories.

The presentations and conversations reminded us that we all create the art of the 21st century; perhaps we are defining the meaning of art for future generations. ●

# PLANETARIUMS

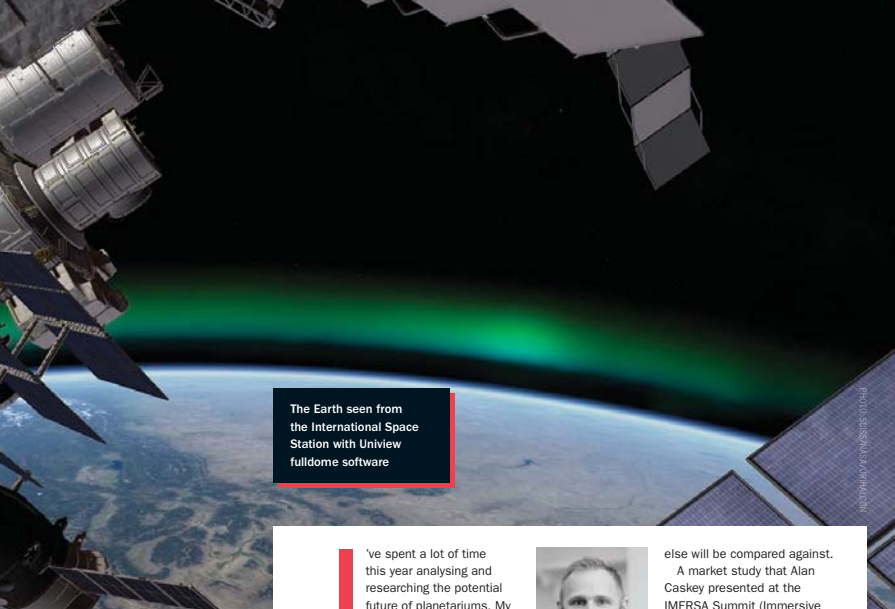
## the next 20 years

What challenges and choices will planetariums face in the coming decades, and what can they do now to shape a future that's relevant and inspiring for the sector and its audience? Staffan Klashed of Sciss shares his thoughts

Staffan Klashed, CEO, Sciss



Planetariums have a value proposition as centres of excellence for astronomy and space exploration, says Staffan Klashed, CEO at Sciss



The Earth seen from the International Space Station with Uniview fulldome software

PHOTO: SPACEX/AMNH.COM

I've spent a lot of time this year analysing and researching the potential future of planetariums. My findings made me want to try to identify where the winds are blowing for the next 20 years. By understanding where we stand today and what the major tendencies are – tendencies that are bigger than any single innovation, company or institution – planetariums can shape a strategy to grow increasingly relevant. That means maintaining current, growing and recurring audiences, and providing them with meaningful and inspirational experiences.

I'd like to take this opportunity to share some of the trends that I identified as important in a recent white paper entitled *The Next 20 Years: A Vision for Planetariums in the 21st Century*.

### The competition for talent

Whether we like it or not, planetariums are just as involved as any other industry in the competition for talent. The International Data Corporation (IDC) estimated in 2014 that there were approximately 11 million professional software developers in the world, or 18.5 million if hobbyists are included. The best ones will choose a career in those industries that reward them best financially, creatively and socially. The best ones will create the audiovisual experiences – whether under the dome, online or in gaming, or in the VR headsets of the very near future – that everything



Staffan Klashed

else will be compared against.

A market study that Alan Caskey presented at the IMERSA Summit (Immersive Media Entertainment, Research, Science & Arts) in 2013 listed user interfaces and real-time system functionality as the two most important features of a planetarium (from a survey of 139 planetariums). The ability to encourage repeat visits and the availability of new content were the two top concerns. All of these points are directly related to advanced software and content development, work that will be carried out by some of those 18.5 million talents – and we're competing with every other IT industry on the planet to get them.

Fortunately, the planetarium industry is increasingly successful in the competition for talent. As an industry, we are investing in research and the development of products that are technically stimulating, considered relevant by the majority of the public, and socially much "cooler" than the conventional planetarium technology.

### Public perception of astronomy and planetariums

People are just as interested in astronomy now as they have ever been. Data from the US General Social Survey from 2012 says that approximately two-thirds of the American public think government spending on space exploration is too small or just about right. European numbers are similar. Data from other parts of the world



PHOTO: BARRALLO SF

Satellite imagery of the Alps, streamed with Uniview fulldome software from NASA's WMS servers



PHOTO: BRABLIO/STENASA

## WE NEED THE PUBLIC TO REGARD PLANETARIUMS AS A PRIMARY PLACE TO FOLLOW EVENTS IN ASTRONOMY AND SPACE EXPLORATION – THAT WILL HELP US GROW AUDIENCES AND REPEAT VISITATIONS

would be most welcome and help to paint a more complete picture.

To find out how the public feels about planetariums, we conducted our own survey by analysing reviews on the travel website TripAdvisor. Visitor satisfaction appears to come from four primary factors: things to do outside the dome (24%); good shows (23.5%); location, view and the building itself (16%); and good live presenters (15.5%). Disappointment appears to come primarily from worn down or poorly maintained facilities, alongside low quality programming (14%), technical issues (8.5%), lack of things to do outside the dome (6%) and cost of admission (3.5%).

### So how are we doing?

According to the annual Dome Theatre Compendium survey from Loch Ness Productions, approximately 107 million people visited a planetarium last year. That sounds like an amazing number – I think we can be proud of our industry. In comparison, the documentary giant screen industry attracts a total of 36 million people per year, and that includes their flat screens.

I don't think our numbers are bad, but

### Planetariums vs Giant Screen Cinemas: An identity crisis?

There's an argument that digital planetarium technology is converging with giant screen cinema. While this might be true for the technology, there's very little convergence in terms of purpose and use of the technology.

Planetariums have a value proposition as centres of excellence for astronomy and space exploration. This is a sustainable proposition and if planetariums don't fill it, something else will. Formats vary – fulldome

shows, live presenter-led discussions, audience-driven experiences – but don't mistake format for value proposition.

Giant screen cinemas show, for example, documentaries about butterflies, artificial intelligence, dinosaurs and aviation. They have an amazing cinema format. People visit giant screen cinemas to pursue their interest in documentaries and film – that's a completely different value proposition.

there is tremendous growth potential in our industry, especially considering that a lot of those 107 million visitors went with a school group and did not actually choose to go to a planetarium.

We have the chance to cater to the two-thirds of people who are actually interested in our topics and to give them meaningful experiences of science visualisation. We need the public to regard planetariums as a primary place to follow events in astronomy and space exploration – that will help us

grow audiences and repeat visitations.

We don't have to abandon our scientific integrity to be relevant and cool. In fact, the opposite appears to be true, as the public is quite invested in astronomy and space exploration. This means planetariums are interesting places for talented individuals to work, which increases the quality of our programming and, in the long run, also our audiovisual systems – in turn attracting more visitors. This virtuous circle has just begun, the next five years will accelerate it.





The Earth seen with Uniview fulldome software

## MARKETING IN THE ERA OF BIG DATA

Planetariums need an increased focus on marketing, and understanding our identity and value proposition. Jim Sweitzer illustrated in his SPECTACLE model in 2004 the effects of the many factors at play during the early years of a new planetarium, and showed the long-term importance of having a balance between good marketing, innovation, high-quality programming and the ability to attract new markets.

Thanks to big data, marketing today is much more refined than it used to be. We can pinpoint target groups online and give them compelling reasons to go. The most successful planetariums are already refining their offerings and introducing special events such as planetarium after dark, science cafés and guest lectures. The key – besides spending on marketing – is to make sure that the overall content and marketing message aligns with the overall identity of planetariums.

PHOTO: SCISS/NSA

### The next 5 years: Big data and the virtuous circle

The next five years will inevitably be about big data – the vastly increased amount of meaningful data accessible to the public. Space exploration will produce a huge amount of data and private initiatives in air and satellite-based imaging, remote sensing and laser scanning will accelerate what the International Planetarium Society's science and data visualisation task force calls the "data tsunami".

Big data is relevant and interesting. It's socially cool and attracts talent, and thus the virtuous circle can accelerate and turn planetariums into what they need to be: places people go to pursue their interest in astronomy and space exploration.

### The next 10 years: New platforms

The data visualisation explosion will happen foremost on other platforms than the dome. With this, the sense of identity in the industry will change. At the moment, most planetariums think of their planetarium as the building itself and everything under the dome, but increased visualisation capabilities online are already starting to change this. Soon, virtual and augmented reality glasses will change the perception and value of immersion. In 10 years' time, to think of the planetarium as only the dome will be a conservative standpoint.

Supported by multi-platform software solutions, planetariums will gradually start to roll out programmes and extend their relationships with their visitors. This creates new business opportunities, thus injecting more resources and more talent into our industry. The planetarium becomes the magnet, the central point of gravity around which a vast number of satellite programmes are orbiting. Experiential hubs for astronomy and space exploration first, buildings second – and that's an incredibly strong position to use to increase attendance to the building itself.

### The next 20 years: Education redefined

Two decades out, the very way we think about learning will be dramatically different. In a report called *Building the Future of Education: Museums and Learning Ecosystems* from the Center for the Future of Museums, Katherine Prince describes "vibrant learning grids". These are communities where learning is not bound by a time and a place, but happens everywhere, all the time.

Our relationship with formal institutions will change so the place we refer to as "school" may be the classroom, the library, the internet or, indeed, the multi-platform planetarium, where learning is not motivated by authority, but by curiosity. This theme is everywhere already today, but

it will take two decades to transform the world's education systems. We are talking about redefining the purpose of education. Sugata Mitra, an educational researcher and TED Prize winner, has shown that in the absence of formal teaching, children can teach themselves and each other, if they are motivated by curiosity and peer interest. And with planetariums now having attracted a large pool of talent and expanded to multiple platforms, we will be the world's primary source for inspirational and engaging experiences about astronomy and space exploration. As such, we have a given role in these vibrant learning grids. ●

#### ABOUT THE AUTHOR

**Staffan Klashed** is the CEO and co-founder of fulldome theatre company Sciss. He has experience in the field of science visualisation and immersive digital spaces. Over a decade ago, Staffan introduced the visualisation software Uniview to the fulldome industry and today Sciss is one of the main fulldome system vendors with over 150 installations worldwide.

For a copy of *The Next 20 Years: A Vision for Planetariums in the 21st Century*, email [info@sciss.se](mailto:info@sciss.se) or search on [www.sciss.se/blog/](http://www.sciss.se/blog/)

# IGNITING IMAGINATION

*The Hunger Games* movie franchise is on the road, with a temporary exhibition opening in New York and then San Francisco.

Tom Anstey goes to see if the interactive tour is catching fire

Tom Anstey, journalist, Attractions Management

**T**hey say if you make it in New York you can make it anywhere. That's where the *The Hunger Games*: The Exhibition has taken its first steps as the temporary exhibition begins its tour of the US with a debut at Discovery Times Square.

With a collection of props and costumes used in the movies, as well as a host of interactive experiences, the exhibition offers something akin to the successful Warner Bros Studio Tour London – The Making of *Harry Potter* (see *Attractions Management* Issue 2 2015, p80) – telling the story of *The Hunger Games* and what went into production behind the scenes.

Operating on a smaller scale than the *Harry Potter* attraction – both are designed by the Thinkwell Group – the *Hunger Games* exhibition starts in similar style, with the timed-ticket experience putting consumers in a room for an initial reveal.

The pre-show theatre – designed to look like the Hall of Justice – airs a film delving into the history of *The Hunger Games* and sets the tone for the exhibit, also introducing major themes for someone less familiar with the franchise. Once

## THE EXHIBITION

**Creators:** Lionsgate; Thinkwell Group

**Tour operator/co-producer:**

Imagine Exhibitions

**Host Venue:** Discovery Times Square

**AV:** Electrosonic

**Fabricators:** MC2

**Audio tour:** Acoustiguide

**Retail:** Event Network

**Image capture:** Pictosolve

## ADMISSION PRICES

VIP front-of-line entry with no reservation time \$49.50. Adult \$29.50. Senior 65+ \$27.50. Child 3-11 \$22.50. Mobile guide (free for Amex customers) \$7. Meyers parking (10 hours at Times Square 45 per cent saving) \$25

the centre doors swing open to reveal the exhibition and the first area – District 12.

This area is relatively small, but doesn't feel crowded, thanks to the timed ticketing. In it guests can look at a number of props and costumes, notably the Mockingjay pin which is an important symbol in the film.

Heroine Katniss Everdeen and her best friend Gale Hawthorne's hunting outfits are also displayed, while nearby interactives show more details of District 12.

The hands-on exhibition includes an interactive touchscreen map of the world of Panem, profiling each of the 13 districts.

## RIDING A CHARIOT

From there, visitors follow the story of the franchise in chronological order, moving on to the Tribute Train area. More costumes are on display here and the experience includes several photo opportunities, the first allowing guests to pose for a photo in an area set up to look like the banquet area at the back of the train.

One of the film's iconic scenes features Katniss riding a chariot at the opening of the Games. In the next area – representing the Capitol – you can see the chariot from

seated, the entire front wall turns into a projection where a life-sized Effie Trinket welcomes you, before transforming into Elizabeth Banks, the actress who portrays the character. Banks takes visitors over the key moments of the film series before



Technology plays an important role in bringing visitors into the world of Panem, creating a modern and entirely immersive experience



Iconic costumes from *The Hunger Games* are on display

GUESTS ARE GIVEN HUNGER GAMES GARMENTS AND PLAY OUT THE CHARIOT SCENE FROM THE MOVIE. THE VIDEO CAN THEN BE PURCHASED, ALONG WITH A SELECTION OF PHOTOS

the film set up with the costumes and flames in tow. Opposite is the balcony where President Snow welcomes the victors during the tribute parade. Guests are taken to Snow's mansion and have the chance to visit Cinna's design studio, complete with the Girl on Fire dress, arguably the most famous of the costumes seen in *The Hunger Games*.

Guests also have the chance to be "interviewed" by Caesar Flickerman.

#### THE GAMEMAKERS' TABLE

From the Capitol, guests move to the next area, Making The Games, a high-tech section dedicated to the actual event of the Hunger Games. This area contains iconic props, a weapons cabinet and costumes, with a range of interactive features.

As they enter, visitors have the chance to try their hand at a range of challenges, such as tying knots. Beyond that, interactive games teach stunt choreography using Kinect technology.

The big highlight of the area is the Gamemakers' table, an interactive touchscreen table where visitors can explore the technology behind the Games. The area also features models of some



Actress Jennifer Lawrence and Lionsgate CEO Jon Feltheimer at the exhibit launch

#### IN NUMBERS

- 12,000sq ft
- Seven galleries
- 16 scenic vignettes
- 46 costumes
- 1,000+ authentic props
- Five digital interactives
- 10 analogue interactives
- Length of stay 1-1.5 hours

of the creatures seen in the film, such as the tracker jacker and the jabberjay.

Visitors then move to District 13 – the secret rebel setting of the films. They visit President Coin's balcony, before moving to Beetee's lab, which has a range of weapons and the chance for visitors to create their own propaganda film. The area looks at the science behind the underground bunker, with a deleted scene from the film showing how technology allowed District 13 to grow plants underground.

#### HEROIC MOMENTS

The next area shows a collection of Katniss's costumes, as well as the iconic Mockingjay armour. Footage airs of the character's most heroic moments, to triumphant, ceremonious music.

A fan gallery is also included in the tour, showcasing works of art drawn and painted by the general public. Visitors are given Hunger Games garments and the tour ends with an interactive green screen experience by Picsolve, during which they can play out the chariot scene from the movie with instruction from staff. The video can then be purchased, along with a selection of still photos.

## WHAT'S THE SCORE?

Toilets	8/10
Staff	9/10
Cleanliness	9/10
Experience	7/10
Value for money	7/10
Overall experience	7/10

## SIGNAGE

Discovery Times Square is located just off Times Square. Among the array of signs and advertising boards there are directions to the Hunger Games attraction. Once on the street, it's clearly signposted and easy to find thanks to its prominent location in the heart of New York.

## RETAIL

Guests exit through a gift shop created by Event Network. Products on offer are on the whole exclusive to the tour and range from low-cost to high-end, with the most expensive item – a diamond mockingjay – retailing at \$7,500. Merchandise is also available via the exhibition's online store.

## EXTRAS

With so many things to see, the additional \$7 Acoustiguide audio tour, adds a lot to the experience. Using the modified iPhones and a specially designed app, guests can take photos of the exhibition – which are later emailed to them – and then, using beacon technology, they listen to audio clips explaining what they see in front of them. While the tour isn't lacking without the guide, it certainly adds to the experience, particularly if the visitor isn't familiar with *The Hunger Games*.

## DESIGN

Located in the bowels of Discovery Times Square, it's easy to forget the hustle and bustle of New York just outside. With no windows upon entry, the tour offers a good level of immersion and suspension of disbelief. Thinkwell has done a great job with the design.

Acoustiguide designed a mobile experience for the travelling exhibition



A Peacekeeper's uniform on display at The Hunger Games: The Exhibition

## THE EXPERIENCE

*The Hunger Games: The Exhibition* is aimed at the teenage market, but that's not to say adults can't also enjoy it. While I was there, the majority of visitors appeared to be between 14 and 18, so the hands-on interactive approach is definitely one that appeals to this age group.

With the entire experience taking 1 to 1.5 hours, its location just seconds away from Times Square is very good, as this isn't something that will take an entire day – rather something visitors would incorporate into a full day experience of the area.

Staff interaction throughout most of the exhibition is minimal, though they are friendly when interacting for the photo opportunities and green screen experience. The exhibition itself is very clean and well maintained, though the queue line for entry is very clearly a waiting area with little or no theming, which – when

compared to similar attractions – is lacking the wonderment you might experience elsewhere. That said, this aspect could also be put down to the dark overtone of *The Hunger Games* storylines.

All in all the production lives up to the standard you'd expect from Lionsgate and Thinkwell. If it can maintain that standard as it tours the US, *The Hunger Games: The Exhibition* should excite and entertain an audience of young adults in the run-up to the launch of the film later this year. ●

Tom Anstey is a journalist who has worked across the UK, Europe and Asia in editorial positions at national publications. He now specialises in attractions as News Editor for AM2 and Attractions Management.







**Log Flume**  
**Calaway Park, Alberta, Canada**  
Opened July 2015

# DISCOVER THE THRILL

Innovative Attractions for the entire Amusement Industry

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

**WHITEWATER.**  
*Attractions*

# SIMWORX ROBOCOASTER: A NEW CHAPTER

With high-profile installations  
and the acquisition of RoboCoaster,  
the Simworx story unfolds



RoboCoaster RCX  
comes in the small  
G1 model and larger  
G2 for theme parks

**S**imworx, one of the world's leading suppliers of turnkey advanced media-based theme park attractions, is entering the next chapter of its story.

The West Midlands, UK-based company has blazed a trail in the industry since it was established in 1997, and today boasts a product portfolio that includes the Lost Temple at Movie Park, Germany, Marvel Avengers at Trans Studio Indonesia, Arthur 4D at Futuroscope and

the London bus adventure at Merlin's new Shrek's Adventure midway.

Recent months have opened a new chapter for Simworx, thanks to fresh investment and the acquisition of ride system innovators RoboCoaster, whose technology is behind world-class rides such as the Forbidden Journey at Universal Studios Orlando.

The two companies – which are both driven by in-house technological innovation and the desire to bring fresh

offers to the industry – have been working together for some time, but when Simworx won £4.5m (\$7m, €6.5m) in investment from the Business Growth Fund, the acquisition was the next step.

The established Simworx line includes the 4D cinema, the Stargazer Motion Theatre, the Cobra Motion Theatre, the Immersive Tunnel and the Flying Theatre (in partnership with Mondial). With the acquisition of RoboCoaster, the company is launching its next generation of new technology rides, include trackless and robotic attractions.

## Next Generation

Simworx and RoboCoaster plan to focus on the design and manufacture of a next generation of dark ride and robotic attractions, adding to their existing portfolios.

One of the new products in development under the RoboCoaster umbrella – the difference between Simworx and RoboCoaster is that the latter's products enable a huge range of linear and/or vertical travel, specialising in passenger-carrying robotic technology and trackless dark rides – is the Advanced Guidance Vehicle (AGV). The AGV is a dark ride



Arthur L'Aventure at Futuroscope, France; a Simworx Cobra Motion Theatre



Simworx entered the attractions industry with its 4D Cinema, and has installed 50 to date

vehicle for eight to 12 passengers and a trackless, cable-free dark ride experience. The AGVs are powered by Ni-Cad batteries which charge overnight.

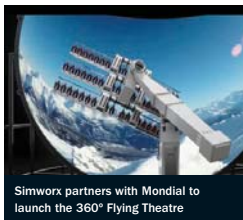
The beauty of the AGV is that you can create any type of ride path and multiple route options within the site space, with a vehicle that can drive forward, backwards and spin. It can also move sideways, "in a crabbing motion, like a hovercraft," Monkton says.

The RCX G2 – the second model from RoboCoaster – is a number of track-based robots that each works in conjunction with a dome dolly, meaning the screen travels together with the passenger vehicle.

"The Immersive Tunnel, where typically you board the simulator and it goes forward on a straight track into the show area, was really our first venture into actually physically moving people," Monkton says. "But the RoboCoaster RCX models and the AGV move people around in fully immersive environments."

According to Andy Roberts, operations director at Simworx RoboCoaster, the affordability of the RoboCoaster technology is central to the business strategy.

"If you buy a Harry Potter ride you need a £250 million purse, and only the



Simworx partners with Mondial to launch the 360° Flying Theatre

likes of Disney and Universal can afford that," says Roberts. "The robots that are used on the Harry Potter ride are welding robots and they're so precise that they could weld a piece of hair together. With the RCX we value-engineered the cost of producing the arm to make a similar ride that's more affordable."

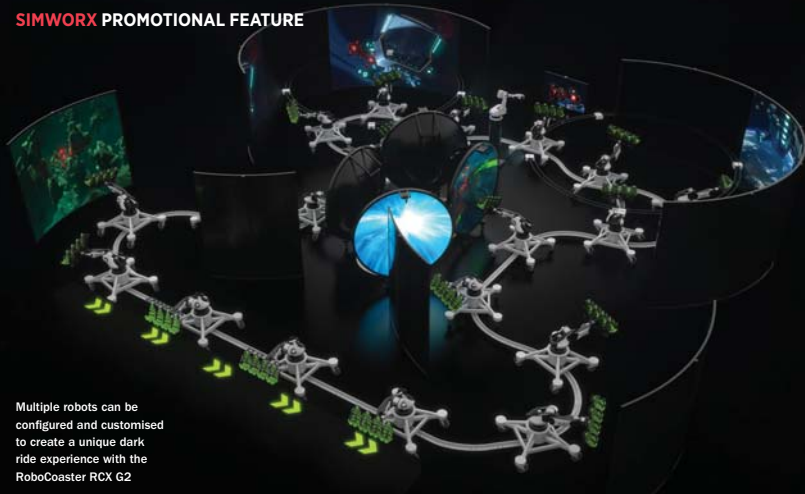
"We've taken the concept of seats on a robot and produced a new machine. It's a manipulator arm that has the same movements but is more akin to a theme park collaboration than a high precision robot. We can deliver that ride to the mainstream theme park industry at a price similar to a rollercoaster."

"One of the goals that Terry and I set in the early days was to position ourselves to produce a quality product for a fair price, and to always aim to have repeat customers. By the end of every Simworx project we ensure our customer has got what he really wants – and that's how we measure quality. We also ensure the equipment that we use and the raw materials that we use are always the best quality," Roberts says.

Simworx is located on one of the biggest trading estates in Europe, and many of the materials are manufactured by suppliers in the nearby area. Simworx has built up working partnerships with many of those, and there are fabricators who have invested in learning new skills and techniques to maintain the high standards demanded and to advance their knowledge.

## Success Stories

The Immersive Tunnels have been well received and are marked out as at the leading edge of this type of ride. Simworx is currently working on its third installation, on the island of Langkawi in Malaysia – a sign of the increasing popularity of cost-effective, indoor media-based attractions in the EMEA region.



Multiple robots can be configured and customised to create a unique dark ride experience with the RoboCoaster RCX G2

**“THE NEW ROBOCOASTER PRODUCTS GIVE A FAR MORE IMMERSIVE FEEL, AS THE ROBOTS MOVE ALONG TRACKS AND INTERACT WITH DIFFERENT TYPES OF AV ALL WITHIN ONE EXPERIENCE”**

**Terry Monkton, Simworx managing director**

► “This summer we completed a project for Merlin’s new Shrek’s Adventure Tours bus. The bus is a 40-seat simulator surrounded by a 360° 3D projection, with sensory effects such as water sprays and wind. The ride takes visitors to the kingdom of Far Far Away, meeting lots of DreamWorks characters along the way,” says Monkton.

“We also did a lovely Immersive Tunnel at Movie Park, where you enter a forgotten temple on a Jeep-style 3DOF dynamic motion-based simulator to rescue a scientist,” he says. “You encounter these dinosaurs which interact with the vehicle. When the T-Rex charges the vehicle from the side the whole rocks.”

The vehicles come in configurations of 30, 60, 90 and 120 seats and a range of themes and film content can be supplied to create unique attractions.

Among other projects around the world, Simworx and RoboCoaster are working on seven new rides in the UAE, comprising of Immersive Tunnels, Cobra Simulators, 4D Cinemas and RoboCoaster G1s – all of them are attached to high-profile IPs – as well as two major European installations.

### New Horizons

Another new innovation that Simworx RoboCoaster has been developing is “show action” technology. Show action robots are used to create visuals and scenes. Robots hold projectors and move along the ride path with the passenger vehicle projecting imagery onto screens, which can also be supported by robots. This opens up huge potential for storytelling, projection mapping and creating visual effects.

“It’s almost like advanced scenery design. One robot with a projector tracks another robot so it’s constantly projecting onto the screen, creating a 3D effect without using 3D technology,” says Monkton. “There are vast opportunities to create different illusions.”

Simworx has also been investing in VR, exploring ways to exploit the technology and develop new experiences around it. The company has used VR to recreate the experience of its existing attractions, a handy tool for communicating with clients around the world, but Monkton is also interested in finding new and innovative ways to bring VR technology into a mainstream visitor attraction experience.

“There’s been lots of development work in house and with external groups. We’ve worked on trackable VR devices that enable people to move around within an attraction using a VR headset with collision detection – basically you can detect other people in the attraction in the VR world,” says Monkton.

To further nurture the innovative design-driven nature of Simworx, the company has set up a division called Simworx Creative, and has established a creative lab of designers, engineers, VR and AV technicians, “a pool of high calibre, highly skilled creatively minded people who are developing technology to implement into wow-factor theme park rides and attractions”. This has also been extended to include team members who work on theming and storyboarding.

“It’s about continually developing new concepts and technologies to stay ahead of the game,” Monkton says. “The RoboCoaster attractions, the development of VR, show action robotics, holographic technology, interactive technology - these are areas where we invest time and money to stay at the cutting edge and make rides that are different and unique.”



## MEET THE TEAM

### Terry Monkton

Managing Director



#### How did you come to establish the company?

I was the second "employee" and I was recruited in 1997. It was a new venture set up to manufacture a range of space capsule-style, entertainment motion simulators ranging from two to 20 seats. These were typically sold to museums, FECs, aquariums and corporate markets.

By 2004, this market was in decline, but we were fortunate to win a one-off custom project for a special effects cinema at an aviation museum called Kalamazoo Air Zoo in the US. It was one of the first of its kind outside Universal / Disney.

With the capsule simulator market in decline, early in 2005 Andy Roberts and I carried out a MBO of the company and concentrated our efforts in productising what is now commonly known as 4D effects cinema.

#### Is there a moment you would describe as a turning point for the company?

There have been quite a few, but the development of the 4D cinema was a big one. As a highly scalable product, it meant we were (and still are) able to offer clients anything from 16 seats to a few hundred seats. This scalability meant that the product was suitable for attractions of all sizes – now including theme parks. We now have a portfolio of nine different media-based attractions, but the 4D cinema is still a big seller.

The Immersive Tunnel has been a real game changer. This was something brand new, embracing immersive AV technology combined with dynamic motion and effects we could offer to larger theme parks. I'm also looking forward to our partnership with Mondial for the 360° Flying Theatre.

Naturally, the RoboCoaster acquisition leads us into the launch of the AGV dark ride and RCX passenger-carrying robotics rides. This combined with the new tech being developed by Simworx Creative is very exciting for the company.

#### What project means the most to you?

There are so many, it would be too difficult to name one in isolation. There really is no greater thrill (as well as a few nerves!) than launch day for a new attraction.



Simworx's first Immersive Tunnel, the Lost Temple, was delivered to Movie Park, Germany, in 2014

### Andy Roberts

Operations Director



#### What did you do before establishing Simworx?

Before establishing Simworx, I worked as operations director for the AI Group where in 2005 Terry Monkton and I acquired the simulation division by way of a management buyout. Prior to this I had worked for automation and control companies Bristol Babcock and Rockwell Automation.

#### Is there a moment you would say changed the game for Simworx? What was it?

Growing Simworx over the past 10 years or so has been and continues to be extremely hard work. Initially our sales effort concentrated on raising the Simworx brand in our market sector and our product development focused on the introduction of new technologies and products to our market. We developed our then core products such as the 4D cinema, Cobra motion platforms, and improved on the Stargazer theatre delivery by introducing 4D SFX and larger format audiovisual experiences.

The turning point for me was the delivery of our Immersive Tunnel Ride, not only a fantastic new ride concept but a ride that can be scaled to suit

smaller venues and high footfall theme parks. The ride employs complex audiovisual and motion schemes taking advantage of the latest available technologies leading to a truly immersive experience for our customers.

The Immersive Tunnel did not only trigger interest from the larger theme park customers resulting in several ride contracts, giving the already growing Simworx sales a further boost, but also sparked the interest of RoboCoaster who expressed a desire to work with Simworx as a partner. The acquisition of RoboCoaster presents us a fantastic growth opportunity with the addition of passenger carrying robots and trackless AGV rides to our product portfolio.

#### What Simworx project has meant the most to you?

All Simworx projects mean a lot to me as we pride ourselves on delivering the best possible service to our customers, whether they are purchasing a spare part or a new attraction. It's important to Simworx that we have customers who engage with us more than once and we always try our utmost to deliver to their expectations.

I did however feel especially proud to be a part of the team when we opened Drayton Manor 4D cinema several years ago (then our largest 4D cinema). Movie Park's Lost Temple Ride and the Shrek magical bus ride also brought the team a great sense of achievement.

## MEET THE TEAM Continued

**Gino Del Gol**

Technical Director

**What do you do?**

I founded RoboCoaster and I'm now the technical director of the Simworx RoboCoaster group.

**What are you working on?**

We have a significant bank of technology and IP to call upon, and we also have a pipeline to produce new dark ride technologies from a single source. My mission is to bring new technologies and products to the market.

**What do you enjoy about your job?**

I'm passionate about bringing cutting-edge technology into the entertainment arena, which was my motivation for starting RoboCoaster in the beginning.

**What's your favourite attraction?**

Harry Potter & the Forbidden Journey. It took incredible leaps forward with ride and show, creating a new benchmark for experiential quality and ride dynamics.

**Edward Pawley**

Business Development Manager

**What do you do?**

My role is primarily sales.

**What are you working on?**

Obviously a lot of confidential sales prospects. I am excited about our Immersive Tunnel opening at Panorama Langkawi, Malaysia and seeing the final version of our new *Dinosaur Island* film. I'm currently working on the launch of our Flying Theatre and AGV dark rides.

**What do you enjoy about your job?**

My background is operating attractions for my family business Drayton Manor. Now I'm on the "other side" of the table, I find it very rewarding to work with clients through the whole process of procurement, design, manufacture, installation, commissioning and operation. I think knowing what it's like on their side of the table, helps me deliver all their expectations.

**Rafael Smith**

Sales Representative

**What do you do?**

I look after sales for the Spanish and Latin American market.

**What are you working on?**

I'm focusing on developing the Latin American market, and on a few ongoing projects in Spain.

**What has been your highlight?**

Seeing how much Simworx has grown to become a very big player within the dark and Immersive rides market

**What do you enjoy about your job?**

I enjoy working with everyone from Simworx. Although I don't see them very often, every time we see each other it seems like it was yesterday.

**What is exciting about the industry?**

I love all the new rides that are coming to the market. It seems like there is always space for new ideas.

**Andy Bates**

Project Delivery Manager

**What do you do?**

I act as a conduit between our clients and our design, fabrication and installation teams.

**What has been your highlight?**

The best part is on opening day, seeing guests come off a ride cheering.

**What is challenging about your job?**

The role is multi-disciplined and there's always something new to learn, but I get support from my peers and directors.

**What do you like doing when you're not at Simworx?**

I love spending time with my family and have recently rediscovered mountain biking – which I enjoy despite my capabilities lagging behind my imagination!

**What's your favourite ride?**

I'm a sucker for a good old ghost train. I'd love to shake that concept up a bit.

**Carl Johnson**

Head of Procurement

**What do you do?**

I look after procurement, which includes supplier selection, carrying out tenders, reducing costs and mitigating risk wherever possible.

**What has been the highlight of your time at Simworx so far?**

The introduction of European standard EN1090 in 2014, which covers structural steelwork, created difficulties within our supply base. We had to either develop suppliers to meet the standard or find new ones that were accredited. We managed to do both, which has improved the quality of our fabrications.

**What do you enjoy about your job?**

Developing suppliers to meet the required standards is always a satisfying process. Negotiating and implementing mutually beneficial agreements with key suppliers also provides a sense of satisfaction.

**Cassandra De-Gol**

IP Asset Manager

**What do you do?**

Simworx RoboCoaster has a growing portfolio of patents and trademarks. I implement global strategies for both businesses.

**What are you working on?**

I'm filing four new patents for Simworx, two for RoboCoaster and furthering the territorial reach of existing applications.

**What do you enjoy about your job?**

As an intangible asset rich company we value new ideas and prioritise protecting valued concepts. It means my job is technologically diverse and I'm lucky to watch a technology grow from concept to realisation.

**What do you like doing when you're not at Simworx?**

My single greatest interest lies in photography and sharing images on social media such as Instagram.

## Matt Clarkson

Creative Designer



### What do you do?

I work at the start of our projects, creating conceptual designs for our clients. I also deal with Simworx's marketing campaigns.

### What are you working on?

We are currently developing ride vehicle designs for brand new installation due 2016 with some very big IPs.

### What has been the highlight of your time at Simworx so far?

Knowing my designs have helped Simworx win bids, and seeing those designs develop from concepts on a screen to highly regarded attractions.

### What do you enjoy about your job?

No two days are ever the same here. I get to work on many exciting and innovative projects in an industry which, from a designer's perspective, is not hard to get enthusiastic about.

## James Clarkson

Project Manager



### What do you do at Simworx?

Manage complex and unusual projects.

### What has been the highlight of your time at Simworx so far?

Presenting detailed plans to the customers and receiving positive feedback.

### What do you enjoy most about your job?

I enjoy the challenge.

### What is most exciting about the industry to you right now?

Being on the forefront of leaps forward in technology, with the Robot RCX, the AGV, our work with VR and so on.

### What's your favourite ride?

Nemesis at Alton Towers – a classic thrill ride that's nothing particularly clever or special, just good honest fun.



Simworx' Immersive Tunnel bus tour at Shrek's Adventure

## Peter Reece

Project Manager



### What is challenging about your job?

Timescales to complete projects and the pace of change.

### What do you enjoy about your job?

The variety within the job and new product development. It's also quite interesting when interviewing new recruits for engineering roles that the candidates are excited about the industry. Sometimes they can't believe an English company is involved in the full lifecycle of ride attractions.

### What do you like doing when you're not at Simworx?

Fishing.

### What's your favourite ride?

It's our Immersive Tunnels because of the way they have evolved since 2012, each one improving in every aspect from theming to the AV experience.

## Richard Monkton

Project Manager



### What do you do?

As project manager, I ensure all QCs are applied to the build and installation, budgets and deadline dates are met and the client is satisfied.

### What has been the highlight of your time at Simworx so far?

It has to be the 326-seat Angry Birds 4D theatre at Thorpe Park. I was project manager for this job, and it was our first project for Merlin Entertainments.

### What do you enjoy about your job?

It's great feeling when the public experience the attraction for the first time. They always give a round of applause which even after 10 years makes the hairs on my neck stand up.

### What do you like doing when you're not at Simworx?

I enjoy playing golf and spending quality time with the family.

## Linda Day

Financial Controller



### What do you do?

I manage the accounting function at Simworx.

### What has been the highlight of your time at Simworx so far?

Seeing the growth of the company since I've been here has been amazing. On a personal level, my highlight has been Carl Johnson joining the team. He is a larger than life character and makes me laugh every day.

### What is challenging about your job?

Keeping everybody happy.

### What do you enjoy about your job?

I enjoy the variation of the work along with the colleagues I work with.

### What do you like doing when you're not at Simworx?

I enjoy socialising and going to pop concerts to see my favourite bands.



Waterparks and theme parks are just part of Lotte Co's extensive business portfolio, which includes property, F&B and retail companies

# BEST OF THE LOTTE

With seven million visitors a year, Lotte World is one of the industry's big hitters.

Now the company has announced plans to build 20 'little Lotte' theme parks in China and beyond. Kath Hudson finds out more

Kath Hudson, Journalist, Attractions Management

**T**he world's largest indoor theme park, Lotte World, pulls in more than 7.5 million visitors a year, mainly from South Korea, putting it in the big league in terms of attendance, ahead of the likes of Hong Kong Disneyland and Universal Studios Hollywood.

Still going strong after 26 years, the cartoonish theme park owes much of its success to its great location in downtown Seoul, with excellent transport links. Additionally, being indoors, the attraction is not affected by South Korea's hot, humid summers or cold winters.

The six-storey venue is owned and operated by a huge conglomerate, Lotte Co Ltd. Founded in Japan and based in both Japan and South Korea, Lotte's other businesses include candy companies, fast food restaurants, cinemas, shopping malls and department stores.

## Expansion Plans

Now, Lotte is looking to the future as it plans to open around 20 kids' parks and expand the business beyond South Korea.

"The kids' park concept will be an interesting challenge for us," says Lotte World designer Liz Lee. "It's our first attempt at making a theme park for a narrower target audience."

The first is expected to open in December 2016 and the others are still under review. The 6,000sqm

(64,583 sq ft) parks will have five rides: two family rides and three children's rides as well as a live show and two play experiences. Using the Lotte World brand identity, they will target one to 10-year-old children and 31 to 40-year-old parents.

One of Lotte's strengths is the fact it's such a large company, with many complementary businesses so – going forward – the new theme parks are likely to become anchors of Lotte's retail ventures.

**"Lotte is looking to the future as it plans to open around 20 kids' parks and expand the business beyond South Korea"**

"Our new kids' parks will be designed following a strategy of making attractive anchor tenants for Lotte's new complexes," says Lee. "We hope we can use our theme park know-how to make different and more competitive shopping complexes."

"Our goal is to open 20 kids' parks, which will be like small versions of Lotte World, in South Korea and to expand the business into China. In fact, we are already developing a theme park

in Shenyang, China, which will open in October 2018," says Lee.

The 67,000sqm (721,182sq ft) Shenyang park will have five different zones: Adventure, Stars, Dream, Giant Ride and Heritage. There will be 25 attractions, nine F&B outlets and eight retail outlets.

"Of course, it will follow the brand identity of Lotte World, such as service and operations protocol, characters and facilities, but it will also introduce some new attractions," says Lee.

## Lotte's Success

Back in Seoul, Lotte World has enjoyed longevity, popularity and increasing success over the years thanks to its continual investment in new attractions.

The park now has more than 50 different attractions, including the adjacent outdoor park Magic Land, an aquarium with shopping and retail areas.

"Introducing new attractions is an important way of bringing in new visitors and keeping the site fresh for our loyal repeat customers," Lee says.

When it first opened in 1989, just after the Seoul Olympics, Lotte World was mainly made up of zones depicting different countries. While this theme has provided the glue for the attraction over the years, Lotte World is now moving away from this to depict more of South Korea's own fairy tales and to create new and unique fantastical experiences.





Lorry (left) is one of Lotte World's mascots. The Let's Dream night show (right), designed by the Goddard Group



Lotte's aquarium is divided into 13 themed zones. Caricaturists at Lotte World (below) and a bird-eye view of the theme park



## ABOUT THE AQUARIUM

Lotte's aquarium has 650 species and the country's longest underwater tunnel. It provides various experiences, such as feeding koi carp, presentations on white whales, penguins and sea lions.

Superflex G, the 21 screen cinema, has the world's largest screen (34m x 14m) which was listed in the Guinness Book of Records last year.

Last year, a \$7m (£4.5m, €6m) multimedia parade was developed to celebrate Lotte World's 25 years of operation. Let's Dream involves drones, holograms and 25 flying lanterns throughout the indoor park.





**The Dragons Wild**  
Shooting dark  
ride attraction, by  
Hetteema Group  
and Alterface

► The involvement of the Goddard Group, a Hollywood, California-based masterplanner and consultant, has helped steer this new course. The Goddard Group came on board in 2006 as Lotte World looked to invest and modernise for its 20th anniversary in 2009.

### Dream Park

"When we came on board, we wanted to create a dream park rather than a theme park," says Goddard Group executive Taylor Jeffs. "Creating a fantasy world has been a really successful way to bring Korean fairy tales and mythology into the park."

"We saw this as a huge opportunity because no one else is doing anything like this," says Jeffs. "Judging by attendance and guest satisfaction levels, this approach

is working. When we first started talking in 2006, Lotte World was achieving 5.5 million visitors a year. In 2014, they were up to 7.6 million – that's a huge gain."

One fairy tale which has been adapted into a ride is Brother Moon and Sister Sun, about a brother and sister who are chased into a tree by a tiger and climb into the sky to become the sun and the moon.

The Tall Tale Ride has one tower themed as the sun and one themed as the moon.

"Lotte had two un-themed Frog Hopper rides and this story was a perfect fit," says Jeff. "The ride lifts you up and the tiger swipes at you. It was a simple, low-cost way to bring in a Korean story."

Another new area is Underland, a themed zone under the park, with restaurants and

shopping. Lotte wanted to bring in a retail area, but also wanted to keep the area themed, so the Goddard Group designed a story about mischievous ogres living below the park. The ceiling and columns are covered with dirt and tree roots, and a sleeping ogre clutches a treasure chest.

"We made efficient use of the space to create Underland, and harmonised the story with the existing themes," says Lee.

### Kimhae Lotte Waterpark

In May 2014, Lotte launched a \$400m (£260m, €358m) brightly coloured, Polynesian-themed waterpark. It was an immediate hit, receiving approximately 18,000 visitors in its first four months.

The waterpark is not in the capital. Lotte chose the location of Kimhae in the south of the country, close to the its second-largest city, Busan, which has a population of 3.5 million and an international airport serving Japan, China and other Southeast Asian countries.

Phase one opened in May, followed by phase two in June 2015. Phase three of the waterpark – exclusively supplied by WhiteWater West – is yet to be completed. The waterpark's icon is Volcano, situated in the middle of the park. When the volcano erupts, a big wave is created towards the main wave pool.

"There hasn't been a similar themed waterpark in Korea until now, so we thought the Polynesian style would work well and offer a unique experience," Lee says.

"We have both an indoor and an outdoor waterpark, with 43 attractions. The outdoor part is composed of a wave pool, torrent river zone and rapid river zone. We're the biggest waterpark in South Korea and we have the longest slide and the largest wave pool in the nation as well," says Lee. ●

## LOTTE SUPER-SCRAPER

Lotte World Tower, a 123-storey, 555-metre (1,821 foot) skyscraper is currently under construction next door to Lotte World, and will be the tallest building on the Korean peninsula – and fourth tallest in the world – when it is completed at the end of 2016.

The conceptual design has a slender cone, with convex, gently curved lines. An exterior of pale-coloured glass is inspired by traditional Korean ceramics and feature accents of metal filigree.



**The Lotte World Tower, by Kohn Pedersen Fox**

The tower – designed by super-scraper specialist architects Kohn Pedersen Fox – will contain an aquarium, retail outlets, offices, residences, a luxury hotel and an observation deck called SKY123.

Also in development is a \$109m (£71m, €98m), 2,036-seater concert hall, with a 5,000 pipe organ, slated to open in 2016. This will be supported by a cultural foundation which will invest \$15m (£10m, €13m) annually in classical music.



**Inner-Tube Slides**

***Waterbom Bali, Indonesia***

Phase III Opened July 2015

# DISCOVER THE THRILL

World's Leading Waterpark Designer and Manufacturer

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

**WHITEWATER.**  
Waterparks

# JULIANA DELANEY

The Continuum CEO is a cheerleader for attractions based on popular culture. She talks to Kath Hudson

**J**uliana Delaney, CEO of UK visitor attraction management company Continuum, is an expert in the branding game, tapping into the British love of popular culture and the demand for visceral experiences to build a new attractions subgenre.

Continuum currently runs six attractions in the UK, with news of two more hot off the press. The company has just announced it will be collaborating with The Royal Mint on the 1,000-year-old institution's first ever visitor centre, and it also revealed its involvement in the upcoming Sherwood Forest Country Park in Nottingham, in partnership with Royal Society for the Protection of Birds (RSPB).

Other attractions are coming to an end, such as the temporary Coronation Street The Tour in Manchester, which closes this year.

The pop-up attraction took *Coronation Street* – an established ITV series – and reinterpreted it as a cultural attraction, meeting with an enthusiastic response from fans.

Continuum will partner with ITV a second time to create *Emmerdale The Tour*, another attraction based on a popular, long-running UK TV drama.

One of Delaney's first successes was helping to reinvent museums at the Jorvik Viking Centre in York, UK





The Rovers Return Inn has been central to the Coronation Street visitor experience

### You recently announced Coronation Street The Tour is closing in December. Why is this, and what has been the secret of its success?

This December we'll be saying farewell to something extraordinarily special. Coronation Street The Tour opened on 5 April 2014, initially for six-months, but due to public demand, extended planning permission was granted by Manchester City Council. In 2016, the site will be returned to owners Allied London for redevelopment.

The attraction has welcomed half a million visitors to the site where TV drama *Coronation Street* was filmed before its move to MediaCityUK. Guest feedback has been phenomenal – people have loved stepping into TV history. Our tour guides have done a brilliant job bringing the sets to life. We're thrilled to be continuing our relationship with ITV for the launch of *Emmerdale* The Tour, based on the TV saga.

### Tell us about *Emmerdale*

We're coordinating with ITV to test the operational viability of an *Emmerdale* visitor experience. From 9 August to 25 October, we worked with coach operators across the UK to deliver tours to the working sets. The experience differed from *Coronation Street* The Tour, because it was a live set which is used five or six days a week by ITV's *Emmerdale* crew. We agreed that trial period to make sure the tour element works for the cast and crew of *Emmerdale*, as well as for our guests. ▶

## CORONATION STREET THE TOUR

The *Coronation Street* TV drama is embedded in British culture, with a loyal fan base around the world. *Coronation Street* The Tour enables viewers to step, Narnia-like, through the wardrobe door into a behind-the-scenes world. An expert guide brings to life off-air stories and facts, while visitors take a walk on the famous cobbles and take a selfie in the Rovers Return pub.

"Because there was such a loyal brand following it needed to be dealt with sensitively," says Delaney. "We had to work closely with the script and production teams, but we delivered exactly what they wanted."

Opened in 2014 as a temporary attraction, planning permission was extended into 2015. In its first two months, the attraction welcomed 100,000 visitors.



Guests enjoy a photo opportunity on the tour

## THE CORRIE FILES

NAME
Coronation Street
NICKNAME
Corrie
CLAIM TO FAME
World's longest-running soap opera
DATE OF BIRTH
9 December 1960
DESCRIPTION
Popular soap opera revolving around the lives of the residents of Coronation Street, in the fictional town of Weatherfield, northwest England
CREATOR
Tony Warren, Granada Television
CHARACTERS
Ken Barlow, Jack Duckworth, Hilda Ogden
MOST VIEWED SHOW
Christmas Day 1987, 28.5 million viewers
BIGGEST RIVAL IN THE UK
EastEnders



Visitors enjoy the view from Emirates Spinnaker Tower in Portsmouth, UK

## CONTINUUM'S THIRD WAY

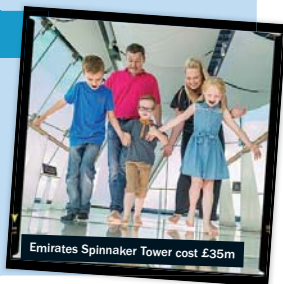
The 170-metre (158-foot) Emirates Spinnaker Tower is an example of the Third Way in action. Continuum has operated this lottery-funded project since 2005, when Portsmouth City Council needed a partner to secure the future of the tower, to run it commercially and share the profit with the city.

Continuum owns the business under a long lease arrangement with Portsmouth City Council. The lease was renewed in 2014.

"Our model works successfully at Emirates Spinnaker Tower, making the attraction an income generator rather than a

drain," says Delaney. "If Portsmouth City Council hadn't taken this decision, this attraction might have cost them money."

The tower became Emirates Spinnaker Tower following a £3.5m (\$5.5m, €5m) sponsorship agreement between Emirates and Portsmouth City Council.



### What will the Emmerdale visitor experience be like?

Visitors will enjoy a guided tour through the popular exterior sets where the Yorkshire drama has been filmed since 1998. It's a unique opportunity to see the Woolpack pub and more, with selfie opportunities aplenty.

### What's the formula for translating a popular culture brand into a visitor attraction?

There are three components. First, it needs to be a subject which has an established audience, whether that be Vikings, Romans, or *Coronation Street*.

Second, there has to be interest. Projects fail when no one's interested in the subject – all the marketing in the world won't work.

Third, the audience wants to experience the subject in a visceral way. We can

"Increasingly, we're seeing the audience doing the marketing for attractions"

be engaged when reading a book and emotional when watching TV, but we want to experience brands at attractions in a much more powerful, real way, sharing that emotional experience on social media.

Increasingly, we're seeing the audience doing the marketing for attractions. Emotional engagement goes up another level with a tangible experience. People don't tweet pictures of themselves watching *Coronation Street*, but thousands do from the Rover's Return Inn at the attraction.

### How do you apply this formula to leverage a brand?

It's important to be authentic and stay true to the brand. We worked closely with the *Coronation Street* production team to deliver what they "live". Storytelling is also a very important aspect.

We're on third-generation attractions now. The first generation was glass cases: don't touch. The second was out of the case: touch and smell. The new way is doing it while sharing it with others.

**NEW FUNSIZE ANIMAL RIDES!**

**WORLD OF RIDES**

...our business is child's play!

FOR EVERY LOCATION THAT ONLY HAS A 4.5M X 4.5M AREA AVAILABLE



**www.worldofrides.com**

ALL OUR POLLUTION-FREE FUNSIZE RIDES INCLUDE A 12V BATTERY, 12V FULLY AUTOMATIC BATTERY CHARGER, SAFETY SENSORS, DELIVERY TO MOST UK MAINLAND POSTCODES, AND 12 MONTHS H.S.E. - A.D.I.P.S. SAFETY TESTED DOCUMENTATION!

**SALLY CORPORATION**

**Bringing Your Brands To Life**



**THE GREAT AMERICAN DARK RIDE COMPANY**

745 W. Forsyth Street - Jacksonville, FL 32204, USA (904) 355-7100 - Fax (904) 355-7170  
Associate/Sales Offices: Australia - Korea - Spain - United Kingdom

**www.sallycorp.com**

Visit us at IAAPA Booth #2253

f t y in

## CONTINUUM'S CULTURAL & HERITAGE ATTRactions

### 1 The Canterbury Tales

A regional attraction inspired by the literary text, the sights, sounds and smells of Medieval England are accompanied by Geoffrey Chaucer's characters

### 2 Oxford Castle Unlocked

Visitors discover Oxford's hidden history through a tour of the castle and Victorian prison, led by costumed guides

### 3 The Real Mary King's Close

Beneath Edinburgh's Royal Mile, hidden streets date back to the 17th century. A unique tour teaches guests the story of those who lived there

### 4 York's Chocolate Story

At Chocolate Story, visitors embark on a sensory journey through York's chocolate and confectionery heritage and discover its trading and manufacturing roots

### 5 Sherwood Forest

Continuum is teaming up with the Royal Society for the Protection of Birds (RSPB) to build and run a visitor centre in Sherwood Forest



PHOTO: CONTINUUM/NSRF

"Our commercial team can turn a struggling visitor attraction into a sustainable business by breathing fresh life into it"

When we're developing attractions we're already thinking about the photo opportunities. I was impressed at Madame Tussaud's as the figures are not behind barriers – you can take selfies with them. Allowing people to touch, share and engage can revitalise a brand for new generations.

#### What is Continuum's Third Way model?

It's a model to help local authorities [UK local government] running attractions and museums, which have high operating costs and lack the funds to innovate.

We're having interesting discussions with local authorities who otherwise face the choice of closing an attraction or continuing to run it at a loss, because we can turn attractions from a loss into a surplus.

Our commercial team can turn a struggling visitor attraction into a sustainable business by breathing fresh life into it, centralising services and having cost-effective teams on-site.

We find the story and we find a way to support it with better marketing and commercial activity. We can also create other income generators – for example, corporate events or weddings.

#### What shape do you think the attractions industry is in at the moment and where is there room for expansion?

It's survived the recession very well because of the trend towards days out instead of an extra holiday. I'm a great advocate of good museums and love

theme parks, but I'm not sure we need more museums – whether free or paid for – or any more theme parks in the UK.

However, I believe there's space in the middle for cultural visitor attractions and attractions based on popular culture.

#### What's next for Continuum?

Within the next five years we're looking to double the number of attractions we operate in the UK and Northern Europe.

We currently operate several sites across the UK and we're adding at least two more locations to the portfolio in 2016.

We're also planning to continue to invest in our own attractions, so we wholly own them and also to partner with other strong brands for operating contracts. ●





Singha at Siam Park, Spain

Copyright © 2013 ProSlide Technology Inc. All rights reserved. ProSlide, the ProSlide logo and any other marks used herein are trademarks or registered trademarks of ProSlide Technology Inc. in Canada, the United States of America and other countries.

## FIVE PATENTS. TWO EXCLUSIVE TECHNOLOGIES. ONE MIND-BLOWING RIDE.

ProSlide's **FlyingSAUCER™/RocketBLAST™**: two world-first technologies in a single hybrid ride!

The **RocketBLAST** water coaster marries technologies from ProSlide LIM coasters with turbine technology to take water propulsion to a new level:

- 100% steeper hills than traditional 'blast' coasters: with a row of water jets on every climb
- 50% more capacity: patented channels on the boats maximize every drop of water
- 60% more efficient: control systems, sensors and zone-blocking optimize operations

The massive **FlyingSAUCER** features are steeply angled to create 'drop-and-dive' sensations, like a World Cup giant slalom ski race! Maximum curving speed and centrifugal forces!

See for yourself: [proslide.com/hybrids](http://proslide.com/hybrids)

Visit us at EAS, Booth #B902, and IAAPA Booth #5139!



[www.watertoys.com](http://www.watertoys.com)  
[info@watertoys.com](mailto:info@watertoys.com)  
 1 866 833 8580 | 905 649 5047  
 IAAPA BEST NEW PRODUCT & IMPACT AWARD  
 WWA INNOVATION AWARD

# CRYSTAL WATERS

**An innovative design combines waterpark and theme park to become one of the UAE's most exciting new developments**

**A** mixed-concept theme-water park boasting a mixture of 40 wet and dry attractions is coming to the emirate of Sharjah in the UAE.

Jack Rouse Associates (JRA) has unveiled the master plan and the preliminary designs for Crystal Lagoon water-theme park, part of the \$5.4bn (£3.5bn, €4.8bn) Sharjah Waterfront City development.

Crystal Lagoon will be sited on one of a series of 10 islands interconnected by man-made canals – part of the upcoming Waterfront City, a luxury residential, commercial and tourism destination across on 36km (22.3 miles) of coastline.

Attractions will include a combination of waterslides, family rides, thrill rides, 4D dark rides, a state-of-the-art planetarium

and children's rides. Crystal Lagoon will also have a rollercoaster that combines the action of a water ride with the interactive nature of a video game.

Crystal Lagoon will feature a night water show made up of a series of coloured fountains as a "relaxation" event for visitors to chill out after spending a day in the water/theme park hybrid.

"We have launched Sharjah Waterfront City in line with Sharjah's development plans to attract 10 million visitors to its emirate by 2021," says Hayssam El Masri, president of developer Sharjah Oasis Real Estate. The emirate currently receives 2 million tourists per year.

"These robust plans will increase demand for residential and commercial units as well as hotels, especially in

prime locations that offer all modern facilities and we can proudly say Sharjah Waterfront City will be able to match the demands and provide the desired quality of living," says El Masri.

The attraction will operate year-round, with a "well known waterpark operator" handling day-to-day operations at the park.

According to a feasibility study by Colliers International, more than 1 million people are expected to visit the attraction on an annual basis once fully operational.

All figures suggest that Crystal Lagoon is aiming high; the most-visited waterpark in the UAE, Aquaventure in Dubai, attracted 1.4 million guests in 2014. Estimates from Crystal Lagoon Entertainment, who will own the park, forecast it will generate an ROI of between 19 and 24 per cent. ●

**" ATTRACTIONS WILL INCLUDE A COMBINATION OF WATER SLIDES, FAMILY RIDES, THRILL RIDES, 4D DARK RIDES AND A STATE-OF-THE-ART PLANETARIUM "**



An aerial view shows Sharjah Waterfront City, a brand new luxury development in the UAE



Plans by Jack Rouse Associates show what the waterpark-theme park hybrid could look like





# LEADING THE WAY IN WATERSLIDE DESIGN AND MANUFACTURING

HEADQUARTERED IN TURKEY, POLIN WATERPARKS IS ONE OF THE LEADING COMPANIES OFFERING INDUSTRY'S WIDEST RANGE OF WATER SLIDES, PLANS TO FURTHER EXPAND ITS L-RTM LINE WHILE INTRODUCING NEW SIGNATURE RIDES AND INNOVATIONS.

*Director of Marketing and Communications, Söhret Pakis answered our questions and gave us an overview of current and future projects of Polin.*



Director of Marketing and Communications, Söhret Pakis

## Please tell us a bit about your company.

Polin was founded in Istanbul in 1976. Since then, it has since grown into a leading company in the waterparks industry. Today, Polin is one of the world leaders in the design, production, engineering and installation of waterparks and waterslides. Our firm has completed more than 2,500 waterpark projects in 93 countries around the world, and we are currently the largest waterslide supplier to Eurasia.

Working with a wide variety of clients has helped Polin reach several milestones, including the installation of the very first waterparks in many countries, as well as the design of many other award-winning rides at parks with world-renowned reputations.

Polin offers the industry's widest range of products, including signature rides such as the patented King Cobra, Magic Spheres, Spheres, Magicone, Space Shuttle and Space Race.

Polin also is the waterslide industry pioneer in the advancement and application of closed-molded manufacturing technology. Polin first implemented the use of this technology in 2006. Today, we have converted 100 percent of our annual fiberglass production to resin transfer molding (RTM), we offer both bowl rides and family rides featuring RTM techniques. Polin also offers its unique and patented **Natural Light Effect (NLE)** technology and **Special Pattern Effects (SPE)** technology in RTM and **Translucent RTM** waterslides and we meet all of the industry's highest standards.

Polin is an ISO9001 certificate holder by TUV Germany since 2003, and all Polin slides conform to European norms. Plus, all steel parts conform to international DIN standards, all designs conform to ASTM practices, and Polin is CSEI-approved for projects in China. Polin is the only waterslide company that holds a quality certificate for all of its waterslides from TUV, and our firm was the 2012 Export Winner of Turkey in the SMSE Category.

Polin is able to produce its attractions with a fast turnaround due to its high-capacity and state of the art plant in Turkey, which is now the largest waterslide manufacturing plant of the world, with a closed area of 35,000 sqm.

**Polin's team includes 500 people in 5 offices around the world.**

## What's everyone taking about in the industry at the moment?

Probably one of the biggest trends is theming. Customers love stories, so they want the parks they visit to tell them stories, including the rides at the parks. So that means we need our waterslides to be able to work with the themes and tell the park's stories, too. That's one of the reasons we created the King Cobra waterslide. It was the very first waterslide in the world to build theming into its actual design into the fiberglass itself. King Cobra marks an important milestone in the waterslides history.

And what's important to note is that means that the theme of the King Cobra waterslide doesn't have to be a cobra. It can be any theme a park needs. So for a park in China, for example, that means we created a dragon-themed version. And for a park in Indonesia, at Bugis Waterpark, we created the slide with a ship theme. And when Cartoon Network's Amazone waterpark wanted the very unique theme of Humungousaur, we were able to create that, too.

Our theming the waterslides as the characters of the CN animation series brought the Leading Edge Award of WWA to the park last year. So theming is central to every waterslide we design today.

## What effect are these issues and trends having on your business?

Basically, the effect is that we must pay close attention to what guests and our clients want. We can't simply create rides that seem like a good idea - they actually must be a fantastic idea based on actual research into what guests want. They must truly meet the specific needs of our clients, which means creating rides that meet the desires of the park's guests.





In essence, that means the guests themselves are now helping to shape our waterslide designs. On the manufacturing process, I'd like to focus on the RTM process again. What's good for our clients is that this technology doesn't simply improve the looks of our slides. It also creates stronger slides that use less waste in the manufacturing process, which is critical in today's environmentally conscious world.



The movement toward closed-molded technology will eventually displace conventional, traditional molding methods. And that gives us a huge advantage because Polin is the pioneer in the advancement and application of this manufacturing technique.

In fact, we're the only waterslide supplier in the world that offers a complete line of products using **RTM technology** which is the latest and the best technology in manufacturing waterslides. We are also able to offer our patented **Natural Light Effects (NLE)** and **Special Pattern Effects (SPE)**, which is a huge milestone in the world of waterslides. Plus, we are elevating the waterslide manufacturing one step further with the new launch of slide series at IAAPA Orlando.

**What in your view are the challenges in the industry at present? How can these be overcome?**

The biggest challenge is the continuing evolution of the waterpark industry. It simply never ends. Guests always want something new and unique, so to keep them interested and coming back again and again, we must make sure our clients have the most fun, most exciting and most original rides ever created. But while that might be a challenge, we see it as an opportunity. We study our clients' interests and research their desires. And our research shows guests want excitement. They want their hearts to pound. They want a ride to take their breath away.

So we create rides with new, exhilarating drops, multiple uphill and centrifugal sliding routes, and water jets that push guests along even faster - rides with steep entries and the thrill of free falling. We're able to provide these types of attractions because we use computer-aided design and simulation to create 100-percent safe rides that meet guests desire for excitement while ensuring their complete safety.

**What are the most exciting things happening in the industry?**

Along with the trend of theming and multi-rider attractions, we think guests' interest in interactivity is adding a lot of excitement to the industry. It's also why we have introduced what we refer to as effects- and technology-integrated waterslides. Plus, we are also working to add the digitalization and the socialization into the waterpark attractions.

What we've done in designing these slides is to include new features that automate the slides, such as waterslide traffic-control and signal-light systems. It's also the inclusion of sensor and timing systems, control units and other special effects that I mentioned earlier, such as visual and auditory effects. And we are incorporating these new technologies into the rides themselves. That means our customers don't have to buy the technology in addition to buying the rides, which makes our rides are truly interactive. There are no add-ons to "regular" waterslides. Our attractions are high-tech throughout.

## EXPERIENCE THE EXPERIENCE

- ⦿ Founded in Istanbul, Turkey in **1976**.
- ⦿ Current headquarters in Dilovasi, Turkey.
- ⦿ Production plants all in Turkey.
- ⦿ Total plant area **35,000** sqm.
- ⦿ Team of **500** people dedicated to waterpark industry.
- ⦿ Offices in Russia, Morocco, Macedonia, Montenegro.
- ⦿ Global market leader in design, manufacturing, installation of waterslides.
- ⦿ **2500** waterpark projects in **93** countries worldwide.
- ⦿ Globally signature waterpark supplier of the leading waterpark chains.
- ⦿ Signature waterslide designer.
- ⦿ Installed biggest and award winning waterparks / waterslides.
- ⦿ Offers industry's widest range of waterslide attractions.
- ⦿ Pioneer in RTM waterslide manufacturing and the sole producer offering the all line in RTM.
- ⦿ Technology leader in waterslide manufacturing.
- ⦿ Meets industry's highest standards.
- ⦿ Strong R&D focus.

## About Polin team.

We believe our facilities demonstrate our ability to efficiently expand our production lines and execute our growth strategy. We have an experienced, talented, and innovative staff of professionals dedicated to the aquatic industry.

The quality of our people is the key to our consistent success. The superiority of our staff makes us stand out. Each team member possesses specialized industry knowledge. The unique combination of our team adds value by introducing diverse approaches and perspectives to ensure maximum customer satisfaction.



**PolinWaterparks**  
THE EXPERIENCE



# AHEAD OF THE GAME

Is selling advance tickets online worth the upfront investment costs? Kath Hudson reports

Kath Hudson, journalist, Attractions Management

**T**heatres and stadium events have long been selling tickets in advance online, and now the attractions industry is starting to embrace the technology.

It means that visitors can buy their tickets on their mobile device, laptop or desktop – and by driving customers to the attraction's website, operators can also benefit from secondary spend in the online shop or by upselling add-ons.

Offering this service can sometimes require a large upfront investment, which is undoubtedly a barrier; however, with an upcoming generation used to doing things immediately and having technology at their fingertips, attractions might start to find that if consumers can't buy a ticket when they want to, they might not visit at all.

So what are the business reasons for investing in the technology to offer this service? We ask five experts.

## SIMON KNIVETON VENNERSYS

Information systems director

Marketing teams win massively with advance online ticketing, as they have access to the purchasers contact data allowing them to analyse visitors and to measure the effectiveness of marketing campaigns.

They can also follow up with surveys after the visit to measure customer satisfaction, as well as communicate with those customers in the future to advertise upcoming events.

Analysing the data generated through advance sales also gives a better understanding of customer behaviour, highlighting popular and quieter periods,



so the operator can design promotions to drive visits on less busy days.

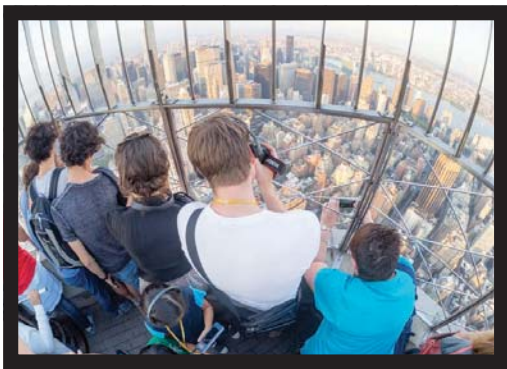
Our customers have found that when tickets have been purchased in advance, people tend to forget about the money spent and are then more inclined to spend more money on the day of visit, leading to increased levels of secondary spend, or even trading up to an annual pass.

Advance ticketing also allows operators to sell tickets to limited capacity or timed attractions and events, as well as selling passport tickets which can allow different levels of attraction access.

Payment card industry compliance is probably the single largest barrier which visitor attractions will face over the coming year, as achieving auditable compliance is a time-consuming and expensive task for any attraction.



Advance ticketing can be used in-queue to shorten lines. Gateway supplies ticketing for Point Defiance Zoo (top) and the Empire State Building (right)



## DON EASH GATEWAY TICKETING

COO and executive vice president

It used to be that an online store was considered a bonus. Now it's table stakes to be in the game. To be competitive in the attractions market, you have to sell online. What we see with our customers is that when they launch their online store, the sales ramp up, then level off or steadily increase over time.

People have a much higher propensity to buy tickets in advance and the easier you can make that process for them, the more they will buy. It's important to note that advance selling doesn't mean necessarily buying tickets at home either. You can use it as an effective strategy to shorten lines. If people are waiting in line and see that they can buy tickets on their



phones, they can skip the lines and have a better experience and, better yet, not get discouraged and leave.

The design and feel of the online store is important. Empire State Building does a great job with advance ticketing. Their website and online store tie together nicely and you get a really good feel for them as an organisation and what the experience would be like if you go there. Consequently, they have robust online sales. The better the online presence an attraction has, the more appealing the facility feels and the more likely people will make a purchase.

Capitalising on advance ticketing

really involves testing what works for your consumer base. For theme parks in general, most studies have found that Mum makes the purchase decision.

Mum is the one doing the research, looking at pricing and planning the vacation. So tailoring your website to appeal to her when she's doing her shopping is important and makes a difference in the conversion. Appeal to her by highlighting the things available for kids and families, and that your attraction is a safe place to be, rather than the wild, action thrill rides you have.

Point Defiance Zoo, the Warner Bros Studio Tour – the Making of Harry Potter and KidZania London are examples of our customers who offer advance ticketing.



Tickets to Warner Bros Studio Tour can only be purchased in advance

### TJ CHRISTENSEN

#### ACCESSO

Senior vice president, business development

Advance ticketing offers an exceptional opportunity for operators. Across our portfolio of clients we see attractions selling between 20 to 40 per cent of their total tickets through eCommerce. Within that percentage we're seeing huge shifts in purchase behaviour.



In 2012, mobile ticket sales were only 2 to 3 per cent of our total online sales volume. Three years later and we're quickly approaching a "mobile majority" where anywhere from 20 to 30 per cent of online ticket sales come from mobile devices.

This shift in purchase behaviour is overwhelming evidence that an attraction's website needs to deliver the content appropriately on whatever device a guest is using, and provide an easy way to purchase when, where and how they want to buy.

The more guests buy tickets online, the more other items guests buy online. If an attraction is fully leveraging its eCommerce and mCommerce sales channels, the number of overall guests who purchase tickets online in advance will increase dramatically. If the online store is easy to use, guests buy more than just their ticket: they'll buy parking, meals and more, helping to increase the overall spend per cap.

A recent example is Accesso's deployment of the Passport ticketing suite at the One World Observatory, providing convenient access to advance ticket sales through desktop computers, tablets and mobile devices and offering flexible solutions that keep pace with ever-changing consumer buying behaviours.



If the online store is easy to use, guests buy more than just tickets: they'll buy parking and meals, helping to increase the spend per cap



Accesso's Passport solution is used at the One World Observatory in New York

### PETER FERGUSON

#### THE ACCESS GROUP

Head of operations

Advance tickets sales allow those who have purchased tickets in advance to be fast-tracked at the point of entry, which reduces queue times. The advance ticket data can be used to forecast daily admission numbers and



accurately predict staffing requirements, which means the attraction can save money on staffing costs by cutting down on the number of admission desks they have to open.

However, in order to make the most of these advantages, it is important that the visitor doesn't need to go to the admissions point on the day of the visit to collect tickets. This can be achieved by emailing them the ticket to print out at home, or using self-service kiosks or mobile handsets for ticket collection.

In the future, emailing directly to wallet applications on smartphones and iWatches will become more popular, further streamlining the transaction for both the operator and customer.

Cashflow can be improved by using advance ticketing, as some people buy tickets up to six months in advance. It makes the visitor figures less vulnerable to bad weather, as if people have made the purchase they tend to visit anyway, and if they decide not to, the attraction has already secured the income.





Gateway  
TICKETING SYSTEMS

SMARTER SOLUTIONS. SMARTER TICKETING.

SOLUTIONS | SERVICES | SUPPORT | STRATEGY

## THE NEXT DIMENSION IN TICKETING

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

Gateway Ticketing Systems, Inc. is the world leader in ticketing, access control and revenue generation solutions, services, support and strategy.

For more than 27 years, the world's top attractions, theme parks, water parks, zoos, aquariums, museums, historic sites, science centers and tours have trusted Gateway and our Galaxy® Product Suite to drive their businesses.

Our full-service approach means confidence for you, your operation and your brand every step of the way.

Join the Gateway family today  
... you'll be in good company!

### U.S. HEADQUARTERS

[gatewayticketing.com](http://gatewayticketing.com)  
+ 1 610.987.4000

### UK OFFICES

[gatewayticketing.co.uk](http://gatewayticketing.co.uk)  
020 7912 2022



Syx Automations  
Solutions You Xpect

## TICKETING SOFTWARE

FOR MUSEUMS, THEME PARKS, WATER PARKS, ZOOS AND AQUARIUMS

- Timed ticketing
- CRM & Big data
- POS & Retail
- Bookings
- Event management
- Online solutions & mobile apps
- Self-service kiosk
- Access control

Call us on 01782 499195 or visit [www.syxautomations.com](http://www.syxautomations.com)



Syx Automations built a trader portal for the View from the Shard, helping partners by advance tickets

### ROBERT VERMAZEN

#### SYX AUTOMATIONS

Operations manager

Advance ticketing enables attraction operators to create a dynamic and flexible pricing structure, offering different rates depending on the day, time of day, or season.



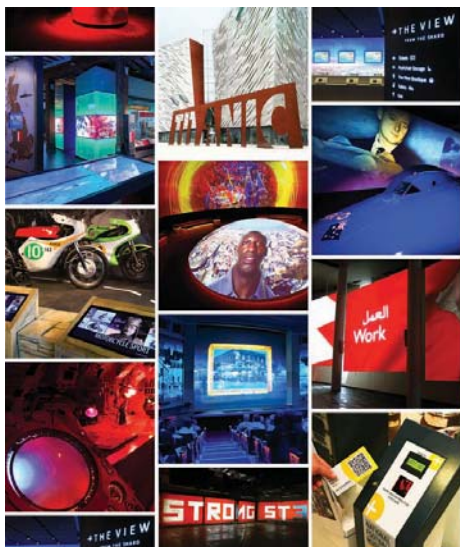
Offering customers discounts for buying tickets in advance, but charging full price on the day, can give people a further incentive to go ahead and make the booking. This can also be used to help boost attendance during quiet times.

Advance ticketing also allows pricing structures to be set up through third parties. Many operators depend on partnerships with tour operators and group organisers to sell tickets on their behalf. Giving them the option to book through a customised portal which changes the ticket price accordingly aids efficiency and improves customer service.



By allowing partners to book online, operators get a better overview of bookings throughout the year, and can immediately see volumes per partner. For London's the View from the Shard attraction, we created a dedicated trader portal enabling

trade partners to book tickets in advance and only see events and tickets which are relevant to them. We can restrict the quantity of tickets they can sell by time slot and day, giving the Shard complete control over which days and or periods they sell. ●



## D J WILLRICH LTD

AUDIO VISUAL & MULTIMEDIA SPECIALISTS

CONSULTANCY  
AUDIO SYSTEMS  
VIDEO SYSTEMS  
LIGHTING DESIGN  
INTERACTIVES  
SIMULATION  
INSTALLATION  
SERVICING

+44 (0)1590 612603  
djw@djwillrich.com  
www.djwillrich.com



**everything we do:**

*it's just child's play*

Penrhosys  
Natural Park  
Norfolk



**eibe**  
complete inspiration



**ISO  
9001  
QUALITY  
ASSURANCE**

**www.eibe.co.uk**  
**01483 813834**



# TURN OVER A NEW REEF

The Florida Aquarium and the National Aquarium of Cuba both work to protect coral, sea turtles and sharks

Florida and Cuba aquariums forge a partnership to protect and restore the Caribbean's coral ecosystems, setting an example for other aquariums to follow

Alice Davis, managing editor, Attractions Management

In August, the Florida Aquarium entered a bilateral agreement with Cuba's National Aquarium in Havana, forming a mutually beneficial partnership aimed at working together on marine issues. Efforts to protect and preserve coral reefs were made a priority in the collaboration.

With less than 250 miles (400km) separating the two attractions, the Florida Aquarium believes studying Cuba's underwater ecosystem – where the reefs are in far better condition – will help with the coral restoration process in the Florida

Keys archipelago. In return, the Tampa Bay aquarium will share with the National Aquarium of Cuba (NAC) what it has learned about restoring coral reefs and growing coral in a controlled setting.

The aquariums agreed the partnership in 2014, deciding to keep a simple focus on education, research and conservation.

"It's an opportunity to work with an aquarium that shares the exact same environment," says Margo McKnight, vice president of biological operations at the Florida Aquarium. "Cuba has done a really great job protecting its reefs and that's

what we're most interested in – Cuba's ecosystems are in much better shape, whereas we are trying to restore ours.

"Observing Cuba's reefs and collecting data on the biodiversity present on these healthy reefs will help us recreate the reefs in the Florida Keys. It's like rolling back time – a snapshot of what our reefs likely looked like," says McKnight.

The Florida Aquarium works with the Coral Restoration Foundation (CRF), as well as other groups, planting fast-growing staghorn coral in the Keys. Monitoring the species and ecosystem in Cuba – which



Volunteer divers with the Coral Restoration Foundation plant staghorn coral to help rebuild the reefs around Florida





The Florida Aquarium conducts a variety of educational and public awareness programmes



is famed for its Jardines de la Reina (Garden of the Queens) National Park in the southern waters off the provinces of Camagüey and Ciego de Ávila – will help the Florida mission focus its efforts to rebuild a productive and healthy reef.

"The Florida Aquarium is taking an active and progressive position on protecting and restoring coral reefs," says Ken Nedimyer, founder and president of the CRF. "They are involved in some progressive research aimed at finding actionable solutions to some of the key problems on coral reefs."

"Cuba has been exposed to the same big problems and events that have degraded most of the rest of the Caribbean – sea urchin loss, overfishing, coral diseases and bleaching, inadequate sewage treatment, poor storm water management, agricultural run-off and hurricanes – so I think the Florida Aquarium can bring the right balance of research, solutions and action to some of the problems facing Cuba's coral reef ecosystems," says Nedimyer.

With Cuba and the US making historic moves to normalise their relationship, more and more people are going to be visiting the island nation. Conservationists are pressing for responsible tourism that won't have a negative impact on Cuba's ecosystems. Aquariums can provide programmes

**"Aquariums stand in a unique position to empower their constituents to get involved in coral restoration as citizen scientists"**

directed at educating visitors about this – and even encouraging them to play a part.

Fernando Bretos, director for Cuba marine research and conservation at the Patricia and Phillip Frost Museum of Science in Miami, Florida, has been working with the NAC for over 10 years on coral reef and sea turtle conservation.

"Through exhibits and outreach programs, aquariums can introduce the public to the benefits of coral restoration," Bretos says. "They also stand in a unique position to empower their constituents to get involved in coral restoration as citizen scientists. For all its value for restoring underwater ecosystems, coral restoration is limited by the number of volunteer divers

that get involved in planting corals. In other words, the more volunteers involved, the more coral can be restored."

The science of coral restoration has seen success in Florida, and by working in partnership the two aquariums will be able to share more information and cover more ground. With an influx of American tourists on the horizon, McKnight is optimistic that Cuba will be able to learn from environmental mistakes made elsewhere in the world, "rolling back time, but knowing what we know now. They can learn lessons that we are now having to fix."

For Nedimyer, if attractions want to aid conservation efforts, it's vital they select the right issues to focus on. Often that will be something in the local area, and if efforts directly benefit the local community, then fundraising will be easier.

"Most public aquariums have very active conservation programmes and are making a difference in the areas they have decided to focus on," says Nedimyer. "They can't do everything, so they must focus on an area that is strategic for them, their clientele and their donor base. The Florida Aquarium has chosen to focus on reefs and it makes sense based on their geographic location. I think they'll be a key player in developing a public awareness programme in Cuba for coral reef protection and restoration." ●



Interactivity is central to the new Justice League: Battle for Metropolis rides

# THE RIDE MAKERS

**The future's bright: we meet four more companies discussing the burgeoning dark rides sector and its latest and most advanced technologies**

Jason Holland, journalist, Attractions Management

## ALTERFACE PROJECTS

**BENOIT CORNET**

**CEO**

### What is your most recent dark ride?

Justice League: Battle for Metropolis 4D, in Six Flags over Texas and Six Flags St Louis. The interactive dark ride is based on the famous Warner Bros / DC Comics IP. It was designed by Sally Corporation, with Alterface Projects' interaction and gameplay system, custom motion-based vehicles from Oceanering and video animation by Pure Imagination.



### What are the current trends?

We're in an exciting era for dark rides. New technologies like interaction, 3D graphics,

4D effects, video projection mapping, vehicles with new capabilities and many others are now blended together with traditional dark ride features like true-to-life scenery and animatronics. This mix of new technologies makes dark rides even more immersive. IPs are also a big deal these days because the story is the heart of a dark ride attraction. Teaming up with the best storytellers makes a lot of sense.

### Have you made any engineering, design or manufacturing breakthroughs or advancements?

As the one stop company for interactive technologies in amusement parks and attractions, we're currently developing new ways for the guests to interact, beyond the usual laser gun. Some of our latest advancements don't require any interactive device to play – you can play with hand gestures alone. Besides creating new gameplay, we're also improving our existing system, for instance by getting rid of the physical target boxes. We've also created

the first interactive fog screen with targets that guests ride through on Justice League.

### What have been the biggest changes for ride makers in recent times?

Attractions based on IPs have quickly become a major trend, but their success can fade if the franchise doesn't release new content for a while. IPs are appealing for obvious marketing reasons but, as ride makers, we need to ensure our attractions stay relevant and popular in the long term.

### What's on the horizon?

We have a bunch of dark ride attractions based on famous IPs in the pipeline. IP owners need to be very careful that their brands and characters are in good hands, so we're proud to be regarded by them as a reliable and faithful partner for IP-based attractions; from our first dark ride inspired by Lego toys in 2009 to the hit cartoon Huntik and Marvel and DC Comics' superheroes ... and more big names that we can't reveal yet.



A rendering from Simuline shows details of a proposed ride installation

## SIMULINE

BYUNG HWAN CHOI

CEO

**What is your most recent product, and what makes it stand out?**

We most recently collaborated on an interactive, dynamic motion dark ride vehicle that is very unique. It is one of the first dark ride vehicles in the world to have a strong heave motion.



**Have you made any engineering, design or manufacturing breakthroughs or advancements?**

We've been able to take the core technology from our motion rides and add that to the dark ride experience in a highly cost effective way. We've also developed some very interesting environment effects that we hope to use in future projects.

**What are the current main trends in creating a dark ride?**

We're seeing a lot of dark ride attractions add motion and interactivity to the experience. We believe that passive rides are still the best way to tell a story, but interactivity is here to stay as well.

**Can you describe the current market climate? How do you stay ahead of the competition?**

With the theme park market in general – and especially the Asian market – flourishing, demand for high quality rides is at an all-time high. Our focus is on continuing to build systems that are unique and maximise immersion in the story.

**What are you doing that other dark ride makers aren't?**

Simuline has the unique advantage of not just being a hardware company. We have the resources to produce Hollywood-calibre content as well – and together with our years of experience creating motion rides and 4D theatres, we believe that bringing that know-how to dark rides has put us in a position to create a truly unique product.

**What's on the horizon for you as a company?**

Our standalone products have been installed in hundreds of sites across the globe and in recent years, we've had the good fortune to be involved in some major theme parks as well. Drawing on these experiences, we're in the process of developing some very interesting systems for future projects.

**And for the wider ride-making industry?**

With continuing technological advances in ride-related systems such as AV and interactive technology, we're excited about the kinds of ride experiences that may appear in the near future.

Simuline's ride Valkyrie features dual screens and back-to-back seating



Triotech's latest ride is *Voyage to the Iron Reef* at Knott's Berry Farm, California



## TRIOTECH

### ERNEST YALE PRESIDENT & CEO

#### What is your most recent dark ride?

Our most recent dark ride project is *Voyage to the Iron Reef* at Knott's Berry Farm in California. It's a media-based dark ride that's interactive. Guests are, therefore, an intricate part of the experience as opposed to passive observers. This ride stands out for the quality of the immersion, the intense interaction with hundreds of digital creatures throughout the ride, the integration of physical elements with the media, the competitive scoring which drives repeat visits, and its wide age group appeal.

It was important to the park that we designed a ride that everyone in a family would want to ride again and again. The objective was to have all guests – parents, kids, teenagers, even grandparents – want to do the ride again because they enjoyed it.



#### Have you made any engineering, design or manufacturing breakthroughs or advancements?

The number one advancement is interactivity. Allowing guests to be an active participant in the ride greatly augments the experience. Media-based rides allow almost endless possibilities when it comes to how and where interactivity occurs, especially when compared to earlier laser-based technology where the guest had to aim at a specific marked target. This is important; targets can appear anywhere on an oversized screen. The place they appear can even be changed overnight. Compare that to a specific laser "red-dot" target which is always at the same place and it is clear that for guests it's a lot more fun when they can interact "everywhere".

Content can be changed on media-based rides. New content attracts guests for repeat visits and this drives the park's revenues up. A case in point is Canada's Wonderland in Toronto. Their interactive dark ride, called *Wonder Mountain's Guardian*, features a quest to recover the king's lost crown. However, in Halloween season, the ride is changed to a *Zombie* adventure. The park has seen increased attendance compared to previous years, which has had a positive financial impact.

## We develop new technology for original attractions

#### How do you stay ahead of the competition?

It's constant innovation, with technology but also with know-how. Technology is important and we invest a lot of money into it, but the other thing Triotech excels at is know-how. This core competency drives our ability to integrate all the elements – technology, content, storytelling, gaming, competition, theming, special effects, audio – into one compelling experience for guests.

#### What's on the horizon for you as a company?

Seamless integration of the ride itself with pre- and post-ride elements. Whether it is using social media or interactivity, guests will benefit from an augmented experience. We're launching brand new interactive technology that will be triggered strictly with hand gestures, with no need for guns or other interactive devices. ▶



# TRIO TECH

CREATOR OF FUN



**maestro**<sup>™</sup>  
hand gesture technology

**WORLD PREMIERE HAND GESTURE TECHNOLOGY**  
*Interactivity without a targeting device*

PRE-REGISTER TO EXPERIENCE IT DURING **IAAPA ATTRACTIONS EXPO**

[sales@trio-tech.com](mailto:sales@trio-tech.com)



BOOTH  
**1053**

**maestro**<sup>™</sup>  
hand gesture technology

## SIMWORX

TERRY MONKTON

DIRECTOR

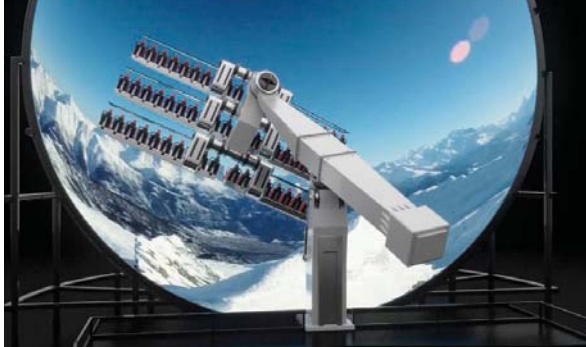
**What is your most recent/current dark ride, and what makes it stand out?**

Simworx has a distinctive variety of dark rides and the 360°

Flying Theatre is our latest attraction. As specialist suppliers of media-based dynamic simulation attractions, our partnership with Mondial, one of the world's leading amusement ride manufacturers, enables us to bring a new range of technologies together to create this cutting-edge attraction.

Using the latest 3D visual technology projected onto dome screens, riders experience a real feeling of flying as they're immersed into a highly entertaining movie, enhanced with a range of optional special effects. The audience "soars" through the film – legs dangling – as they're seated in three rows of 20 and transported sideways, backwards, forwards, up and down, providing a fun and exhilarating experience that appeals to audiences of all ages.

We've recently installed a new custom 3D/4D immersive simulation attraction at Merlin's London-based Shrek's Adventure. The flying bus ride, which is based around our Immersive Tunnel, transports riders through a fairytale world, with Donkey at the helm. The ride uses advanced technology, 360° 3D projection and unique



DreamWorks 3D animation, together with numerous multisensory effects.

**In terms of engineering, design or manufacturing, what have been the most exciting breakthroughs or advancements you've made lately?**

Following our recent acquisition of RoboCoaster, the company is now concentrating on the launch of a range of AGV and RCX dark rides. The AGV rides are trackless and not hampered by any power cables, and move at up to 0.5g. They're available with a variety of different motion systems, sizes and on-board 4D effects. The latest AV solutions combine with the ride to offer an enthralling experience.

The RoboCoaster RCX range offers either a fixed or tracked solution, providing three axis motion, high-quality media content and AV solutions, plus optional 4D effects.

**What are the current main trends in creating a dark ride?**

Media-based attractions continue to grow in popularity, thanks to a range of well

**Riders have the sensation of flying with Simworx's latest attraction offer**

known IPs. Many years ago, IPs were limited to Universal and Disney, but IP providers have found that expanding into the mainstream theme park market has not only given them high-profile marketing opportunities, but also a new revenue stream through licensing.

**Can you describe the current market climate? How do you stay ahead of the competition?**

There's a huge appetite for new dark rides and unique experiences from theme parks around the world who want to set themselves apart from the competition. At Simworx, product development has always been at the forefront, together with the desire to offer clients a first-class attraction along with excellent after-sales support.

**What have been the biggest changes for ride makers in recent times?**

Having a varied portfolio of products to meet the demands of an ever-increasing, wide-ranging market has meant that we are continually launching new products and technology. However, this has been a very exciting challenge that we have been pleased to adopt into our company strategy.

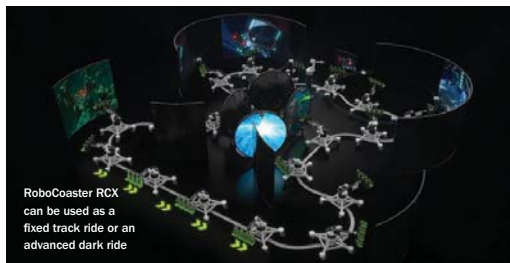
**What's on the horizon for Simworx?**

Following the successful installation of the world's first Immersive Tunnel at Movie Park in Germany, Simworx has secured a further five orders for Immersive Tunnel rides around the world.

Our 4D cinemas are still extremely popular, along with other dynamic simulation attractions in our portfolio. With the launch of our AGV and RoboCoaster attractions, we'll continue to develop new technology in the areas of VR, interactivity and advanced projection. ●

**There's a huge appetite for new dark rides**

**from theme parks around the world**



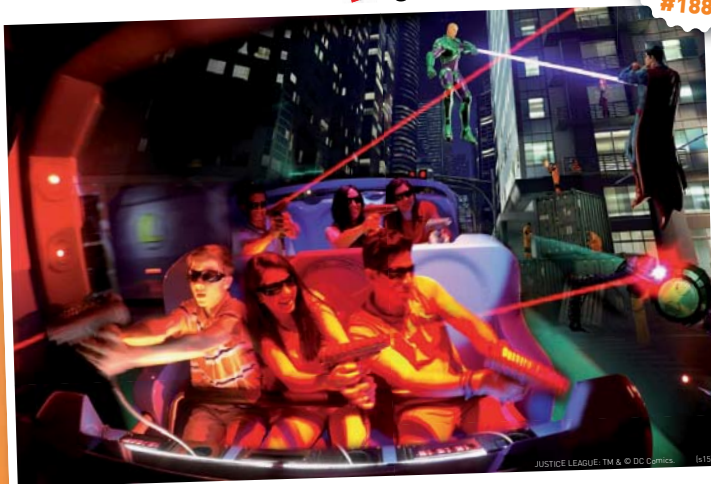
RoboCoaster RCX can be used as a fixed track ride or an advanced dark ride

# READY FOR THE MOST (INTER)ACTION-PACKED RIDES?

**SixFlags**

IAAPA  
ATTRACTIONS  
EXPO ORLANDO

**BOOTH  
#1881**



JUSTICE LEAGUE, TM & © DC Comics [s15]

## JUSTICE LEAGUE: Battle for Metropolis 4D

Alterface Projects is proud to provide the interaction and gameplay system on SixFlags' new state-of-the-art dark rides designed by Sally Corporation, featuring stunning 3D, special effects and motion-based vehicles. Now open in SixFlags St Louis & SixFlags Over Texas.

**Experience the newest technologies from our R&D lab that will make the most advanced interactive attractions of tomorrow. See you at the IAAPA Attractions Expo on our booth #1881!**

INTERACTIVE ATTRACTIONS • UNLIMITED POSSIBILITIES

Alterface Projects HQ - Europe  
alterface@alterface.com  
+ 32 485 620 390

Alterface Projects - USA  
info@usa.alterface.com  
+ 1 417 973 0301

Alterface Projects - Asia  
info@asia.alterface.com  
+ 86-10-64391086

[www.alterface-projects.com](http://www.alterface-projects.com)

**alterface**  
projects

# REINVENT THE VISITOR EXPERIENCE WITH MULTI-TOUCH AV

Paolo Pedrazzoli of 3M – which provides multi-touch displays and systems to venue designers, AV specialists and end users – tells readers how this technology is transforming the visitor experience, while generating new revenue opportunities

One of the biggest challenges facing galleries, museums and other entertainment venues today is how to make the visitor experience as compelling as possible, particularly when competing with other forms of entertainment. Today's younger generation, in particular, have very high expectations, thanks to their everyday use of video games and other media. Plus, there is the additional challenge of finite physical space, meaning that what venues can display is inherently limited.

This is why an increasing number of the world's attractions venues are turning to multi-user, multi-touch AV technology. With its ability to show such a rich array of



Multi-touch technology creates exciting, interactive visitor information points

information while allowing several people to engage with the screen at any one time, the technology takes the AV experience to a whole new level. While it might be

used as part of a particular exhibition, the technology – with its visual “wow” factor – is increasingly finding permanent uses and providing far more than just wayfinding.

For example, windows on the screen can provide deeper insights into parts of the venue. You can include fun, interactive elements, such as modifying well-known paintings (imagine drawing a moustache – just temporarily! – on the *Mona Lisa*) or exploring the remains of Pompeii (and build your own Roman villa at the same time).

Several viewers can compete to identify star constellations across the Galaxy, or create their own football teams who can then compete against each other. They can home in on the Statue of Liberty, flipping the screen to see it from another angle or enjoying a bird's eye view from the very top of her crown. They can take interactive tours of hidden treasures in the museum's vaults, watch 3D interviews with celebrity sportspeople, play interactive video games themed to the venue – the potential is only limited by designers' imaginations.

## Generate more visitor revenue

Adding an extra layer to the whole visitor experience in this way also creates opportunities to generate additional revenue. For example, consumers can take an interactive tour of the museum shop catalogue and view far more merchandise than is possible in a physical space. They can purchase discounted tickets for future events, or even pay a nominal amount to enter an online competition or play a game, with guaranteed low-cost prizes.

## Five steps to create a great multi-user touch experience:

- **Location matters** – table-top designs are imposing and create a powerful impact, while upright kiosk or wall-mounted systems are great space-savers. Think about the furniture it is housed in, make a statement and link to branding.
- **Touch quality is essential** – an unresponsive screen is very frustrating for users. Look for zero-lag, no matter how much information is being displayed. Bezel-free design ensures that the screen is touch-sensitive right to the very edges.

- **Robust and self-service** – Look for “fit and forget” design. The system should be intuitive to use with no training, and should not require regular rebooting.
- **Integrate it with the bigger picture** – link multi-touch systems into the rest of the sales and marketing strategies, for instance to send data back to CRM systems and databases.
- **The right support and expertise** – work with a system designer and hardware provider that has a track-record in multi-touch and so knows what pitfalls to avoid. Make sure there is strong ongoing support.





Viewers can compete to identify star constellations across the Galaxy, create their own football teams, enjoy a bird's eye view from the Statue of Liberty or tour the hidden treasures in the museum's vaults

Multi-touch AV systems can also be integrated with other systems, such as customer relationship management (CRM), databases and marketing systems to gather data about visitor interest. For instance, the multi-touch screens might register significant interest in a particular type of exhibit, providing the kind of information that helps when planning future events.

### What is multi-user, multi-touch?

One major benefit of touch technology is that we are already familiar with it through using our own smartphones and other devices. We know that pinching our fingers or swiping the screen will change the content that we can see. Multi-touch technology takes this highly intuitive approach a step further, creating an interactive multi-user experience that can be applied to all kinds of environments.

Ranging from 21.5 to 55 inches (55cm to 140cm), multi-user, multi-touch displays make an immediate impact, often housed in beautifully designed table-tops, although systems can also be wall-mounted. Once users start to interact with them – simply using their fingertips, with over 60 simultaneous touch points – they can explore a wealth of information. In essence, a multi-user, multi-touch AV system is a smart screen, linked to a computer underneath or behind it and in turn able to connect to the Internet and other systems. The technology has evolved considerably in the past couple of years, with screens now able to display a fast and consistently high-quality response, even in high footfall areas.

Of course, any technology is only as good as its execution. Our five tips (see "Five Steps" box, left) are based on the work

we've carried out with some of the world's leading designers, installers and users of our multi-touch displays and systems.

The right multi-touch system, complete with content that captures visitors' interest, can create a compelling, interactive experience, while at the same time generating new revenue opportunities and helping venues to compete in an increasingly multimedia world. ●

### READER OFFER:

3M has created a multi-touch best practice guide specifically for the attractions management market. To download a copy – as PDF or as an app – please go to [www.multi-touchlibrary.com](http://www.multi-touchlibrary.com)

IAAPA

Attractions  
Expo

# IAAPA Attractions Expo

More than 1,000 exhibitors will be at IAAPA Attractions Show at the Orange County Convention Center in Orlando. Here's a sneak preview



Holovis' showcase features the latest game from the Dome Rider series, **Crimson Wing**

## Holovis

Holovis is presenting the world's first real-time interactive game solution in a 3D dome, combining immersive visuals and a highly compelling storyline with perfectly synched motion and interaction for a next-generation dark ride-style experience.

Taking place in a full 10-metre dome, 12 people will be able to experience the attraction simultaneously through the Holovis MotionSeat platform. The dome itself is a portable solution from Holovis, designed for rapid deployment for events and product launches. ■ **Booth #4086**  
attractions-kit.net keyword: Holovis



FlowRider's WaveOz

## FlowRider

WaveOz was born from a simple stream of water hitting a mound, and was extrapolated into a powerhouse of flowboarding functionality. WaveOz is set to be the competition wave of the future, as the enormous ride surface allows for a multitude of tricks to be performed on the liquid canvas. With the ability to create a wave "in the round" a 360° canvas to paint flowboarding exploits on could become a possibility. ■ **Booth #2243**  
attractions-kit.net keyword: FlowRider



Forrec is developing a Top Gear concept

## Forrec

Forrec is presenting two projects from 2015. The first is the theme park for the new Wanda Xishuangbanna Resort, in Yunnan province, China. The theme park includes a jungle-themed attraction park, waterpark and adventure park. Forrec is also working with BBC Worldwide to help develop a range of high-level attraction concepts that extend popular brands such as Top Gear and CBeebies into prototypes for the Asia market. ■ **Booth #2049**  
attractions-kit.net keyword: Forrec



Maestro to debut on Legoland Ninjago ride

## Triotech

Triotech is unveiling its revolutionary new hand gesture technology at IAAPA. Maestro allow guests to interact with the story without holding any device in their hands. The technology can be integrated in digital interactive dark rides and other attractions. This family-friendly technology features inherently optimized ergonomics since each guest uses his/her own hands and is very intuitive and adaptive to the guest's playing style. ■ **Booth #1053**  
attractions-kit.net keyword: Triotech



DNP's DS620A printer

## DNP

DNP is introducing its flagship DS620A dye-sublimation professional photo printer. As the latest addition to DNP's award-winning line of DS Series printers, the DS620A is the world's most compact professional-grade photo printer and can produce up to 400 prints per hour. The printer works with ride photo systems and is a profitable solution for venues that want to provide instant custom photo souvenirs. ■ **Booth #4659**  
attractions-kit.net keyword: DNP



Location: Orange County Convention Center, Orlando, Florida  
 Dates: 17-20 November 2015  
 Who's there: 1,000 exhibitors and more than 28,000 attendees  
 What's on: 100 educational opportunities  
 On-site tickets: \$199 for members and \$385 for non-members



For full company and contact details  
 please visit [attractions-kit.net](http://attractions-kit.net)



A superflume by Interlink

### Interlink

Interlink will be announcing details of two new products: a dark ride attraction and a themed water coaster. The former will be a themed, water-based ride featuring 10, eight-seater boats travelling in a 180m circuit. The latter will have a 300m-long, Mad Mouse style track running through trees and culminating in a simulated water flume splash. It will utilise eight, four-seater boats with a hovercraft theme. ■ Booth #3051  
[attractions-kit.net](http://attractions-kit.net) keyword: Interlink



Kew Gardens employs Gateway Galaxy  
 Gateway Ticketing Systems, Inc

Gateway Ticketing Systems is highlighting its Galaxy Product Suite's ability to accept contactless payments such as Apple Pay and Google Wallet. One of Gateway's clients, the Royal Botanic Gardens at Kew, is using the technology to improve the customer experience by reducing queue times. Accepting contactless payments can also increase revenue as guests don't suffer the "pain of paying" when using a phone versus cash. ■ Booth #4831  
[attractions-kit.net](http://attractions-kit.net) keyword: Gateway



Picsolve solutions support the London Eye  
 Picsolve

With guest demand and revenue from digital photography at an all-time high, Picsolve is highlighting large-scale digital technology solutions such as its new "All You Can Eat" consumer offering, including insight into guest app usage in 2015. CEO Jeff Kelisky is discussing redefining the "connected guest" experience, with a look at new partners including Warner Bros Studio Tour Hollywood and the Hunger Games exhibition. ■ Booth #3012  
[attractions-kit.net](http://attractions-kit.net) keyword: Picsolve



A new look for Coral Reef Waterworld  
 Van Egdom

Coral Reef Waterworld in the UK is about to undergo a year-long transformation. Van Egdom is installing five exciting new flumes (in total more than 500 metres long), including two iconic thrill rides: the Crazy Cones and the Super Crater. This complex project requires a new tower to be built into the existing facility. The project will also see a new roof over the main pool and facility improvements. The waterpark will reopen in 2017.  
[attractions-kit.net](http://attractions-kit.net) keyword: Van Egdom



Sally's popular Justice League dark ride  
 Sally

Sally is showcasing its custom dark ride attractions and animatronics and displaying its new line of interactive mixed-media dark rides. These new rides feature interactivity, multi-DOF ride vehicles, media-based scenes, highly immersive theming with realistic sets, scenery and animation and 4D special effects. Sally can work with a client's unique brand, a particular IP or create a custom attraction. ■ Booth #2253  
[attractions-kit.net](http://attractions-kit.net) keyword: Sally



Huss's VR test at Djurs Sommerland  
 Huss

Huss is demonstrating a high-performance VR system which is set to add optional ride experiences to its attractions. It's also presenting Enterprise, a classic ride that's been brought back into the portfolio after getting a makeover. Enterprise will be available as Enterprise 2G, Enterprise 2GH (2nd Generation Hybrid - with suspended seats and gondolas) and Enterprise 2GH-Plus (2nd Generation Hybrid with a tilt action). ■ Booth #2604  
[attractions-kit.net](http://attractions-kit.net) keyword: Huss



For full company and contact details please visit [attractions-kit.net](http://attractions-kit.net)



IdeAttack's Yulin waterpark is inspired by gemstone mining in Guangxi province

## IDEATAK

Designer of mixed-use tourism and leisure projects IdeAttack is presenting Yulin Tourism Development, a major project in Yulin City, Guangxi province, China. Envisioned as a regional mixed-use tourism destination, it features an expo

pavilion, various entertainment facilities, a commercial complex, prime shopping areas, diverse F&B offerings, numerous leisure facilities on land and lake, a unique themed waterpark, botanical garden and wetlands, and a secluded luxury club for VIP guests. ■ Booth #2861 attractions-kit.net keyword: IdeAttack



Gale Force, by S&S Worldwide

## S&S Worldwide

New for 2015, S&S introduces the LSM Triple Launch Coaster. The design of the three launches provides an amazing high-powered ride within a very small footprint. S&S has packed the ride design with a number of exciting elements, including a 125-foot crest, the rush of a 100-degree dropdown at a pulse-racing 59mph, a 180-degree twisting climb, an off-camber dive drop, a corked roll, a top hat twist, and a raven dive. ■ Booth #2217

attractions-kit.net keyword: S&S



nWave's new film is an island adventure

## nWave

As an accident-prone Robinson Crusoe tries to adapt to his new life as a castaway, the island's animals are equally astonished to find this strange creature washed up on their shores. Crusoe meets an optimistic parrot named Tuesday; Carmelo, the coolly sophisticated chameleon; and Scrubby the lazy goat. When unwelcome visitors appear, the unlikely new friends scramble to defend their island paradise. ■ Booth #4873 attractions-kit.net keyword: nWave



Niceberg presents Little Dolphin

## Niceberg

Niceberg Studios presents its new 3D/4D attraction film, *Little Dolphin*, a marine adventure targeted at theme parks, aquariums, zoos and other venues. Niceberg is also launching the reloaded version of Great Wall of China 360° – the Flying Experience! This prime licensed film addresses the growing market of specific high-end media based attractions such as multi-degree tilted dome simulators, flying theatres, VR coasters and more. The flexibility in formats is achieved with the proprietary multi-format output generator specially developed by Niceberg's R&D department. ■ Booth #2071 attractions-kit.net keyword: Niceberg



COST: in the industry since 1957

## COST of Winsconsin

COST of Wisconsin is an industry leader in theme and specialty construction services, specialising in exhibit fabrication, theme facades, faux finishes, water features, aquariums, simulated trees and sculptural elements. COST fabricators, artisans, construction personnel and project managers work closely with architects and owners to ensure the finest in theme construction is delivered to every project. ■ Booth #4125 attractions-kit.net keyword: COST



# The Carousel Company



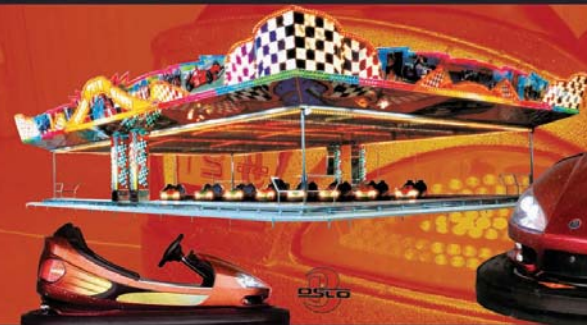
Kiddie



Kart



Major Rides



Venetian  
Carousels



Bumper  
Cars



**BERTAZZON**

*The Carousel's Company*

BERTAZZON 3B SRL, 31020 SERNAGLIA (TREVISO) ITALY  
PHONE +39.0438.966291 FAX +39.0438.966165  
E-MAIL: BERTAZZON@BERTAZZON.COM



For full company and contact details please visit [attractions-kit.net](http://attractions-kit.net)



The new RMF System Controller

## Neptune Benson

Neptune Benson is presenting its new hi-tech controller for its water filtration system. The Defender Regenerative Media Filter (RMF) can be operated via the RMF System Controller, a graphic interface which allows owners to programme and manage everything from bump and precoat cycles and recirculation pumps to data logging and maintenance reminders. The controller can be used remotely via a smart device or laptop. ■ **Booth #24069**  
attractions-kit.net keyword: Neptune



Guests ride Singha at Siam Park. The slide is a first-ever combination for ProSlide

## ProSlide

ProSlide is presenting its newest slide, Singha at Siam Park in Tenerife, Spain. The ride incorporates ProSlide's FlyingSAUCER features into its RocketBLAST water coaster, with patented water jet and boat

design. Singha uses ProSlide's water rafts up the hills higher and faster. Four huge saucer-shaped bowls punctuate the ride, which are steeply angled for a drop-and-dive sensation. ■ **Booth #5139**  
attractions-kit.net keyword: Proslide



APX at Aquatopia, Camelback Lodge

## WhiteWater West

WhiteWater is introducing a new era of interactive waterplay inspired by the way kids play. APX creates an engaging experience full of interactive elements that entice, challenge and reward guests. On an exciting adventure through five zones, waterpark guests will slide, spray and splash their way through APX. APX has been crafted from the perspective of a child in order to encourage interaction and maximize the fun. ■ **Booth #2239**  
attractions-kit.net keyword: Whitewater



Adventure thrills with No Boundaries

## WhiteWater Attractions


WhiteWater Attractions is presenting a customisable adventure park installation that combines different elements of the adventure genre – zip lines, rope courses, vertical climbs, slides – into a single family-oriented attraction called No Boundaries. Its high-thrill and high-challenge activities suit guests of all ages and skill levels. No Boundaries aims to provide adventures and thrills in a safe environment. ■ **Booth #2234**  
attractions-kit.net keyword: Whitewater



The rotating flying theatre by Simworx

## Simworx

Simworx is presenting its latest media-based, dynamic simulation attraction, developed in partnership with Mondial. The 360° Flying Theatre, a full turnkey solution, draws on the expertise of both companies to deliver a cutting-edge experience. Passengers take their seats, legs dangling freely, to experience a realistic sense of flying as they are immersed in a movie shown on a huge domed screen. ■ **Booth #2869**  
attractions-kit.net keyword: Simworx



**HUSS®**  
PARK ATTRACTIONS

THE BIRTHPLACE  
OF EXCELLENT  
AMUSEMENT RIDES

Visit us at  
**IAAPA Orlando**  
November 17-20 2015

See the full line of  
HUSS® Rides.  
[www.hussrides.com](http://www.hussrides.com)

International Inquiries:  
+49-421-49900-0  
[sales@hussrides.com](mailto:sales@hussrides.com)

# Huss Park Attractions

# WE BRING COLOR TO EMOTION



CUSTOM DESIGNED ATTRACTIONS FOR INDOOR AND OUTDOOR AMUSEMENT PARKS

## TECHNICAL PARK

[WWW.TECHNICALPARK.COM](http://WWW.TECHNICALPARK.COM)

<b>EAS</b> Entertainment Attractions Systems	<b>IAAPA</b> International Amusement Park Association	<b>ARIAN</b> Amusement Rides International
BOOTH C116	BOOTH 4015	BOOTH 1534



### ACCESS GAMMA

Modular integrated management information systems for visitor attractions, museums, heritage sites and theme parks



T 0845 835 0192 E [tellmemore@theaccessgroup.com](mailto:tellmemore@theaccessgroup.com)

[www.theaccessgroup.com/gamma](http://www.theaccessgroup.com/gamma)



### ANTONIO ZAMPERLA SPA

The Amusement Rides Company



T +39 0444 998400 E [zamperla@zamperla.com](mailto:zamperla@zamperla.com)

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



### BERTAZZON

Manufacturers of unique merry-go-rounds, high quality bumper-cars and go-karts



T +39 0438 966291 E [bertazzon@bertazzon.com](mailto:bertazzon@bertazzon.com)

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



### CUMMINS-ALLISON

Industry-proven coin handling, currency note handling and office equipment to a variety of business sectors



T +44 (0)2476 339810 E [info@cummis-allison.co.uk](mailto:info@cummis-allison.co.uk)

[www.cummisallison.co.uk](http://www.cummisallison.co.uk)



### DAN PEARLMAN ARCHITECTURE

Storybuilding: we turn an experience into a brand + a brand into an experience.



T +49 30 53 601 860

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



### D J WILLRICH LTD

An audio visual multimedia integrated system company



T +44 (0)1590 612 603

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



### EAG INTERNATIONAL 2016

The definitive show for the European Amusement and Coin-Op industries



T +44(0)1582 767254 E [karencooke@swanevents.co.uk](mailto:karencooke@swanevents.co.uk)

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



### EAS

Euro Attractions Show 2015. Register now for Europe's premier event for the attractions industry



T: +32 2609 54 45

[www.iaapa.org/eas](http://www.iaapa.org/eas)



### EMPEX WATERTOYS

An innovator of unique interactive aquatic playgrounds and spray parks



T +1 866 833 8580

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



### EUREKA! THE NATIONAL CHILDREN'S MUSEUM

Eureka! is the UK's national children's museum



T 44 (0)1422 330 069

[www.eureka.org.uk](http://www.eureka.org.uk)



### EVANS & SUTHERLAND

Creators of Digistar 5 full dome digital planetarium system and distributors of full dome shows



EVANS & SUTHERLAND

T +1 801 588 7972

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



To book your space in the Web Gallery contact Julie Badrick

Tel +44 (0)1462 471919

Email [juliebadrick@leisuremedia.com](mailto:juliebadrick@leisuremedia.com)



**FORREC**

Specialists in the creation of entertainment and leisure environments worldwide



T +1 416 696 8686

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

**NATIONAL MARINE AQUARIUM**

Full consultancy and project delivery service ranging from short term advice to complete management of third party facilities



T 0844 893 7938 E [enquiries@national-aquarium.co.uk](mailto:enquiries@national-aquarium.co.uk)

[www.national-aquarium.co.uk/consultancy](http://www.national-aquarium.co.uk/consultancy)

**HIPPO LEISURE**

Specialists in flume slides and interactive water play.



T +44 (0) 1752 771740 E [sales@hippoleisure.com](mailto:sales@hippoleisure.com)

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

**N WAVE**

Fully integrated digital studio handling all aspects of 3D cinema production and distribution



T +322 347 6319 E [edillens@nwave.com](mailto:edillens@nwave.com)

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

**HUSS PARK ATTRACTIONS**

Development, manufacture and sale of amusement rides for amusement parks



T +49 421 4990 00

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

**OMNITICKET NETWORK**

Specialists in providing ticketing distribution



T +44 (0)1782 714 300

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

**INTERNATIONAL PLAY COMPANY**

Design, manufacture and install play structures, interactive events and custom theming for all ages



T +1 604 607 1111

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

**POLIN WATERPARKS**

Global leader in design, engineering, manufacturing and installation of waterslides and waterparks



T +90 262 656 64 67

[www.polin.com.tr](http://www.polin.com.tr)

**JORA VISION**

Design and Production of breathtaking experiences and environments in the leisure industry



T +31 (0)714 026747 E [info@joravision.com](mailto:info@joravision.com)

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

**QUIRK**

Full service digital marketing agency



t +44 (0)20 70998849

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

**KRAFTWERK LIVING TECHNOLOGIES**

One of the leading specialists in high-end audio-visual system integration



T +43 7242 692690

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

To book your space in the Web Gallery contact Julie Badrick

Tel +44 (0)1462 471919

Email [juliebadrick@leisuremedia.com](mailto:juliebadrick@leisuremedia.com)

**SIMWORX**

**SIMWORX**

3D & 4D effects  
theatres, motion theatres, simulation attractions  
and the provision of 2D & 3D film content

T +44 (0)1384 295733 E sales@simworx.co.uk

[www.simworx.co.uk](http://www.simworx.co.uk)



**SKY SKAN**

Design and installation of  
fulldome planetariums and  
visualization theatres



T: +1 603-880-8500

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



**TAPE MY DAY**

The fully automatic visitor  
video-generating system for  
sports, rides and attractions



T +31 20 471 4640

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



**TRIO TECH**

A leading manufacturer of  
multi-sensory interactive  
attractions for the entertainment industry



T +1 514 354 8999 E info@trio-tech.com

[www.trio-tech.com](http://www.trio-tech.com)



**UNLIMITED SNOW**

Unlimited snow services  
for all snow and ice  
leisure experiences



T +31 20 471 4640

[www.unlimited-snow.nl](http://www.unlimited-snow.nl)



**VEKOMA**

Design and manufacture of family  
coasters, thrill and mega coasters  
and family attractions



T +31 475 409 222

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



**VISITOR ATTRACTION EXPO**

A complete show for  
the leisure, parks and  
attractions sectors



T +44(0)1582 767254 E karencooke@swanevents.co.uk

[www.attractionsexpo.co.uk](http://www.attractionsexpo.co.uk)



**WATER TECHNOLOGY INC (WTI)**

WTI maintains the widest  
range of planning, design  
and engineering qualifications  
in the waterpark industry



T +1 920 887 7375

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



**WHITEWATER WEST INDUSTRIES LTD**

The global leader in  
waterpark design,  
engineering, manufacturing and installation



T +1 604 273 1068 E sales@whitewaterwest.com

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



**WHITEWATER ATTRACTIONS**

Designer and manufacturer  
of harnessed attractions, interactive  
play structures and water rides



T +1 604 273 1068 E whitewater@whitewaterattractions.com

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



To book your space in the Web Gallery contact Julie Badrick

Tel +44 (0)1462 471919 Email [juliebadrick@leisuremedia.com](mailto:juliebadrick@leisuremedia.com)



**DON'T MISS THE  
MOST IMPORTANT  
EVENT OF THE YEAR!**

**12-14 JANUARY 2016**  
ExCeL London Exhibition Centre  
**[www.eagexpo.com](http://www.eagexpo.com)**  
**[www.attractionsexpo.co.uk](http://www.attractionsexpo.co.uk)**

Presented by



T: **+44 (0)1582 767 254**  
E: **[sales@swanevents.co.uk](mailto:sales@swanevents.co.uk)**



# EXPERIENCE THE REVOLUTION

FOR YEARS, POLIN HAS BEEN CHANGING THE WATERPARKS INDUSTRY.

IN 2006, WITH OUR INTRODUCTION OF L-RTM TECHNOLOGY, **WE CHANGED THE WAY PEOPLE PERCEIVE.**

IN 2007, WITH OUR TRANSLUCENT RTM TECHNOLOGY, **WE CHANGED THE WAY PEOPLE SEE.**

IN 2008, WITH OUR PATENTED NATURAL LIGHTS, SPECIAL PATTERNS, **WE CHANGED THE WAY PEOPLE FEEL.**

IN 2010, WITH OUR KING COBRA'S BUILT-IN THEMING, **WE CHANGED THE WAY PEOPLE TELL STORIES.**

IN 2012, WITH OUR MAGIC SPHERE, SPHERES, SPACE SHUTTLE, **WE CHANGED THE WAY PEOPLE THRILL.**

IN 2013, WITH OUR NEW GENERATION WATER-PLAY STRUCTURES, **WE CHANGED THE WAY PEOPLE HAVE FUN.**

IN 2014, WITH OUR NATURAL SOUND EFFECTS TECHNOLOGY, **WE CHANGED THE WAY PEOPLE HEAR.**

IN 2015, WITH THE NEW ART OF WATERSLIDE DESIGN, **WE WILL CHANGE THE FUTURE OF WATERPARKS.**

JOIN POLIN AT IAAPA 2015 IN ORLANDO AND DISCOVER THE NEXT GENERATION OF WATERSLIDES  
AND MORE VERSATILE WATERSLIDE COMPONENTS.

**SLIDE'N ROLL · GRAFFITI · MOSAIC · TRIANGULATED · WOOD'N SLIDE · REFLECTION · HONEY COMB**

EXPERIENCE THE FUTURE OF WATERPARKS TODAY!  
SOUTH EXHIBIT HALL B - BOOTH 4239



**PolinWaterparks**  
THE EXPERIENCE

[polin.com.tr](http://polin.com.tr)



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